

UNIVERSITY OF MANITOBA

U M

The Magazine

2022 ANNUAL

Let's Catch Up

A lot has happened since
our last print issue in 2020.
Look inside to see what
we've been talking about.

SAVE THE DATE

Join us this fall for UM alumni events. Hear what's new at your alma mater, reconnect with alumni in your city, learn from signature-area researchers, and meet host President Michael Benarroch.

VANCOUVER

Monday, Oct. 24
5:30–7:30 p.m.
The Permanent, 330 W Pender St.

CALGARY

Tuesday, Oct. 25
5:30–7:30 p.m.
Hudson, Scotia Centre
200 8 Ave. SW 6th floor

TORONTO

Tuesday, Nov. 1
5:30–7:30 p.m.
The Pantages Hotel, 200 Victoria St.

OTTAWA

Wednesday, Nov. 2
5:30–7:30 p.m.
The National Arts Centre
1 Elgin St., at Confederation Square

BRANDON

Tuesday, Nov. 8
5:30–7:30 p.m.
The Firehall, 637 Princess Ave.

WINNIPEG

Wednesday, Nov. 9
5:30–7:30 p.m.
The Hotel Fort Garry
222 Broadway Ave.

A light dinner buffet will be served at each event.

HOMEcoming

2022

SEPTEMBER 21–24

Reconnect with friends and fellow alumni to share past experiences and create new ones.

EVENTS AND ACTIVITIES

Distinguished Alumni Awards Celebration of Excellence Gala
Reunions // Faculty Events // Bisons Football Game
Desautels Faculty of Music Concert

[UMANITOBA.CA/HOMECOMING](https://umanitoba.ca/homecoming)

ALUMNI REUNIONS

Are you celebrating a milestone graduation anniversary this year? Or maybe the pandemic paused your plans? See which alumni reunions are already in the works—and let us know if you'd like our help to organize one.

Agriculture Diploma
1970

Bachelor of Science (Hons)
1967

Commerce
1972

Home Economics
1972

Kinesiology & Recreation Management
1970 / 71 / 72

Law
1980 / 2012

Bisons—Gymnastics

**University of Manitoba
Nigerian Program Graduates**
1983-90

For more info on reunions in all clubs, programs and faculties (*other than health sciences*)

CONTACT

Lynn Ferguson
lynn.ferguson@umanitoba.ca
204.474.7881

Don't see your class? Visit
[umanitoba.ca/community/
alumni/reunions](https://umanitoba.ca/community/alumni/reunions)

Max Rady College of Medicine
Medicine
1957A / 62 / 65 / 67 / 70 / 72 / 77
82 / 87 / 92 / 97
2002 / 12

Dr. Gerald Niznick College of Dentistry
Dentistry
1972 / 82 / 97 / 2012

Dental Hygiene
1972 / 82 / 97 / 2012

College of Pharmacy
1972 / 82 / 97 / 2012

College of Nursing
1972 / 82 / 97 / 2002 / 12

College of Rehabilitation Sciences
Physical Therapy
1972 / 82 / 97

Occupational Therapy
1972 / 82 / 97 / 2012

Respiratory Therapy
2012

For more info on reunions in the Rady Faculty of Health Sciences

CONTACT

Darcy Routledge
Darcy.Routledge@umanitoba.ca
204.977.5650

From the President

Michael Benarroch
President and Vice-Chancellor

One of my highest priorities as UM president is to help our community dream big.

I was reminded of the impact of visionary thinking when I travelled to India this May. I saw up close how **Dr. James Blanchard [BSc(Med)/86, MD/86]**, **Dr. Marissa Becker [MD/99]** and the team at the Institute for Global Public Health are driving down maternal and neonatal mortality rates in Uttar Pradesh.

In this colourful, densely populated region of India I saw how innovative research and community partnerships can empower local health providers to significantly improve health outcomes. I saw the impact of awe-inspiring investments by the Bill & Melinda Gates Foundation and our generous donor community. I was reminded that all of our greatest contributions as a university happen

because someone is brave enough to dream beyond the status quo.

On April 15, we lost a true visionary, one of Canada's most accomplished Arctic researchers, **David G. Barber [BPE/82, MNRM/88]**.

As founding director of the Centre for Earth Observation Science, and Canada Research Chair in Arctic System Science and Climate Change, his commitment to big thinking helped establish UM as a global leader in climate science and Arctic research.

I look at the National Centre for Truth and Reconciliation, located on our Fort Garry campus, and see how their ambitious dream to build a permanent home, worthy of its place in Canada's past, present and future, is attracting investment from all over the world, including a significant commitment from the Government of Canada.

Coming this fall, I will be celebrating UM visionaries with a new speaker series: *What's the big idea?* I can't wait to bring you conversations with big thinkers in our faculty, student and alumni community.

We will be launching the series as part of Homecoming 2022, which will also feature an in-person concert, football game and many other meaningful opportunities for our thriving alumni community to gather. I can't wait to see you there!

As we work to navigate this time of unpredictability, we can't let the surprises or challenges of life stop us from pursuing big dreams. The world needs the University of Manitoba and it needs each of us in this remarkable community to ask ourselves, What's the big idea?



PHOTO BY DAVID LIPNOWSKI [BA(HONS)/08]

Publisher's Message

Vanessa Koldingnes
Acting Vice-President (External)



PHOTO BY DAVID LIPNOWSKI [BA(HONS)/08]

Wow. A lot has changed since our last print edition of *UM Today The Magazine* in 2020.

Surrounded by uncertainty, we’ve all felt the push to look deeper at the world and our place in it. How we work, how we stay close to friends and family—it’s all been transformed. We’ve been moved to better understand the mysteries of global public health, and more recently, how to bring about peace during the heart-break of war. We’ve all witnessed greater immediacy to think globally and act together.

Whether subtle or significant in our own lives, change challenges us to think in novel ways. This drive to collaborate—to create progress—always makes me proud to be part of the University of Manitoba community. As acting vice-president (external), I’m excited to bring you stories in

our flagship magazine of students, faculty and alumni who are always thinking ahead.

Take biomedical engineer **Zahra Moussavi [PhD/97]**, whose mission is to find a way to reverse the effects of Alzheimer’s disease in honour of her mother, Soroor, who was diagnosed with the condition. In this issue, Dr. Moussavi shares how she just wanted to see her mom for even 10 minutes the way she used to be.

I’m also inspired by the ingenuity of people like **Vincent Cheung [BSc(CompE)/03]**, who developed Facebook’s video chat technology, Portal, before we knew a global pandemic was around the corner. “We literally built the future,” he says.

And then there’s the foresight of UM entomologist Kateryn Rochon, who’s opening our eyes to new dimensions in how animals and humans

interact—a timely conversation, considering the risk of infectious disease spilling over.

I see this urge to look out for one another in the hearts of donors to the university, as well. Most recently, you stepped forward to give to UM students from Ukraine, who are navigating the impact of war on their families from afar.

Stories move us. They teach, they entertain, and they introduce us to people who dare to do things differently.

We’re doing things differently, too. While we took a break from print production when the pandemic hit, we continued to bring our rich storytelling to our online magazine platform. With this issue, we invite you to merge those reader experiences by scanning the QR codes for bonus digital content.

Enjoy.

Volume 82, Annual 2022



Publisher Vanessa Koldingnes [MBA/14]
Acting Vice-President (External)

Editor Katie Chalmers-Brooks

Design Kathryn Carnegie [BFA(Hons)/08]

Contributors

Kerry Banks
Linda Barnard
Sean Moore

UM Today The Magazine is published annually and is available online at news.umtoday/magazine.ca. External Relations reserves the right to edit material as appropriate and may not necessarily share the views expressed by the writers. External Relations makes all attempts to ensure the accuracy of information in this magazine but cannot be held responsible for inadvertent misrepresentations.

External Relations

200-137 Innovation Drive
Winnipeg MB Canada R3T 6B6

Telephone 1 204 474 9946
Toll-Free in Canada 1 800 668 4908
Fax 1 204 474 7531
Email alumni@umanitoba.ca
Web umanitoba.ca/alumni

Canada Post Agreement #40063720

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If undeliverable, please return magazine cover to:
External Relations
200-137 Innovation Drive, Winnipeg MB
Canada R3T 6B6

Printed on recycled paper with vegetable-based inks.
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WAR FROM AFAR



Every morning this spring, when Nikolai Kryvoruchko woke up, he checked in on his grandmother, Olga, in Ukraine. From his cellphone, the UM civil engineering student would tap into the security camera attached to a lamp post on her street in Zaporozhye. An unchanged view of her orange brick house, with its friendly red door, provided comfort for the 25-year-old in Winnipeg.

His grandma insisted on staying in her beloved hometown, where she works at a shoe factory producing boots for Ukraine's military. When the sirens blare, she heads to the basement.

"If the picture is on the camera, the house is still there," says Kryvoruchko. "My grandma can hear the bombings. It's like 10 or 15 kilometres away."

His parents were out of the country when Russia attacked in February. His mom, Julia, is safe with his sister, Anna, in Sweden while Kryvoruchko used savings earmarked for tuition to pay lawyer and travel fees to bring his father, Vadim, who is unfit to be a soldier, to Canada. He arrived with a backpack of belongings.

Donors stepped forward earlier this year with gifts to UM's emergency bursaries fund, of which Kryvoruchko is a beneficiary. He compares the shock of being bombed by neighbouring Russia to the disbelief felt if the United States were to launch an air strike against Canada. "No one expected it," he says.

When the conflict began, his mother had been caring for her elderly mom in Russia. Kryvoruchko feared she'd be discovered on enemy ground when the Russian military began checking people's cellphones for evidence of anti-war sentiment. He says they were also forcing some Ukrainian men to fight for their side.

Kryvoruchko says war in his country has opened his eyes to the vulnerability felt by his UM classmate, whose family members are living in a refugee camp after fleeing Syria.

With plans to specialize in project management in the construction industry, Kryvoruchko says his career goal will allow him to better support his parents, and give back to other students going through a crisis where their education is in jeopardy. "Maybe one day my money will help another student

to finish university. Pay it forward—that's my motivation," he says.

Yelyzaveta Proskurenko, a third-year political studies student who came to UM from Ukraine in 2019, also benefited from the emergency bursaries fund, designated for students impacted by extenuating circumstances. When war broke out in her home city of Kiev, her parents Roman and Oksana, and little sister Katya, fled to western Ukraine. During the upheaval, her father suffered a stress-induced heart attack. A news crew interviewed the 40-year-old in hospital during his recovery; Proskurenko watched from afar.

