

MARK CARNEY'S
HONEYMOON IS OVER

*The Man Who Wants to
Mine the Ocean*

MY BATTLE AGAINST
AI: A MEMOIR

MACLEAN'S

The Doom Spenders

THE
2026
UNIVERSITY
RANKINGS

Canadian twentysomethings are deep in debt—but can't stop shopping. Portrait of a generation in financial freefall.

BY COURTNEY SHEA





Research that changes how the world heals.

From groundbreaking stroke and cancer therapies to MedTech startups reshaping patient care, UCalgary researchers have the space to translate their discoveries into treatments, technologies, and startups, directly improving lives in Canada and around the world.



UNIVERSITY OF
CALGARY

**Start
something.**

ucalgary.ca/startsomething

MACLEAN'S

November 2025 · Volume 138 · Number 10

28

Last year, Canadian Gen Zers' consumer debt surged by 30 per cent



Prop styling by Alanna Davey/CADRE Artist Management; hair and makeup by Simone Otis/CADRE Artist Management; wardrobe provided by Jaclyn Bonavota/CADRE Artist Management

15

THE INTERVIEW

Gerard Barron says there's no harm in mining the sea floor. Environmentalists disagree.

20

THE BIG IDEA

Drones will soon be fixtures in Canada's skies. Sky highways can prevent chaos.

COVER STORY

28

Young Money

Gen Z, facing a brutal job market, a housing crisis and a general sense of doom, are spending more than ever. How Canadian twentysomethings maxed out on debt.

BY COURTNEY SHEA

UNIVERSITY RANKINGS

We crunched the numbers so you don't have to. Which schools came out on top this year?

P. 61

22

MODERN LIVING

After years of birth control, one 35-year-old woman decided to get sterilized

50

Author J.B. MacKinnon is leading class-action copyright lawsuits against the biggest big tech companies



FEATURES

40

Mark Carney Is a Very Demanding Boss

Now that the honeymoon period is ending, he's ready to run the country like Bay Street. Canada's first CEO PM has arrived.

BY STEPHEN MAHER

50

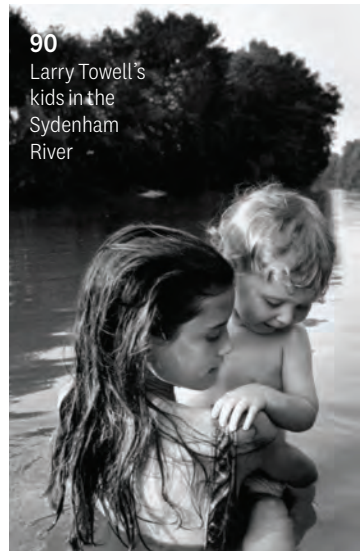
Why I'm Suing Big AI

Meta and Nvidia used my books, without permission or compensation, to train their AI models. My case will establish the ground rules for big tech's consumption of creative works.

BY J.B. MACKINNON

90

Larry Towell's kids in the Sydenham River



90

PHOTO ESSAY

Larry Towell documents disputed land around the world—and peace at home



96

Robert Lepage's play *The Far Side of the Moon*

96

CULTURE

Margaret Atwood's memoir, plus everything else you should hear, see and read this month

98

CROSSWORD

The *Maclean's* crossword, only available in print

Greater climate resilience

All in.



Pictured here are Western students and researchers at the WindEEE Dome in London, Ontario. Image background has been enhanced for print quality.

At Western's world-renowned WindEEE Dome, wind engineers and students are helping to build stronger, safer and more sustainable communities worldwide.

The stakes are too high for half measures. At Western, we're all in—creating opportunities and driving global impact, today. **Join us.**



Join a grand collaboration for Canada and the world



EDITOR'S NOTE

IN THIS ISSUE OF MACLEAN'S

I confess: I sometimes stand in line at my local coffee shop, looking incredulously at younger customers' elaborate beverage orders and wondering how they can afford to drop \$10 daily on grande iced matcha lattes. I'm a Gen X mom who drinks regular drip coffee with milk, usually brewed at home. Other people's impulse buys bring out my judgmental side.