"It's very stressful because I don't know when I'm going to see my parents and you don't have a place to go back to," she says.

Her parents have since made the two-day trek to Poland. Worrying about loved ones took a toll on Proskurenko's studies and mental health as she scrambled to try to connect friends in Ukraine and Poland to arrange safe lodgings. With her parents not able to send funds, Proskurenko received help to pay for daily expenses and her continued coursework.

In class, they'd discuss the conflict and its legalities. She chose political studies because of its creativity to problem-solve globally but hadn't anticipated gaining such a personal perspective.

Bombing blew out the windows of her family's 14th-floor suite in the capital's town centre—the neighbourhood where she grew up. From the balcony, she could see the park that doubled as her backyard, where they'd spend hours beneath its sweeping canopy of trees.

"I knew war is bad but never saw it with my own eyes, so I didn't feel it," she says.

In May, UM announced a commitment of up to \$1.7 million to support students in Ukraine—both undergraduate and graduate—as well as researchers wanting to come to our campuses to continue their disrupted work and studies.

The student funding takes many forms, including waived application fees, research experience internships, and awards covering tuition and accommodation. For researchers, there are up to 20 one-year stipends. The university also joined the Scholars at Risk Network, an international

initiative that protects academics suffering threats to their lives, liberty and well-being by arranging temporary research and teaching positions at partnering institutions.

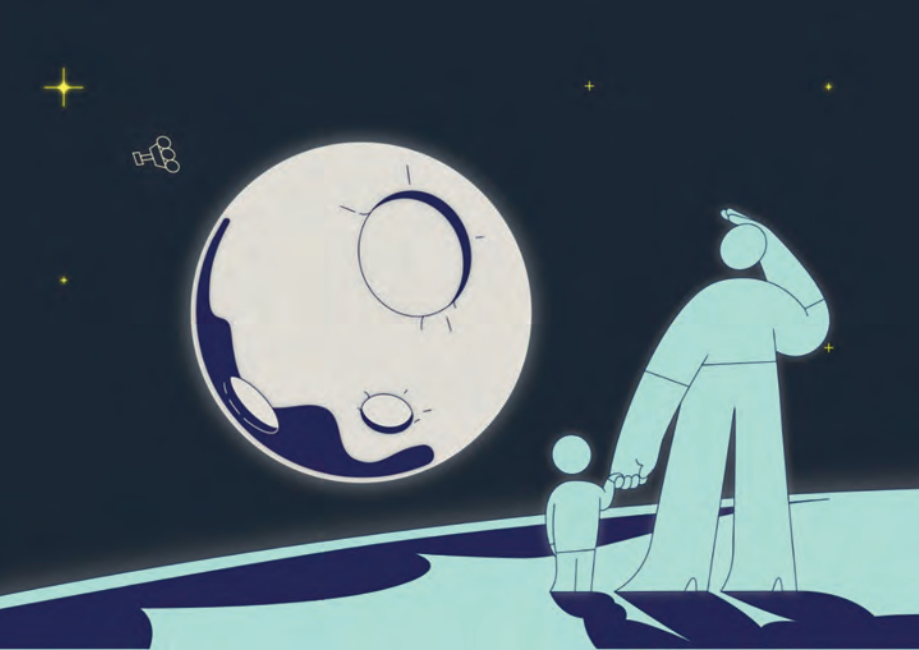
"It is paramount that such work is not thwarted and that those scholars who do this work can continue without fear for their personal safety," says Digvir Jayas, vice-president (research and international) at UM.

Going forward, protocols established as a result of the war in Ukraine will guide how UM responds when future geopolitical conflicts arise elsewhere.

To assist UM students navigating unforeseen challenges, visit:

give.umanitoba.ca/emergency-bursaries





HOME SWEET HOME

When Sahar Azizkhani, a mechanical engineering student, looks at the moon she thinks about a second chance. With the effects of climate change closing in, Azizkhani is among those with a growing curiosity about life in places other than Earth and what that could look like. She's working in UM's Space Technology and Advanced Research Laboratory, or STARLab. Its mission: to make space accessible through technology development and innovation.

Azizkhani is helping to figure out how autonomous vehicles can better navigate planetary bodies like the moon without getting stuck—and if they do, how they can get unstuck on their own. To troubleshoot the mechanics, first you have to recreate the terrain.

What parts of the moon's surface are you focused on?

"We are concerned about terrain that has fine and soft soil that the rover could sink into. We know the chemical makeup of the soil but what it *feels* like and how it would react under the wheel is a totally different thing. Some people are using things like poppy seeds to simulate the softer Martian soil, which is super interesting. I'm pretty fascinated with Mars as well but making it habitable would be a challenge because of the long winters and sandstorms."

WATCH Sahar Azizkhani's ideas come to life



ILLUSTRATION BY NICHOLAS LUCHAK

YOU CAN RUN FOR HOW LONG?

New Yorker **Glen Redpath [BA/87, BFA(Hons)/94]** recalls the time he willingly put himself in the heart of California's Death Valley, welcoming the challenge of 50°C and a 217-kilometre ultramarathon billed as the world's toughest foot race. It required he put one running shoe in front of the other for nearly 30 straight hours, navigating a basin at the lowest point of elevation in North America, surrounded by steep mountain ranges—a perfect storm for sweltering heat. He felt like a dinner roast, cooking from the inside out. Redpath, who's a senior administrator at Fordham University, once told *Runner's World* magazine tackling long distances makes him feel wild. Growing up in Winnipeg, neighbourhood kids would chant, "Run, Forest, Run!" Now you might see him brushing his teeth mid-race. He says an ultramarathon and a pandemic are not unlike one another—both test endurance. He regularly turns to positive self-talk to reset his focus. "I ask myself, 'Why am I here and what's going to get me through?'"



PHOTO BY CEDRIC CORROY



ILLUSTRATIONS BY JEANNIE PHAN

Gone Viral

COVID-19 pulled us together in chaos, stumped infectious disease experts and catapulted their field to newfound fame. Why did this particular coronavirus get so out of hand?

BY KERRY BANKS

When the first stories about a mysterious respiratory virus began to seep out of China in January 2020, University of Manitoba researcher Keith Fowke was in Kenya for a scientific conference at the University of Nairobi's Institute for Tropical Infectious Diseases. The topic? HIV and other emerging viruses. But even Fowke, who's spent decades unravelling the mysteries of these conditions—most notably, uncovering a natural immunity to HIV that has transformed how we treat it—was taken aback by the pace and persistence of this new threat.

"The news was concerning, but at first it seemed like a regional issue," says Fowke[BSc(Hons)/88, PhD/95], who is head of UM's department of medical microbiology and infectious diseases. "We didn't correctly anticipate the speed of transmission of the virus or the impact of the disease. It shut down the world economy. COVID-19 caught us by surprise."

Yet, its possibility was never in doubt. At least not in the ever-alert

eyes of infectious disease experts now taking stock of what this pandemic has taught us.

Even before variants Delta and Omicron, the original SARS-CoV-2 was very transmissible. While some infectious diseases—like SARS and MERS—took four months or more than a year to infect 1,000 people, COVID-19 took 48 days. Investigators also had to deal with the perplexing phenomenon of "superspreaders." Multiple studies suggested as few as 10 to 20 per cent of infected people may be responsible for as much as 80 to 90 per cent of transmission.

Unlike most infectious viruses, this coronavirus could infect people and cause little effect so people who were not feeling sick were infecting others. And it developed a terrifying mystique since it causes mild symptoms in some but critical illness in others. Early on, there was also a lack of knowledge about its main means of transmission—not by touching contaminated services but through the air, and from distances beyond two metres.



Another frustrating aspect: how quickly the virus became politicized. “Really to an extent that is unprecedented,” says **Dr. James Blanchard [BSc(Med)/86, MD/86]**, executive director of UM’s Institute for Global Public Health. In the U.S., this became an obstacle to slowing the spread as President Donald Trump and his supporters began actively working to undermine public confidence in the very doctors who were working to keep people safe.

As the pandemic exploded it also became clear that even the world’s most “advanced” government systems were ill prepared to deal with its effects. Masks, personal protective equipment, diagnostic tools, ventilators, hospital beds and other equipment were in short supply. “It became clear that we were all reliant on the same manufacturers,” notes Jason Kindrachuk, assistant professor in medical microbiology and infectious diseases at UM.

COVID-19 exposed weak governance in terms of making science-based decisions, explains **Pamela Orr [MSc/94]**, a UM professor of internal medicine, medical microbiology and community health sciences. “The pandemic has shown that our primary care and hospital services have been cut to the bone over the past decades, with catastrophic results,” says Orr.

Considering that the global community had already grappled with two recent coronavirus outbreaks in SARS and MERS, Kindrachuk had hoped society would be better prepared for something like COVID-19, but this wasn’t the case. “Once a virus fades from the headlines there is a human tendency to lower one’s guard. It’s an out-of-sight, out-of-mind thing. We’ve got to be proactive rather than reactive,” he says. “We are at the behest of these organisms.” **UM**

COVID-19’s impact will inspire a surge of students to enter the field, predicts Jason Kindrachuk, Canada Research Chair in Emerging Viruses at UM. South of the border, where the number of applicants to medical school was up 18 per cent in 2021, they’ve dubbed the enrolment increases “The Fauci Effect.”



PHOTO BY LAINA BROWN

RECORDING OUR HISTORY

Justin Langan feels the pull of advocacy and storytelling. The UM political studies student travelled Manitoba's Parkland region talking to Elders for an interview series exploring issues important to them, including climate change. "I always asked the same questions: What have you noticed? What does it mean to *you*?" Langan, who is Métis and from Swan River, interviewed more than a dozen Elders. It's an opportunity he says he missed out on within his own family, having lost his grandmother when he was nine years old. He questions why rural Indigenous communities are so often ignored in the climate change conversation, given their profound connection with the land they call home. "They

notice the small differences, whether they're hunting, trapping or commercial fishing. They see the water rising from different levels, species leaving and coming in. They see when berries get bigger, when they're smaller," says Langan. "Of course Indigenous people will have a better understanding of how the Earth is changing. They've been warning about it but no one was listening." The series is set to broadcast later this year.