But I know I'm falling into a trap. Matcha lattes are the new avocado toast—the big consumer trend that symbolizes a generation's wasteful habits, at least in the eyes of the over-40 set. Young people often complain about the rising cost of living, so it's tempting for the rest of us to criticize what looks like profligate spending. Matcha is mocked as a drink Gen Zers love for its colour (the green plays well on social media) and for its purported antioxidant health benefits (which are marginal, especially in a 250-calorie drink). Plus it's expensive—and about to get pricier. Poor weather in Japan, one of the world's biggest matcha producers, decimated this year's harvest, just as global demand was skyrocketing.

Will Gen Z be dissuaded from buying matcha products in response to the price spike? Probably not, if you ask Courtney Shea, the author of this month's cover story on young Canadians' spending habits. Her story is highly informative, a little voyeuristic

and totally unputdownable. In it, she observes that young people are splurging on items both small (\$10 coffees) and large (\$2,000 Taylor Swift tickets) as a way to cope with a sense of hopelessness fuelled by financial anxiety, global political unrest and climate change. She says that this phenomenon, also known as doom spending, is largely responsible for a spike in consumer debt among young people. She lays out the social and economic factors at play in Gen Z spending and brings context to consumer behaviour I would otherwise find baffling.

Courtney is a terrific writer, with a sparkling prose style and a unique talent for capturing the spirit of a cultural moment. In 2023, she won the National Magazine Award for best long-form feature of the year for a *Toronto Life* story called "The Death Cheaters," about affluent Canadian biohackers who want to live forever. I've been lucky enough to publish Courtney's writing for almost two decades, and sharing her work with readers has always been a joy.

In her story, Courtney describes young people's questionable personal finance decisions with both honesty—she doesn't mask their flaws—and considerable empathy. Her piece made me so worried about the Gen Z cohort that I got sweaty palms and heart palpitations while reading it. Perhaps you will too. And maybe that's a good thing. It makes me feel less judgmental about all the people I see buying matcha lattes.

"Young people are splurging to cope with the hopelessness fuelled by political unrest and financial anxiety"



A handwritten signature in black ink that reads "Sarah Fulford".

SARAH FULFORD
Editor-in-chief, *Maclean's*

SIGN UP FOR OUR FREE NEWSLETTER TO GET THE MAGAZINE'S TOP STORIES SENT DIRECTLY TO YOUR INBOX: [MACLEANS.CA/NEWSLETTER](https://www.macleans.ca/newsletter)

Get your winter body ready

stay **TOUGH** 

We don't have time for COVID-19

COVID-19 may be hanging around, but there are ways to help prevent it from getting in your way. Visit spikevax.ca and see if COVID-19 vaccination is right for you.

Spikevax[®] is used to prevent COVID-19 caused by the SARS-CoV-2 virus. 100% protection cannot be guaranteed. Side effects and allergic reactions may occur. Talk to your healthcare professional to see if Spikevax is right for you. For additional product information visit spikevax.ca



spikevax[®] by moderna

COVID-19 mRNA Vaccine



The War Amps

The Key Tag Service protects your keys and has been supporting child amputees for 50 years!



Order free key tags at waramps.ca

MACLEAN'S

EDITOR-IN-CHIEF Sarah Fulford

EXECUTIVE EDITOR Emily Landau

MANAGING EDITOR Katie Underwood

ASSISTANT MANAGING EDITOR (Special Projects) Claire Gagné

SENIOR EDITOR Matthew Halliday

ASSISTANT EDITOR Alyanna Denise Chua

ASSISTANT EDITOR (Special Projects) Caroline Bellamy

COPYEDITOR Kristen Chew

DIRECTOR, PRODUCTION & TECHNOLOGY Jacob Sheen

DIGITAL EDITOR Jadine Ngan

NEW PLATFORMS EDITOR H.G. Watson

CREATIVE DIRECTOR Christine Dewairy

ART DIRECTOR Emily Vezér

DESIGNER Lauren Cattermole

DIRECTOR OF PHOTOGRAPHY & VIDEO Rachel Wine

CONTRIBUTING EDITORS Liza Agrba, Michelle Cyca, Alex Cyr, Christina Frangou, Brian D. Johnson, Adnan R. Khan, Carly Lewis, Michael Lista, Stephen Maher, Jason McBride, Lauren McKeon, Chris Nuttall-Smith, Luc Rinaldi, Sarah Treleaven, Caitlin Walsh Miller, Andrea Yu