WATCH THE VIDEO



MY FIRSTBORN

He was about 30 feet from CEO Mark Zuckerberg's desk when something sparked. **Vincent Cheung [BSc(CompE)/03]**, a member of the Artificial Intelligence-New Experiences team at Facebook, shorted a circuit while working on a prototype intended to transform how we video chat.

"That's why you shouldn't let software engineers touch hardware," jokes Cheung.

There's still a burn mark on his desk at the Silicon Valley headquarters. It's a story the father of two shared on his personal Facebook page in a moment of appreciative awe as he watched his daughter Kylie, at two years old, call her grandparents who live a country away. The toddler did so on her own volition, using Portal, the video-chat technology her dad helped bring to life. When Cheung was a kid growing up in Winnipeg, pushing a button to instantly connect with his grandparents in Hong Kong was unfathomable.

"It was really amazing today when she was rude to my parents and started walking away without saying 'Bye' and then later, after we talked about it, she decided to call them back by herself to apologize and ask if they could still be friends," Cheung posted. "When I started the project five years ago, I thought that it would be useful but didn't really grasp what we achieved until now. We literally built the future."



ILLUSTRATION BY JOE MCDERMOTT

His table-top prototype launched in 2018 as Facebook's first foray into hardware, often marketed for the ease in which little kids and grandparents can navigate its operating system, as well as its smart camera which zooms in and out to continuously frame the shot, leaving you free to walk and talk. Suddenly, everyone's in the same room going about life without having to fiddle with their phone.

When Portal first hit stores, Cheung took a photo of Kylie at Best Buy, sitting on a display next to the device. "When your firstborn meets your firstborn," he posted on Facebook.

He can't reveal how many of these units have been sold worldwide but reports suggest sales jumped at least tenfold during the pandemic. Zuckerberg himself chimed in on Cheung's post: "It's pretty amazing. I remember your first prototype and that original innovation makes the whole thing possible."

READ THE FULL STORY for Vincent Cheung's account of how he found his passion for neural networks at UM, and for his take on why robots won't take over the world.



PHILANTHROPY = PROGRESS

Forty-five.

That's how many children, for every 1,000 born in Uttar Pradesh, who didn't survive their first month of life. Researchers with the UM Institute of Global Public Health have for years worked with the government of India's most populous state to transform maternal and newborn care, and by 2019, helped shift that number to 36.

Renewed support from the Bill & Melinda Gates Foundation, with a gift announced in May of \$87 million USD, builds on their efforts to further strengthen health systems, and develop health-care mentors and policies.

"Each year there are over 5.5 million babies born in Uttar Pradesh, and so improving the outcomes for mothers

and their newborns and children in that state is one of the most important public health initiatives in India—and globally," says **Dr. James Blanchard [BSc(Med)/86, MD/86]**, the institute's executive director. "Achieving these goals is a complex challenge."

In the region, less than half of women living in villages were receiving prenatal care. "Though they wanted access to care, many women were unable to leave their many responsibilities or lacked the resources to visit distant health facilities," says Blanchard.

With an improved, state-wide program, that number rose to 90 per cent, with the majority of women now delivering babies in proper facilities.

Part of UM's role is to embed research into these types of programs to

optimize their design and how they're rolled out. The new funding will expand their reach to all 75 districts in the state.

UM researchers have also helped broaden mentorship for doctors and nurses so they can better handle emergencies during delivery. And they've upped the availability of specialists, along with drugs and equipment essential to acting fast and saving the lives of moms and their babies.

"The confidence and competency of frontline workers has gone up. You can see it in the way they go about their work and the way they talk. Nurses and doctors know how to deal with delivery complications now," says Blanchard. "There's still a long way to go but you do see changes."

LEARNING HUBS PROVINCE-WIDE

Young Indigenous people will be the ones reimagining programming that works best for them, through a new partnership between UM and the Mastercard Foundation.

It's the first initiative of its kind in Manitoba to be done on such a large scale, says **Dr. Catherine Cook [MD/87, MSc/03]**, UM's vice-president (Indigenous). The Foundation's EleV program, which supports Indigenous-led approaches to education and employment, pledged \$16.1 million towards creating systemic change.

So far, a learning hub has launched in Pinaymootang First Nation, 240 kilometres northwest of Winnipeg, allowing students to take university courses closer to home. It's the first hub of many to be developed with Indigenous communities province-wide. Better internet connectivity along with academic and cultural supports, including Elders, will accompany online learning.

Anishinaabe student Shelby Sinclair, who has family in Pinaymootang, says it helps if Indigenous youth don't have to move away to pursue post-secondary. "For many students, it would be way better to stay in the community to do their schooling," she says. "There are high drop-out rates when they come to Winnipeg because the learning style is so different."

The Law Makers program, which connects Indigenous high school students with law students at UM for course credit, will also benefit from the funding. There's a demand for this type of mentorship model in other faculties as well, says **Christine Cyr [BA/99]**, UM's associate vice-president Indigenous of students, community and cultural integration. "I hope to see...many more programs like it in many different fields so every student feels supported to pursue whatever career they want."



PHOTO SUPPLIED

Remember Me

Can we reverse the effects of Alzheimer's disease?
This UM biomedical engineer and advocate—and daughter
of a mother who forgot—is determined to find a way.

BY KATIE CHALMERS-BROOKS

It was the same answer every time. And it was crushing.

Zahra Moussavi [PhD/97], a UM researcher leading a study into a potential new treatment for Alzheimer's disease, would ask Bridgit, a participant, how old she was.

Bridgit would respond: "I'm in my 20s."

Do you have children? "No, but maybe one day."

At 82, Bridgit had four children and three grandchildren—and a husband desperate for her to remember.

She had enrolled in Moussavi's study of an experimental brain treatment for its potential to slow the disease's progression, or perhaps even reverse it. Moussavi is a biomedical engineer; she applies engineering skills and technologies to solve health-related problems. Up until then this type of electrical pulsing to trigger the brain, called rTMS or repetitive transcranial magnetic stimulation, had been used for other conditions like depression and Parkinson's disease but it was the first time it was being applied to dementia in Canada.

On day seven: a breakthrough, when a frustrated Bridgit said she wanted to stop. She'd had enough. While the

procedure isn't painful it can be uncomfortable. Patients wear a head piece mapping the brain while a hand-held coil delivers 25 bursts to a specific spot—it feels like someone poking at your head with their finger. Bridgit's husband tried coaxing her to continue, reminding her why she wanted to do this: so she could remember the kids.

"Then she said, 'But I do remember my children,'" recalls Moussavi, who promptly followed up by asking if she could tell her their names.

"She said, 'Of course. They are Susan, Sam and Donna.'"

Bridgit had named two of her children and one of her grandchildren. Although imperfect, her recollection was a big moment—the win the family was after—albeit fleeting.

"By the next day," Moussavi says, "she was back to her normal age: 20."

It was the kind of joyful recall Moussavi had hoped to achieve with her own mother, Soroor. She says her mom, leading up to her death in 2013, no longer recognized her.

"I didn't expect a miracle," the researcher says. "I just wanted to see my mom for even 10 minutes the way she used to be."



Can we really hit the rewind button on Alzheimer's disease? Moussavi says yes. After years of research in what she calls an underfunded field of study, her findings offer hope and also sound the alarm on the importance of beginning treatment to activate those brain cells not yet destroyed by disease before symptoms progress beyond repair.

With an aging population, the number of Canadians living with dementia is expected to nearly double by 2031. The key to mitigating the effects of one of the country's fastest surging diseases is catching it early, insists Moussavi, who is the director of the biomedical engineering program in UM's Price Faculty of Engineering.

Back in 2011, Bridgit was the very first patient in her pilot study. Bridgit's memory retrieval may have been short-lived but its small success was what pushed Moussavi to explore deeper—and those first results across participants were promising. For as long as they were receiving treatment her patients didn't decline, and some improved.

But the sample size was a mere 10 people and there was no control group, so Moussavi couldn't yet say if their progress was from the stimulation that comes with simply getting out and routinely interacting with her friendly staff, or if it was spurred by the rTMS.

Nevertheless, a spark ignited so it was deeply disappointing when funding dried up after three years. Moussavi would spend nearly as long trying to secure further resources to launch what became, in 2016, the largest clinical trial of its kind in North America. This study, in collaboration with McGill and Monash Universities, continues today and will more fully speak

to the benefits of rTMS treatment beyond the placebo effect for participants in the early and moderate stages of the disease. Psychiatrists, clinical psychologists and neurologists also make up this collaborative effort.

For those for whom the treatment is working Moussavi provides maintenance sessions, mostly funded by private donors. But not everyone responds. For those who don't, she found an alternative in transcranial alternating current stimulation, or TACS. This technique, done every four months, attaches electrodes on the left frontal cortex and uses a current to boost excitability, paired with cognitive exercises. Two years into the study this treatment is also revealing a new way to turn back time or, at the very least, freeze it.

"I have seen significant improvement after the treatment. More than 90 per cent of participants improved significantly and those who did not improve did not decline," Moussavi says. "The TACS is really doing something—it's boosting the results of the cognitive exercises."

While her latest investigations are more substantial in scope and approach than that early pilot study, the delay in getting here had ramifications. People were lost along the way, says Moussavi, who is forever advocating to treat Alzheimer's patients soon after onset. (She once made an exception, for compassionate reasons, and enrolled a man in her study who had been diagnosed at a particularly young age—52. He was already unable to say more than a simple sentence; the treatment proved unsuccessful.)

"It was very sad," says Moussavi. "It's very frustrating because I have seen that we can help as long as the patient

is at the early stage. These patients are on a slippery road downhill. If you lose the opportunity—that window of the first five or seven years—you have lost the opportunity."

A more recent setback came when COVID-19 restrictions shut down Moussavi's lab. Given she's an engineer and not a physician, her treatments were deemed non-essential. "Three of our enrolled patients whom we did the treatment on, they declined so rapidly that they ended up in the nursing home during the pandemic. And one of them—one of our patients who was responsive to the treatment—he committed suicide," she says. "It's extremely frustrating. Because we can help."

Moussavi knew something was wrong with her mom, even when doctors insisted she was fine.

"I noticed Mom was getting overly anxious when it was dark when we were driving, or when I was driving to a place and I took a scenic route for her to enjoy. She seemed to be becoming more and more anxious because it was a route she didn't know."

Moussavi explains how egocentric spatial orientation declines with age but it's much more pronounced at the onset of Alzheimer's. "That was one of the main red flags for me."

She also noticed her mom, who married at 15, and after four children went back to school and graduated at age 46 with a 3.8 GPA, was not as articulate as she once was. Her vocabulary had decreased.

"She used to be a very sophisticated lady—very smart. And she used to have a lot of comments on political issues. She was well educated, well read."

"I didn't expect a miracle. I just wanted to see my mom for even 10 minutes the way she used to be."



Photos on opposite page, clockwise from left: Zahra Moussavi's parents; her mother, holding her brother; Zahra as a child (centre) with her parents and siblings; as a young mother with her children and parents; as a teen; and her mother holding her son. Photos supplied.



John and Nerina Robson in Turkey, during a stop on a 2018 cruise. Photo supplied.

Moussavi took her mother to a neurologist, who did a MoCA assessment—a common test for dementia—which she passed with no problem two years in a row. “MoCA is not helpful at the onset of Alzheimer’s, especially among those who are well educated. They can disguise their symptoms. My mom aced it. She got 30 out of 30.”

It wasn’t until seven years past onset that anyone believed her mom had Alzheimer’s and physicians could diagnose it based on plaque on her brain using MRI. Moussavi would go on to develop her own test to access people’s spatial abilities, delivered using virtual reality, and those who failed—those she was able to track down four years later—did in fact develop dementia.

With gaps in current diagnosis tools, people are often not diagnosed until they are five to seven years past the onset. By that point, they may no longer be able to read or write. Moussavi says one man from her study who underwent rTMS for two weeks could once again write a coherent paragraph. “He was so excited,” she says. “The paragraph was about a memory—a memory of his vacation.”

The birth of his son. The day he and his wife brought their adopted daughter home. The moment they met their baby grandson. That walk in Venice together, when the beautiful voice of the gondolier nearly brought them to tears.

“O sole mio,” sings **John Robson [BA/62, BSW/65, MSW/66]**.

These are the memories he holds on to most tightly. The retired social worker became a participant in Moussavi’s rTMS study seven years ago—a few years before he was diagnosed with Alzheimer’s.

He had noticed changes to his short-term memory; he would forget he had done something or that he needed to do something. He also felt like his astute sense of direction was fading.

These days he loves going to see a movie with his grandson, now 14 years old. The movies have gotten more grown up over the years—John used to fall asleep watching all the kid-friendly fare, jokes his wife, Nerina.

“They were not that entertaining,” says John, “but it’s a joy.”

“John’s attitude has always been very positive,” says Nerina. “Right from the beginning, I said to him, ‘We’re going to do whatever we can to delay and have a good life.’ And we’ve done that. I keep telling him that one warning sign that I’ll see as tragic is when he forgets my name. And he says, ‘That’s not going to happen.’”

“No, it’s not,” John affirms.

Every four months John attends daily treatments with Moussavi’s team. Nerina says she believes it’s slowing his symptoms.

“The wife of one man who was there said to me, ‘This is a huge commitment to come here every day. It might not do any good.’ And my response is ‘And it might. And isn’t it better to do something than not to do anything?’ And, consequently, his decline has been very slow. It’s there, but it’s slow.”

Nerina says people diagnosed with dementia are quickly forgotten. “Too many people want to put people in storage and I really believe we need more stimulation and progress and therapies that are attempted, like what Zahra is doing. I don’t think our provincial government is doing enough or anybody is doing enough

to support the research. This is a huge issue for our citizens in Canada. Nobody is talking about it as the real epidemic that it is.”

How the brain works has long fascinated Moussavi, whose early life in Iran was a mix of happiness and hardship. She grew up near the Caspian Sea, feeling free as she lay in the lush, green backyard among the chickens, snails, worms and flowers.

“In the most stressful times of my life, I speak to those childhood memories. It’s my zone. I go back and feel that and smell it and it gives me a strength. It makes me feel young,” she says.

In her 20s, she would endure eight years of war in southern Iran. With universities closed, she headed to hospitals to volunteer, helping any way she could, often injecting pain medicine into those injured.

She recalls walking down the street on a sunny spring day in 1981, in the small city of Dezful, when she witnessed the gruesome death of a teenage boy. A missile landed and a piece of metal debris struck him as he rode his bike; the injury left him decapitated. His lower body continued to pedal for some time before collapsing to the ground. Beyond the horror of this tragedy, Moussavi says witnessing the marvel of the spinal cord and its ability to continue to give signals stayed with her.

“I was just seeing it in slow motion,” she says. “It was the war—these war scenes—that made me interested in the human body.”

How our organs communicate is complex, as is how we store memory.

In a brain with Alzheimer’s, there are excessive tau and beta amyloid proteins, which destroy the communication channels between neurons. The pulses of the rTMS treatment try to counter that by stimulating the neurons to communicate with one another again.

“Millions of neurons are being activated simultaneously in order for us to even lift a finger or say a word,” says Moussavi. “When you activate the neuron more and more, repeatedly, the brain may even create new synapses—that is called brain plasticity. And that’s the hope of rTMS. That we may awake brain plasticity.”

By its very nature, Alzheimer’s forces those afflicted to live in the moment. Could there be something freeing about not being bogged down by should-haves or past traumas? If only that were the case, Moussavi says.

“Our past memories are part of our identification—it informs who we are. If we lose those memories that have formed us we will feel lost at sea. People who can’t remember usually feel like they’re lost in time and space. And it’s such a frightening feeling because they cannot make sense of things—they see things are happening and they cannot make sense of it.”

Moussavi’s dream is to open a first-of-its-kind centre in Manitoba for the early diagnosis and treatment of Alzheimer’s disease. It would be home to new diagnostic technologies, including the latest she’s developing in her lab. Electrovestibulography measures the vestibular system’s response while functional near-in-

frared spectroscopy measures the brain’s blood flow—these could help to better predict which treatment is best suited for a particular patient.

“Then perhaps we can optimize a strategy, not go by trial and error,” she says.

This research hub would also promote aging with a healthy brain, encouraging stimulating in-person activities like salsa dancing, as well as virtual reality opportunities at the push of a button. “It could be virtual gardening; they could plant seeds and harvest.”

The key to maintaining brain health is to not only stimulate the mind as much as possible but do so in different ways to generate new neurons and synapses between the neurons, she says, noting this could mean something as simple as switching from doing crossword puzzles to sudoku. So-called “super-agers” are those with greater numbers of synapses in their cognitive reserve. After retirement, Moussavi plans on flexing her cerebral muscle by going from professor to student and enrolling in a first-year university math course.

There are 52 genes involved with Alzheimer’s disease but only two of those genes are guaranteed predictors you’ll develop it, she says. And if you have those two genes they are always linked with early-onset. At 62, Moussavi says she avoided that fate but she could still develop the disease later in life.

“I do worry about myself. Part of this centre is for myself, too,” she says. “If I get Alzheimer’s then I will be a subject.” **UM**



ILLUSTRATION BY FRANZISKA BARCZYK

WHAT LIES BENEATH

Lieutenant (Navy) Steve Dyck's favourite action movie isn't *Trolls*, the soft and cuddly children's hit. That's pretty clear, despite a joke to the contrary from a colleague out of frame during a Zoom interview with this no-nonsense member of an elite Naval Tactical Operations Group.

We caught up with **Dyck [BA(Adv)/13]** while aboard a warship monitoring the Arabian Sea for vessels carrying illicit cargo. He's trained in weapons-use, rappelling and hand-to-hand combat. The team boards suspicious fishing ships to intercept illegal weapons or narcotics that finance criminals and terrorist groups in the Persian Gulf.

It's not unlike the plot of a nail-biting blockbuster, but with at least one notable difference. "There's always way more paperwork that they fail to show you in action movies," Dyck says from the ship's flight deck.

For the counter-smuggling mission known as Operation ARTEMIS, the specialized crew embarked with Her Majesty's Canadian Ship Calgary (HMCS Calgary) to patrol off the coast of Oman in the Middle East. Last year, the UM anthropology grad was behind a record-setting heroin bust when he helped undercover and confiscate 1,286 kilograms—the largest seizure in the history of the Combined Maritime Forces.

Policing international waters wasn't always his plan. He originally joined the Navy to do more deep-sea diving. After graduating from UM, he worked at maritime museums in the United States, exploring underwater shipwrecks. Following wicked storms, he'd search for newly revealed remnants of sunken schooners or merchant-class ships from more than a century ago. Uncovering the cultural histories of communities was key to making sense of the findings.

"When they used to construct ships they used to put a single coin under the mast for good luck—that's an easy way to be able to date a shipwreck site, by finding that coin."

He chose anthropology at UM, with a minor in archaeology, because it felt like an adventurous type of degree. "It was about working in isolated locations, you know, austere environments," says Dyck, who will find himself surrounded by towering waves with no view of land for days.

LISTEN IN

Working with the military, Steve Dyck says he'll never forget witnessing the struggles of refugee families who took to the water on their journey to find safety.



*David Milgaard died unexpectedly in May 2022. UM Today The Magazine is honoured to have had the opportunity to hear his story, in his own words, and to support his lifelong mission of advocacy.

Out of Sight/Out of Mind

COVID-19 in prisons got our attention. Manitoba has quietly been home to the highest incarceration rates in the country, with a grossly disproportionate number of Indigenous people behind bars. And Canada has one of the highest prison rates in the world. Hear from four members of our UM community who've witnessed a broken system and are pushing for change and greater empathy—but is society ready?

BY KATIE CHALMERS-BROOKS

David Milgaard says the word “free” with intention, as though it might just float away. In a deliberate yet delicate cadence, the former prisoner, at 68, is reading poetry over the phone from his townhouse in Cochrane, Alta.

He recites: “It is in a lament of time, trusted like a given home, an open pleasant place, with a fire and a love of the people that live there, that I choose to remain *free*.”

“I like that one,” he says.

The poem is about his family and trying to stay close to all that is good, when the world saw him as a killer.

“I needed that just to keep my head up and move forward, and feel cared for by a sense of morality that I held on to.”