CONTRIBUTING ARTISTS Rodolphe Beaulieu, Jeff Hannaford, Antony Hare, Adrian Hogan, Selman Hosgör, Wade Hudson, Emaan Kheraj, Vishal Marapon, Grady Mitchell, Ebtî Nabag, Louise Pomeroy, Melissa Renwick, Pete Ryan, Allison Seto, William Ukoh

PUBLISHER

Jason Maghanoy

PRODUCTION

PRODUCTION MANAGER Joycelyn Tran

DIGITAL COLOUR SPECIALIST Drew Maynard

SJC

CHAIRMAN & CEO Tony Gagliano

VICE-CHAIRMAN John Gagliano

PRESIDENT & COO Kin-Man Lee

EXECUTIVE VICE-PRESIDENT, ENTERPRISE OPERATIONS, COMMUNICATIONS

GROUP & GENERAL MANAGER, SJC CONTENT David McGrath

EXECUTIVE VICE-PRESIDENT, SALES Ray D'Antonio

CHIEF CREATIVE OFFICER Sylvie Lamont

VICE-PRESIDENT, MARKETING & BRANDED CONTENT Sasha Emmons

VICE-PRESIDENT, AUDIENCE & COMMERCE Michael Gagliano

VICE-PRESIDENT, CLIENT SOLUTIONS Cameron Williamson

VICE-PRESIDENT, CONTENT Kyle Joe

DIRECTOR, BRAND EXPERIENCES, SJC Chantal Roy

DIRECTOR, CONSUMER MARKETING Maham Shakeel

DIRECTOR, DATA & ANALYTICS Angad Gadre

DIRECTOR, DIGITAL PRODUCT Amy Gibson

DIRECTOR, PROJECT MANAGEMENT OPERATIONS Ajay Masih

SENIOR EDITOR, BRANDED CONTENT Jenna Mohammed

HOW TO REACH US

LETTERS TO THE EDITOR

letters@macleans.ca

(Provide your name, address and phone number. Letters may be edited for length and clarity.)

CUSTOMER SERVICE AND SUBSCRIPTIONS

service@macleans.ca

macleans.ca/service

Maclean's Customer Service, 15 Benton Road, Toronto, M6M 3G2

TO ORDER BACK ISSUES

canadianmags.ca

TO SUBSCRIBE

macleans.ca/subscribe

Full subscription price for one year is \$39.99 plus applicable taxes;

U.S.A., \$60 surface; all other countries, \$100 airmail.

ADVERTISING

jason.maghanoy@stjoseph.com

Contents copyright © 2025 by Maclean's, Inc., may not be reprinted without permission. *Maclean's*, 15 Benton Road, Toronto, Ontario, M6M 3G2. *Maclean's* ISSN 0024-9262. Publications Mail Agreement No. 42494512. We acknowledge the financial support of the Government of Canada. Printed in Canada by SJC Print.

Maclean's is a member of the National Newsmedia Council, an independent organization established to uphold ethical journalistic practices. If you have concerns about editorial content, please contact us directly. If you are not satisfied with the response and wish to file a formal complaint, visit the NNC's website at mediacouncil.ca.



SJC

ALGONQUIN COLLEGE



Innovative Degrees

Launch your career with a degree that's anything but ordinary.
Real skills. Real experience. Real success.

algonquincollege.com/degrees



COMMENTS

READERS WEIGH IN



The Condo Crash

For years, low interest rates fuelled a big-city condo-flipping frenzy. Profits got bigger and condos got smaller. Now the bubble has popped and left behind thousands of unsellable, unlivable units.

By Ali Amad

Photo illustration by Andrew B. Myers

CRASH LANDING

Our September cover story on the Canadian condo crash detailed how the country's biggest cities are filled with tiny units no one wants. A sizable chunk of readers expressed unbridled schadenfreude for the builders and investors left in the lurch.

When people buy property expecting to flip it for profit, they're the problem. It's good that condo prices have cratered if it means these greedy idiots are bankrupted out of the market. It would also be good if condo values fell so low that people could afford to buy and live in them.