He wrote *A Canded Home* from inside Ontario’s maximum-security Millhaven Institution while serving a life sentence for a rape and murder he didn’t commit. Easily Canada’s most recognizable name among those wrongfully imprisoned, **Milgaard [LLD/22]** says he was never actually able to achieve any kind of freedom within his own mind during the 23 years he spent behind bars—not when

people believed he was capable of something so horrific. As fellow poet Gord Downie famously sang in “Wheat Kings,” the Tragically Hip’s homage to Milgaard, “No one’s interested in something you didn’t do.”

Milgaard was incarcerated at 17 and emerged at 39, bewildered by a simple trip to the grocery store. He remembers trying to buy flowers for his mother, Joyce, a recognizable face on the news and her son’s greatest ally, but leaving empty-handed. “It felt like walking on the moon,” he says.

But Winnipeg-born Milgaard doesn’t dwell on the judicial missteps that linked him to the 1969 death of 20-year-old nursing assistant Gail Miller in Saskatoon. Once freed, with help from a team of lawyers that included UM alum **David Asper [BA/80, LLD/22]**, Milgaard made it his mission to help others unjustly incarcerated. (Both he and Asper were recently named recipients of UM honorary degrees, celebrating their work in this area.)

Milgaard not only advocates for those wrongfully convicted, he brings

his unique voice to push for a rethinking of prison systems in Canada—a conversation gaining momentum, given the brighter spotlight COVID-19 has cast on inequities.

He says transformation of the punitive nature of Canada’s prison system is long overdue. Milgaard isn’t excusing criminal behaviour, but insists that a more effective system for dealing with offenders will reduce future victimization and ultimately create a safer society. He says he had a front-row seat to all the shortcomings of the status quo.

“People who are caught up in the punitive justice model, they don’t really have any opportunity to make a legitimate change in their lives,” he says. “As a prisoner, for as long as I lived in prison, you know, you’re not given credit, you’re held in a situation where they’re focusing on all of the things about you that aren’t good. They’re saying you’re not going to make it. You’re a danger. You’re a threat to society. You know, if you want people to draw some sort of richness from themselves, hold up their strengths.”



PHOTO BY TODD KOROL FOR THE GLOBE AND MAIL

Milgaard vividly recalls the volatility behind bars. Sometimes it would quiet down; other times tension ran high. “It’s often tenuous—you can feel it,” he says. “It’s a horrible place.”

Milgaard clung to hope between appeals, but at times couldn’t see any sign of it. “You do end up coming to a loss and sadness inside your soul. But I don’t want to draw a real distinction between my situation, because I didn’t do anything wrong, and the person who has done something wrong who is inside prison. A lot of people have a hard time. They are just going through it one day at a time. They struggle very much.”

He’d watch the coming and going of young offenders, some of them charged with crimes as minor as stealing tires, but who, after having lived within the institution’s microcosm, would slide further down the wrong path. It’s why Milgaard, a father of two teenagers, calls Canada’s prisons “a growth industry.”

He has regular contact with those still in the system. When COVID-19 first hit, he teamed up with Canadian Senator Kim Pate to push for early releases, concerned that lesser convictions could become death sentences given the heightened risk of the virus spreading through close quarters.

Milgaard says we need to look to more progressive justice models used elsewhere in the world—yet cautions none are without flaws. He points to Japan’s merciful leniency approach, offering those convicted with the opportunity for reform by surrounding them with love and support of family. If they don’t respond, a prison term comes next—one that is especially cruel and torturous and not something Milgaard condones. But the intent behind their lenient approach makes sense, he says: Prisoners wanting to change should be given the tools to succeed.

“It’s amazing, if you think about it. There are people in Japan who have committed horrendous crimes and they have never spent a single day in jail. Hard to believe, but it’s true,” he says.

Milgaard insists restorative justice measures in Canada—where the perpetrator and victim sit across from one another to reconcile—need greater attention since they, too, put the onus on the offender to take responsibility for change. He also likes that it’s an approach that’s peace-making, rather than war-making.

“When these men have a chance to let that feeling go about what they’ve done wrong, share such a remorse for it, they will make up their own minds not to do wrong again. And this is the way of reformation. They will take that criminality that they have and they will beat it—they will become free.”

Howard Davidson, a sociologist and retired UM extended education professor, who spent years teaching in some of the toughest prisons in Canada and the U.S., founded the groundbreaking *Journal of Prisoners on Prisons* more than 30 years ago.

He launched the publication with Canadian convict-turned-criminology professor Bob Gaucher. The peer-reviewed, prisoner-written journal features incarcerated voices from across North America, and as far away as Ireland and South Africa.

The first volumes unlocked a door for inmates to speak out about prison conditions and health issues—from aging behind bars, to abuse, to solitary confinement. Research on these issues, to be effective in any real way, requires these first-hand perspectives, says Davidson.

“We published it with the aim that it would actually be picked up in the universities, that academics would

start to get their students to read prisoners’ analyses of crime and punishment,” he says.

But it was an uphill battle.

“Unfortunately, a lot of professors talk the talk, but not walk the walk. So, they’re interested in talking about marginalized voices but when you actually present an opportunity to get those voices heard in the classroom, that’s not always so easily done. Nonetheless, the journal I think has accomplished a great deal for the people who have written in it and the people who have read it.”

Just as interesting as what the prisoners chose to write about was what they wouldn’t. Racism and the politics of prisons and gangs were always verboten. These “hugely powerful entities within the prisons,” notes Davidson, were especially prominent at the American institutions in which he taught, including Massachusetts Correctional Institution. “Negative findings like that, as a sociologist, were always really important.”

Time spent with inmates proved to be some of Davidson’s most rewarding teaching experiences. “Where else would you want to teach a course in sociology of deviance? They were fantastic,” he says.

But throughout his career he could see an overwhelmed infrastructure that was never conducive to effective learning. While there’s always going to be people who we need to keep imprisoned for the safety of society, it’s a far lower number than those behind bars today, says Davidson.

Change may be coming. In response to the pandemic, Manitoba’s adult jail population dropped by 30 per cent. A 2019 Statistics Canada Report revealed that Manitoba had the highest incarceration rate in the country—231 adults per 100,000—and roughly three quarters of the inmates are Indigenous, despite this group making up only 15 per cent of

the population. The province held this position for highest incarceration rates since at least 2006, with Saskatchewan now narrowly taking the top spot. Canada’s rate—at 114 per 100,000—is among the highest in the developed world, lower than the U.S., but much higher than all of western Europe, according to The John Howard Society of Canada.

“So as long as you’re dealing with that kind of a situation, the amount of reform that you can do within the prison itself is pretty minimal,” says Davidson. “You have to basically bring the population down to those people who actually need to be incarcerated.... Prisons may have been a good idea in the 18th century when the penitentiary concept was created but they’re not a very good idea in the 21st century.”

Racism is a huge factor in how society thinks about the role of prisons, he says. “High rates of imprisonment and the function of prisons are defined by the nature of racism in the particular country.”

Where someone fits in socio-economically may also determine how open they are to rethinking the punitive model. People with secure jobs, who are educated and don’t see themselves as racist may be more open to conversations about reduced sentencing and decriminalization. “Criminality is often abstract for them. Their homes are not being robbed; dope isn’t being sold on the corner,” says Davidson.

Whereas, for people living in high-crime neighbourhoods, the impact is less abstract. “It happens in your face, it falls in your lap and it happens to and by people you know. In short, our attitudes about crime and punishment are affected by our socio-economic position, the immediate environment in which we live, and our perceptions influenced by media and political considerations.”

“We’re people—all of us—who dream, who want to love others and to care for others. You know, the people that we’re talking about, that are sitting inside cages right now as I say that, they dream and want to love others and to care for others. There is no real difference between them and us.”

DAVID MILGAARD

Only a fraction of prisoners are in for violent crimes. Sexual assault accounts for one per cent of reported crime and there are roughly 500 cases of homicide or attempted murder every year, among the roughly 80,000 overall criminal cases, according to The John Howard Society of Canada.

In both Canada and the United States, jail time can be spared if offenders can afford to pay a fine, which suggests their freedom isn't a threat and unfairly targets an already marginalized group, argues Davidson. "If you want to bring about change, you don't really start at the level of prison. By the time you get to the prison, you're already dealing with the worst of what's already happened."

We need to study how the social system "has created this monster." But maybe it's easier to not think about it? "That's what prisons are all about to a big extent, to make sure that people are forgotten about in our society," he says. "They fall off the map. They disappear. They go to prison, which means they go off to the netherworld."

As a doctor at Brisbane Correctional Centre in Queensland, Australia, **Dr. Heather Parker [MD/79]** got a glimpse into a world that up until then had been a mystery to her. Despite a varied career—as an aviation medical examiner, a medical journalist and a physician-pilot who would fly herself to remote areas to hold women's health clinics—she says the institutional role took some getting used to.

It was a strange feeling, she says, knowing the man who mopped your office had murdered his wife. But through her interactions with patients she grew familiar with their day-to-day lives and challenges. She recalls reports of rape and how inmates would feign knee pain in order to get particular bandages to use as tourniquets to inject drugs.

"There were lots of request for opiates," says Parker, who is now retired. "A significant number of inmates had mental-health issues like schizophrenia or had intellectual disabilities. Many made an appointment simply to alleviate the boredom of their day."

Parker was also a medical practitioner on the South Queensland Parole Board—one of 10 members. The job demanded a challenging balance of skepticism, support of the prisoner's rehabilitation, and protection of the community. Any decision could have a heartbreaking outcome.

"I still remember a young, violent sex offender who preyed on young boys as well as girls. He was accompanied by a psychologist and chaplain who pleaded his case and offered to live with him and supervise him closely. He was granted parole and almost immediately raped and murdered another young girl," says Parker.

It was clear to her then—and now, three decades later—that more resources should be funneled into prevention to address the root causes leading to criminal behaviour. "Putting more resources into preventing people from entering the prison system is needed—addressing such problems as poverty, homelessness, a lack of education, second and third-generation unemployment, drug and alcohol abuse, sexual abuse, proper medical care—especially for Indigenous Australians."

As in Manitoba, the number of people incarcerated in Australia draws heavily from Indigenous communities. According to the Australian Law Reform Commission, only two per cent of the population is Indigenous yet members of this group make up 27 per cent of the adult prison population.

It's the prison within a prison. When human rights lawyer **Isha Khan [BA/94]** would walk through solitary

confinement units she'd sometimes see eyes peeking out from the narrow slots where inmates would receive their meals.

"They'd be crouched down looking through because somebody was walking by and nobody had walked down the hallway for quite a while. I found that really hard," says Khan.

She was among a dozen lawyers across Canada assigned by the Minister of Public Safety in 2019 to review cases where people have been segregated from the general prison population. The initiative was in response to earlier findings that this isolation tool discriminated against those with mental health issues as well as Indigenous inmates. More recently, the pandemic created even more instances of segregation in Manitoba as inmates were isolated when cases surged.

Khan would ask offenders: How are you doing? How often are you getting outside? When was the last time you had any human interaction (beyond the delivery of your food through a hole in the door)?

She quickly unearthed a pervasive lack of resources—or thought—given to meeting inmates' needs. Often, the offenders were young, Indigenous and reported as having a history of mental illness.

Some prisoners hadn't been outside in days (in one case, it was as simple a fix as securing a jacket). One was still in segregation and shackled for an incident at another prison four years earlier. Some hadn't had mental health assessments since their intake—as far back as six years—with no follow-up assessment or care. "Why hadn't that status changed?" asks Khan, who admits she only got a glimpse into the system but it was enough to identify glaring gaps.

Some inmates told her they weren't allowed to have books; others were told their only prized possessions—



Isha Khan, at the Canadian Museum for Human Rights, where she is CEO

Photo by David Lipnowski [BA(Hons)/08]

their family photos—were lost when transferring from one prison to the next. There was little access to spiritual care from rabbis, Elders or imams, when it could have been doable at least by phone or Zoom.

"Sometimes they were so forthcoming and they would say at the end of it, 'You're the first person who ever wanted to listen to this, you know?' Was I the first person? I don't know. Maybe I wasn't, maybe they talked to several people but the fact that they had to say that meant that they hadn't felt heard. And they definitely didn't feel like they had been listened to."

Khan made recommendations for improved access to mental health and spiritual support, including more Indigenous-centred programming. She could see positive steps already being taken in this area. Speaking with Elders was not only benefitting Indigenous inmates but those of other backgrounds who were given the opportunity.

But without the tools to manage their anger, some inmates told Khan they'd rather ride out their sentence in segregation so as not to risk pushing back their release date. "They would say, 'I know if I go back into general population something is going to happen.' There were a lot of people who

seemed young and hurt and didn't have the tools to go back into the community and I thought it would be really great if we could use this time to give them those tools."

Khan says that among human rights circles, Canada's prison system is seen as "one of the country's most significant human-rights issues that we need to address."

"But when you talk to the general public there's often complete apathy. There's huge work we can do in terms of our awareness and education about these issues so that our judicial system will catch up."

It was her belief that dialogue creates understanding and change that prompted her to take the post as CEO of the Canadian Museum for Human Rights.

"We need to remember that these people are human beings; they have a story. They had something that went wrong. Sometimes they made a bad choice, sometimes the choice was imposed on them. Sometimes there were various other layers to it," she says.

Khan heard first-hand how complex these stories are. One inmate explained how his sister had been missing for days and he was sent by his mom to find her, only to search in a house frequented by drug dealers and have a weapon pulled on him.

"It's our country's shame—it should be.... We need to ask ourselves, 'Why is this happening?' We're not looking at the systems that perpetuate it," she says. "It's just so pervasive, right? We don't care about the people who we've kind of put away. We don't see them and we don't need to see them and we don't need to deal with those issues. But we do care about crime, right? And we do care about safety and so there's something broken in terms of the public attention to those issues."

But are we ready for a new conversation?

"There are pockets of people who are, but I don't think the general public is—but that doesn't mean you don't do it. I actually don't know if they will ever be ready because of how our whole penal system is, what it's based on, where it comes from. To undo that, it won't be incremental. I actually think it has to be completely up-ended but there's risk and money and all those things that go with that. And a whole lot of thought is required." **UM**

[illegible]

BY SEAN MOORE

The beast looked exhausted, yet it found strength to thrash about, desperately leaping toward freedom. When the chair yanked it back the animal whomped to the ground, over, and over again. Hours later a conservation officer arrived, but by then the deer had ripped the chair's tether and hobbled away, tripping with every step over the net it dragged from its head.

It was a passing remark, but eerily prophetic: days later COVID-19 introduced itself. Given the suspected source—likely a bat or pangolin—that final assertion should give us pause. Human and animal encounters can have consequences we cannot see for years, but come they do because every action collides with the natural world. As famed naturalist Sir David Attenborough put it: we are not *apart* from the natural world, we are *a part* of the natural world.

IS IT WRONG TO LOVE SOME ANIMALS MORE?

In his book *Wild Ones*, journalist Jon Mooallem notes that moose are 76 times more popular than opossums. But would that change if people knew opossums ate the very ticks that can infect us with Lyme disease? People caring more about certain animals is a condition some biologists refer to as “fussy.” We tend to prefer creatures that resemble our infants: big eyes, awkward, chubby.

In 1985, a 40-foot humpback whale captivated the public when it swam into the San Francisco Bay area to what would surely be its demise. Humphrey, as the wide-eyed cetacean was dubbed, was eventually lured out to sea through recordings played from a fishing boat, and 5,000 people flocked to watch his release. Huzzah indeed, but, those megafauna lovers tromped through the only patch of habitat for the critically endangered lungehead butterfly. Fussy.

These biases creep into funding. Since 1992, a 2017 *PLOS ONE* article noted, climate change has sparked reams of research on biodiversity, but most of these studies focus on vertebrates, snubbing spineless creatures. Perhaps COVID-19 will jolt this alignment anew as we realize unfussy creatures drive biodiversity, which in turn, lowers the risk of

novel pathogens spilling over from the wild into humans.

“When you talk about conservation,” UM entomologist Kateryn Rochon says, “the conversation stops at parasites because nobody values parasites. I can get funding to work on ticks that have an impact on human health and animal health if it has an economic impact. But the groundhog tick is of interest to no one. It might be endangered—I don’t know. Most ticks are not studied because you can’t get funding.”

The Dalai Lama said small things have great power, and if you disagree, try falling asleep with a mosquito in the room.

HOW IS A TINY INVERTEBRATE BOTH OUR FRIEND AND FOE?

Rochon, an associate professor in the Faculty of Agricultural and Food Sciences, began her studies interested in fleas, but then she learned that winter ticks, which are just over one centimetre long at their plumpest, can kill a moose. Although these ticks feed in clumps of thousands and can drain a moose of its blood, most moose die because the ticks change the mammal’s behaviour—driving it to scratch itself to death. That hooked her. Today, Rochon is one of the foremost experts in these miniscule carnivores and how they spread disease.

Ticks make a good case for anti-fussiness. Depending on who you ask, there are anywhere from 867 to 907 species of ticks in the world (with 40 in Canada) and we know very little about most of them because—as we’ve determined—parasites have few friends.

Agreed, the disease-vector thing is a turnoff, as is the way they crawl up your leg. But given our recent collective re-awakening to the importance of knowing about diseases lurking in the wild, we should embrace knowing more about these tiny ecological

cogs. “If you want to know about natural reservoirs of disease, local research is crucial,” Rochon says. “Manitoba is not the same as southern Ontario, for instance. What strains of bacteria would persist in the environment and spread through ticks would be different.”

Manitoba is also blessed with a geography that allows for three or four major flyways—migrating bird highways—to pass over us, and riding on these birds are ticks that may carry diseases. Indeed, this is likely how the blacklegged tick—the vector of Lyme disease, as well as *Anaplasmosis*, *Babesiosis* and Powassan virus—arrived.

“We’re getting diverse strains of infectious bacteria here because of these flyways,” Rochon says. “Things are kind of spicier up here compared to down south and we don’t know what this creates. It could be a dilution effect: Because so many potentially infectious strains come in here, no single one can really be dominant. Or it could be we get more chances of nastier ones. It’s too early to know.”

HOW ELSE ARE WE CREATING NEW COLLISIONS AMONG OUR SPECIES AND THEIRS?

Ecosystem balance is about timing. And climate change and human activity continually disrupt the time and place of natural events. Take purple martins.

UM’s Avian Behaviour and Conservation Laboratory (ABC Lab) published a paper in 2020 showing that artificial light at night impacts the timing of spring migration of *Progne subis*, dashingly feathered birds that are the size of your outstretched hand. Reid Smith, the student who led the work, attached sensors to martins that overwintered in the Brazilian rainforest. The birds roosting nearest the brightest human lights, she learned, began their 9,000-kilometre-return-journey to

Canada eight days ahead of schedule. That’s a significant amount of time when you consider how, for millennia, these birds have exquisitely timed their migration to coincide with the emergence of insects up north. Imagine the stress of walking 9,000 kilometres to your favourite restaurant only to be told your table would not be ready for a week.

Oddly, there is a hope in this: Climate change is causing insects to hatch earlier, and the purple martins who follow regular itineraries are beginning to arrive too late, missing out on the feast. So biological sciences associate professor Kevin Fraser, head of ABC Lab, is working on a separate project to explore if, and how, a field experiment that exposes chicks to alternative light cues can help the swallows adjust faster to this new reality than evolution would allow.

Rochon says we need to be active thinkers when we’re exploring the natural world. She was speaking about the need to check often for ticks when enjoying the wild—especially the small nymphs that are about the size of a poppy seed—so that you can prevent disease transmission. But it’s clear that her message is applicable to the bigger picture: We need to change our behaviour and our views.

“People who do field work in nature see themselves as the intruders. We understand that we are encroaching,” she says. “When you have a life that is disassociated with that, you see yourself as having a right to it. And that’s a big difference.” **UM**



Esther is a Healing in Harmony participant and mother to son Josue. She was abducted by militia members from the rebel group FDLR while fetching water in a forest by her home. She was held captive for three days before she was able to escape.



Imani and Sara came to Panzi Hospital for care. Imani [left], pictured at eight months pregnant, says her parents didn't believe she was raped. Sara was on her way to the river to wash her clothes when two men sexually assaulted her.



Hope *in* Harmony

Alum Darcy Ataman saw a way music could empower survivors of sexual assault and trauma in conflict zones. Now they're reclaiming their voices and speaking out in song.

BY LINDA BARNARD

The women move slowly, bent slightly as they tentatively enter the room at Panzi Hospital's Maison Dorcas after-care unit, as if making themselves physically smaller might ease the agonizing trauma they have endured.

Panzi Hospital in Bukavu, Democratic Republic of the Congo (DRC), was founded by gynecological surgeon and Nobel Laureate Dr. Denis Mukwege. It treats war atrocity survivors in a region where rape is a weapon of conflict and leaves women with devastating internal and external injuries, along with deep psychological scars.

There is a room there where another kind of caring treatment happens. A recording studio.

The Healing in Harmony music therapy program was created by Winnipeg music producer **Darcy Ataman [BA/96]**. It's an arm of Make Music Matter, the charity Ataman started in 2006 to help marginalized people through song. Since he began Healing in Harmony in Rwanda in 2009, more than 5,000 people, primarily women,

have completed the four-month therapy program in seven countries: DRC, Rwanda, Uganda, Guinea, South Africa, Turkey and Peru.

Canada will be the eighth, with the launch of a Healing in Harmony program in Manitoba's Fox Lake Cree Nation. Band leaders hope it will help bring healing to struggles arising from poverty and isolation, as well as painful generational trauma. A report issued by the Province in 2018 revealed allegations of sexual abuse committed by some Manitoba Hydro workers in the community as far back as the 1960s.

Healing in Harmony are community-based initiatives, run by local teams and led by a staff psychologist and music producer following a structured program. The participants are never referred to as patients or survivors. They're called artists. Their emotions and stories become lyrics and then songs. Each one is performed and recorded by the entire cohort, explains Ataman.

“The producer is helping to pull out people’s stories, which turn into lyrics and melodies. While it’s happening, the psychologist is there. And while that process is going on, we interject therapy, like cognitive behavioural therapy,” he says. “And in a way, that’s almost not even noticed. They don’t come in thinking, ‘I’m going to my doctor’s appointment or therapy appointment,’ which still has a lot of stigma. They come in thinking, ‘I’m going into the studio. I have my own notebook with lyrics and rhymes.’”

Artists are scored for PTSD, anxiety and depression at the beginning and end of each program. The results are tangible, measured by globally recognized standardized tests, including The Harvard Trauma Questionnaire. “We can literally quantify that reduction of trauma,” Ataman says. “They regain their sense of self.”

Ataman, 46, is often an observer at the recording sessions and graduation concerts. He sees the transitions. Feelings of stigmatization lift as participants go from “half-coma” states in the earliest days to emerge as confident artists. They are empowered, dancing and joyful. They feel like rock stars, he says.

Told there may be perpetrators in the crowd at a concert, they reject the psychologist’s suggestion they perform in another community. They won’t be moved.

It’s not always about the singing. “Maybe she just wants to hold her friend’s hand,” says Ataman. Sharing stories and learning other women

have been through similar experiences breaks isolation and eases stigmatization. It’s what Ataman called “re-framing their past while carving out a new identity,” in a blog post from one recording session.

The songs have titles like “My Body is Not a Weapon,” with the lead vocal performed by the songwriter, Sandra. She was raped, becoming pregnant and contracting HIV. Sandra sings that it’s okay for her to have new dreams, a new life. She doesn’t have to live in pain. She can be a doctor, a lawyer, a president and, when she is, this is how she’ll fix her country.

“The Criminal Father” calls out abusive, repressive men, not only those who perpetrate rapes but those who allow them to continue.

The songs also have an unanticipated effect on the soldiers. Healing in Harmony releases are played on regional airwaves, which have considerable reach in a place where everybody seems to have a transistor radio. The military has called the station to complain, demanding they stop playing them. The requests are ignored. That’s a powerful thing for the artists to hear.

“Those women who wrote that song and heard that loved that,” Ataman says.

Teenage artist Esther was raped by rebel soldiers. She had two children as a result and was unable to bring herself to care for them. Ataman saw her, after performing at her graduation concert, go over and pick up one of her babies for the first time. 



Darcy Ataman’s social conscience was stirred early. The son of a Holocaust survivor in Ukraine, he was barely five years old, listening to his father’s stories of his childhood traumas during the Second World War. Speaking about it seemed to somehow help his father cope. Ataman would become a well-connected, recognizable name in the music business, with multiple JUNO Award nominations. He didn’t appreciate it until recently, how his psychology studies at UM and Make Music Matter’s mission meet with Healing in Harmony’s music therapy programs.

LISTEN on Soundcloud



“I am an artist. I am a survivor—a survivor who is an artist,” says Sylvia Acan, as she describes the song she recorded. It’s a call for peace. Acan has experienced unimaginable violence and trauma from the long conflict in Northern Uganda. She says she lost “all my people” in the Lord’s Resistance Army insurgency. Orphaned, Acan would grow up in a displaced persons camp. She says she’s seen the positive results from Healing in Harmony. “Darcy—he means a lot to us. He means a lot to the world.”

Self Portrait

We asked artist Lori Blondeau to share the personal stories behind her pieces that span decades. Whether it's performance or photography (she always puts herself in the image), activism meets art. The School of Art assistant professor, who is Cree, Saulteaux and Métis, won a 2021 Governor General Award in Visual and Media Arts.

“Because I make work with my own body, I always think in those terms. Like, how would I place myself in a landscape and what am I trying to say?”



COSMOSQUAW (1996)

In the 1990s, Blondeau worked at a Montreal shelter for Indigenous women and had a co-worker who would often come in with the popular women's magazine *Cosmopolitan*.

"I couldn't understand why she would read it because it was a very white magazine."

Blondeau knew then she wanted to do a parody of *Cosmo* for Indigenous women, put herself on the cover, and call it *Cosmosquaw*. "I grew up in Regina, which was a very racist place to grow up, and I grew up being called 'dirty squaw,' 'ugly squaw,' 'f*cking squaw.'"

She recalls one particularly traumatic Saturday afternoon when she was 16. Blondeau was hanging out at a park with friends—all of them non-Indigenous—when a man from a distance yelled to her, "You f*cking ugly squaw!"

She left for home in tears and relayed what happened to her grandma, who told her "squaw" was a word that carried a lot of beauty and power, simply meaning "woman."

"That was the first time I had to really think about: What did squaw mean?"

Blondeau learned the word comes from the Rappahannock people, a nation in New York state who were among the first to be in contact with white people. "As settlers started coming west and there was more resistance, the word became bastardized and then it took on this negative connotation for Indigenous women. I want to—I'm not going to say 'reclaim' because I don't think that we need to reclaim any word that comes from an Indigenous language—but re-appropriate it."

It made perfect sense to pair "squaw" with "cosmos," which means at one with the universe.

"That's what I think an Indigenous woman is."

“Growing up in the 60s and early 70s, there was all these surfer movies, you know, with Elvis Presley, and I remember just falling in love with those and wanting to be a surfer.”

LONELY SURFER SQUAW (1997)

Knowing only life on the Prairies, Blondeau always dreamed of “getting out of here” and let her imagination fly with this pop culture parody of one of the old movie postcards she collected. The river stood in for the ocean and the snow for the sand. “And when you’re on the Prairies, you’ve got to have a fur bikini.”



STATES OF GRACE (2007)

For this exhibit—performed in Venice, Italy—audio played of Blondeau reading seven stories of birth, death and near-death. As the narrative filled the air near the famous canal, she braided her hair and then cut one off for each story told. “For me, the word [‘grace’] was really interesting, how it has this dichotomy to it. You either walk in grace or fall in grace.”

ASINĪY ISKWEW (2018)

A 400-tonne boulder known as Mistaseni (big rock in Cree) inspired this photograph. Despite protests from Buffy Saint Marie and others, the government blasted this ceremonial rock with dynamite in 1966 to make way for southern Saskatchewan’s man-made Lake Diefenbaker.

“They ended up blowing it up in the middle of the night, you know, when nobody could be there,” says Blondeau.

For generations, Mistaseni was a huge gathering place for the Cree, Assiniboine and Saulteaux people, with up to seven miles of teepees.

Blondeau draped herself in red velvet because it’s the colour of power, of blood, of life.

In 2014, divers found remnants of the rock under the water. Here, Blondeau stands on a recovered portion of Mistaseni. [UM](#)



Agents of Change

These notable alumni don't just talk about challenging the status quo, they make things happen. Get to know the Distinguished Alumni Awards' Class of 2021.

BY SEAN MOORE



LIFETIME ACHIEVEMENT

MYRA LARAMEE

[MEd/92, PhD/13]

With her no-nonsense approach, Myra Laramee helped transform Manitoba's education system as a beloved teacher, administrator and creator of guiding documents on infusing Indigenous-centered content into curricula.

Something she's learned from her students: The potential for humanity to be good. **Why she says everyone needs to take ownership of their own education journey:** A lack of knowledge is a disgrace and it's your problem. And there's 100 ways to learn and to change. **Her advice to young alumni:** Do what you were meant to do. We've got to encourage our beings not to give up, give in, sit down or stop doing it.



OUTSTANDING YOUNG ALUMNI

ASHLEY RICHARD

[BComm(Hons)/17]

She navigated a route to leadership paved with challenges, including homelessness and a terrible car accident. From this, Ashley Richard found new ways to advance Indigenous voices, like heading a national Indigenous hub for women entrepreneurs, and cofounding an Indigenous comedy festival.

Why she was reluctant to apply for a student scholarship: I didn't believe that good things happened to me.

Her spirit name, shared with her by her grandmother, Mary, a revered community leader: Forever Woman.

What she's working on now: a housing initiative for Indigenous women called WellNest

OUTSTANDING YOUNG ALUMNI

DR. NIRVANI UMADAT

[BSc/07, BSc/11, DMD/11]

This dental surgeon brought new smiles to patients in remote communities in the Americas and South-east Asia, by providing care and co-founding BdIn, a digital platform to improve patient admissions in South America. Dr. Nirvani Umadat's global reach expanded through the citizen-scientist astronaut training program, which led to advising the European Space Agency on oral health in orbit.

What she loves about dentistry:

It's a privilege to be able to combine the science and the art for people, to use my abilities that I have to change somebody's smile and in turn maybe change the way they feel about themselves.

Something she learned from

Dr. James Elliot Scott, her supervisor at UM: You can be laid back while being a perfectionist if you just enjoy what you do.



OUTSTANDING YOUNG ALUMNI

CHRIS VOTH

[BPE/20]

As an openly gay athlete, mentor and motivational speaker, Chris Voth creates opportunities for others to be themselves. This former captain of the Bisons volleyball team, who's played for Team Canada and on teams throughout Europe, was named assistant coach of Canada's 2024 Olympic squad.

Why he wanted to be a role model:

If I would have had a role model, it would have been a lot easier for me to come out—to understand that it was possible—and so I just really want to be that person for someone else. **His take on whether the weight of mentorship can be exhausting:** It only gives me energy.



PROFESSIONAL ACHIEVEMENT
DWAYNE MILLER
[BSc(Hons)/78]

His lab at the University of Toronto unlocks atomic mysteries many thought impossible, allowing us to see atomic motions in real time. Insights gleamed have, for instance, enabled the development of a laser scalpel to operate on single cells, avoiding collateral damage. A champion of making science accessible, Dwayne Miller helped launch “Science Rendezvous,” where the public interacts with researchers at events Canada-wide.

Why he says funding basic sciences is always a good idea: You can never predict where basic science will take you, only that wherever we’re going to go it’s going to be beautiful. **His take on the duty of every scientist:** To try and instill interest in the general public for science, and to explain it and to make it approachable.



PROFESSIONAL ACHIEVEMENT
DR. NORMA RAMSAY
[MD/68]

An acclaimed pediatric oncologist, Dr. Norma Ramsay found her life’s calling in the emotionally charged field of childhood cancer. She treated the most difficult cases in the world using bone marrow transfusion techniques she helped develop. Since 1979, Ramsay led the University of Minnesota’s renowned pediatric blood and marrow transplant program.

Her driving passion: Finding ways to make a bigger impact. **A quote by former U.S. President Harry Truman that sums up her philosophy:** “It is amazing what you can accomplish if you don’t care who gets the credit.”

PROFESSIONAL ACHIEVEMENT
HELEN ROBINSON-SETTEE
[BEd/87, MEd/14]

This long-time teacher, and now director of the Indigenous Inclusion Directorate with Manitoba Education, has taught students from middle-school age up to teacher candidates in UM’s Faculty of Education. Bringing her influence to many organizations, she’s a member of 14 boards and committees.

Her thoughts on getting things done: Wherever I can impact change, I want to invest my time there. **What drives her:** I want these histories—our languages, our contemporary lifestyles—taught because there are still people who see us as living in the past.



COMMUNITY SERVICE
ZOFIA DE WITT
[CertEd/71, BEd/73]

She’s known for her lifetime of volunteering for Canada’s Polish community, prompting the Government of Poland to award her the Gold Cross of Merit in 2010. A teacher for 30 years, Zofia de Witt helped establish the Polish Studies Endowment Fund at UM, now nearing her \$1-million goal.

Her inspiration: It seems my whole life has been bringing people of different backgrounds together in mutual understanding. **Her take on personal success:** There’s always been three parts of me: my family life, my professional life and my volunteer life. I knew that I had to fulfill all three to be a complete person.

COMMUNITY SERVICE
LITA FONTAINE
[DipArt/97]

When Lita Fontaine saw a lack of Indigenous perspectives in the local art scene, she co-founded Winnipeg’s Urban Shaman Contemporary Art Gallery—an Indigenous-artist-run centre that’s now one of the foremost venues of its kind in Canada. The teacher and renowned artist’s greatest accomplishments emanate through the many young creatives she’s nurtured.

Her advice to young people: It’s fine if you feel lost or you don’t know if you’re going left or right at first—just make an effort to learn. **What her art explores:** her experiences living as an Indigenous female in a colonial world. **How she explains her creative process:** I like to go within myself and then create something beautiful to help myself heal. It becomes my medicine.



COMMUNITY SERVICE
DOUG HARVEY
[BComm(Hons)/75]

Committed to Winnipeg, Doug Harvey has helped bring capital projects in the city to fruition, from the Canadian Museum for Human Rights to Qaumajuq at the Winnipeg Art Gallery. This CEO of Maxim Truck & Trailer leads by example through his volunteering and philanthropy.

His inspiration: To create a society of giving, where everyone is following their own interests and passions and creating a difference. **His thoughts on UM:** I made so many great friends and had so many wonderful professors who helped me and influenced me greatly in all I have done since university. **UM**

To watch video interviews with our 2021 DAA recipients visit:
umanitoba.ca/distinguished-alumni

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Get your tickets today for the first in-person Distinguished Alumni Awards Gala in three years. The evening honours our recently announced 2022 recipients, whose leadership inspires innovation in medicine, business, science and philanthropy.

THURSDAY, SEPTEMBER 22

5:30 PM RECEPTION

6:30 PM AWARDS PROGRAM AND DINNER

MANITOBA ROOM, UMSU UNIVERSITY CENTRE

TICKETS: \$100 OR A TABLE OF 12 FOR \$1200

[UMANITOBA.CA/DISTINGUISHED-ALUMNI](https://umanitoba.ca/distinguished-alumni)

DISTINGUISHED ALUMNI AWARDS



LIFETIME ACHIEVEMENT

Dr. Arnold Naimark
[BSc(Med)/57, MD/57, MSc/60]

Champion for the advancement of research and education in health care



PROFESSIONAL ACHIEVEMENT

Charlie Spiring
[BComm(Hons)/80]

Leader in business and entrepreneurship



ACADEMIC INNOVATION

Peter McPherson
[BSc(Hons)/86, MSc/88]

World-renowned scientist



COMMUNITY SERVICE

Pam Klein
[MEd/83]

Philanthropist and community builder



OUTSTANDING YOUNG ALUMNI

Dr. Carly McLellan
[BA/16, MD/20]

Emerging voice for Indigenous health and rural medicine



The five children of Louis and Marie Halwas—(shown left to right) Donna, Laleta, Ella and twins Wilfred and Lily—died in the span of three days in early 1919, along with their mother. Photo reprinted by permission of the RM of Riding Mountain West and Gerald D. Halwas.

VOICES OF PANDEMIC PAST

UM alum Wayne Chan turned his curiosity toward the forgotten pandemic of 1918-19, uncovering little-known stories of rural Manitobans forever changed by the Spanish Flu. These excerpts from his article in the Manitoba Historical Society's *Prairie History* journal bring to life a hardship and a hope to which we can all now better relate.

"You may believe that your personal observations of life during COVID-19 are mundane," writes **Chan [BSc/93, BA/00]**, "but they may be invaluable to historians years from now."

Many survivors recalled their local doctor working night and day during the pandemic. Ethel Bruce's husband, Dr. Edwin Bruce, was the physician for Swan River Valley. When Ethel was

interviewed in 1978, at the age of 97, she remembered that "...he was scarcely ever at home, but went from one house to another, keeping in touch by telephone. At one time he was three days and nights without sleep, and would have to get out of the car and run up and down the road to keep awake so that he would not end up in the ditch."

In a history of the former RM of Silver Creek, Evelyn Avery said, "...that was when the word 'neighbourliness' had its true meaning. When whole families were sick in bed, there was always a neighbour or neighbours who would bring homemade soup, bread, and other foods for those who were ill, and care for them, and the menfolk looked after the farm animals, then when that family recovered,

they in turn did these neighbourly tasks for another family who was ill." There were even cases where children who were orphaned by the pandemic were adopted by neighbours.

Aside from the oft-recommended shot of whisky, people wore bags of camphor around their necks and some gargled with kerosene. Others wore garlands of garlic to ward off the disease.

READ THE FULL STORY
for more excerpts



KEEP READING Find more stories online: news.umanitoba.ca/magazine



A LOOK BACK

IT HAPPENED HERE

We asked alumni for their most meaningful campus memory. See what artist **Takashi Iwasaki [BFA(Hons)/06]** found late at night, among the mess of paints and wafts of turpentine, in the Art Barn.



CANDID

MAKING AN IMPRESSION

Luther Konadu [BFA(Hons)/19] talks about his tactile photography.



ALUMNI POV

STORYTELLER

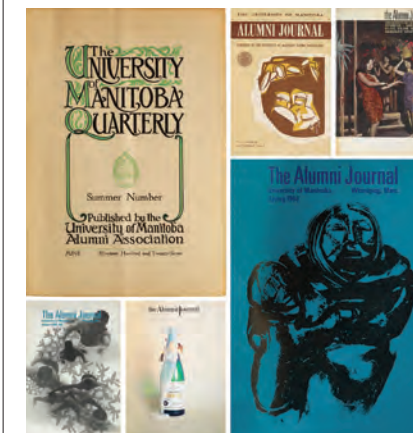
Acclaimed journalist and author **Michael Posner [BA/68]** tells us about his serendipitous encounter with Leonard Cohen, the subject of his best-selling books. Read an excerpt about Cohen's concert at UM in the 1960s.



INSIGHT

THE BATTERY REVOLUTION

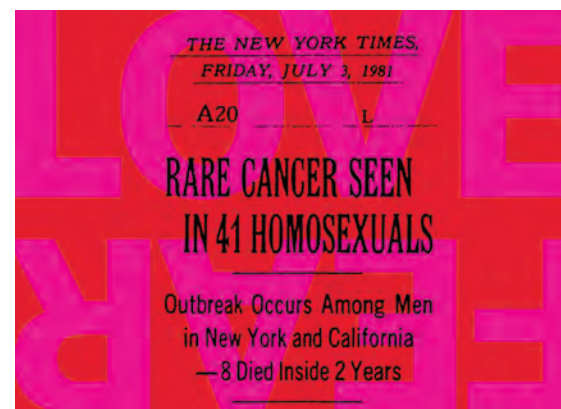
Will the everyday battery be key in solving our climate crisis? Faculty of Science researcher Christian Kuss thinks so.



ARCHIVE

WHAT'S IN A MAGAZINE?

We got nostalgic about how we shared campus happenings with grads of yester year. Check out early iterations of our UM alumni publication.



ALUMNI POV

WOULD I LIVE OR WOULD I DIE?

Dahn Hiuni [BFA(Hons)/88], a Los Angeles-based playwright, artist and academic, recalls those first mysterious cases of HIV when he was an 18-year-old UM student finding his way. His show, *The AIDS Portfolio*, offers a decades-long retrospective.



CLASS NOTES

TELL US WHAT YOU'RE UP TO

And read about fellow alumni doing big things.

**We don't even realize
that we live in the
future now. We don't
realize that all these
relatively small changes
over the past 25 years
have now accumulated
to the point where
we literally have
technology that we
saw on 'The Jetsons'
growing up.**

Vincent Cheung
UM alum / developer at Facebook