A lack of regulation by our spineless governments has allowed homes to be commodified. It's good when things conspire to push out individuals who are only

“When people buy property expecting to flip it for profit, they're the problem”

PAUL BELLEMARE
Kingston, Ontario

interested in homeownership to suck profit out and make it harder for regular people to own a place to live.

*Paul Bellemare
Kingston, Ontario*

“I bought my condo so that I could extort high rents from the working class! Now I can't sell because I don't fully comprehend how the market works! Losing money isn't supposed to be an option for me! I'm entitled to a million dollars for my shoebox!” Cry me a river. There are people sitting in tents in parks all over Toronto because the cost of housing has grown out of control and contributed to a destabilized economy with precarious employment. You want us to feel sorry for you? These people can get bent.

TongueTwistingTiger, Reddit

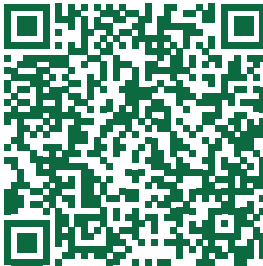


BE YOU.
BE WHAT THE WORLD NEEDS

The University of Saskatchewan (USask) is ready with flexible learning opportunities, hands-on training and customized programming to help you reach your goals.

With a rich cultural community unlike anywhere else, USask is a place where opportunities to learn, grow and connect are without limit.

Imagine your bright future and prepare to solve the latest global challenges in a place that is as unique as you are.



UNIVERSITY OF SASKATCHEWAN

usask.ca/admission

COMMENTS

SECESSION

Readers had big feelings about our September photo essay featuring Albertans who want to separate from Canada. The overwhelming consensus: it's a bad idea.

I was so distressed by the piece on Alberta separatism that I had to write. The Alberta separatism movement is not likely to succeed (I truly hope). I don't think the people interviewed are considering the whole picture. Many of them seem to be pretty well off—even the single parent who moved from Vancouver and laments that the cost of living has gone up. Presumably, she blames that on being part of Canada, while simultaneously ignoring that the rising cost of living is a worldwide phenomenon.

If Albertans look at accurate numbers about what they pay and what they get back in transfer payments, grants and more, they will see that they aren't being hard done by. Canadians are all taxed the same way. On average, Albertans pay more in taxes because they earn more (and that's a bad thing?). If you truly understand equalization, you'll know if a province doesn't qualify for equalization payments that simply means it is in better shape than the provinces that receive them.

*Bill C.
Regina*

I almost fell off my chair while reading "Alberta's New Separatists." First it said that Albertans' income was once 30 per cent higher than the rest of Canada and it is now only 15 per cent. My tears were flowing. It also said that Alberta has lower taxes and more affordable housing than the rest of Canada. Now my crying is uncontrollable. It sounds like you got it pretty good. Stop your whining and help the rest of Canada in the fight against the tyrant below us.

*Ron Werner
Vancouver*

As an adopted Albertan who loves this province, I would hate to see it torn apart or torn away from Canada through separation. I am aware of separatists' concerns; I just do not agree with their solution. The day we exit Canada would be the day we would be absorbed into the U.S. No

question—Trump is waiting to pounce. He is talking about taking Greenland by force. Why not Alberta? If you think Trump would be kinder to the West, please remember that he has just sent the marines into California for no reason. We would no longer be citizens of Canada, so there would be no army to protect us. As a U.S. colony, we would lose control of our oil and gas, our water and our other resources. Our children and grandchildren would be drafted to fight American wars, and ICE agents would patrol our streets. Finally, we would lose our health care. All the above would happen even if Alberta became the 51st state. Mr. Trump does not believe in the freedom you are hoping for—only his own.

*Harry Dudley
Calgary*

Although I've lived in Ontario most of my life, I was born and raised in Crowsnest Pass, Alberta. It's still my lovely Big Sky Country. My husband and I have been fortunate to be able to explore all 10 provinces. If only more of us could explore this wonderful country coast to coast, I believe we would better understand each other. Now whenever I hear people in one province or another wanting to secede, I'm floored.

Sure, we have our political differences, and the cost of living is soaring. But it is crucial that we discuss and work on possible solutions—not abandon ship. More than ever we need to stand together to cherish and protect this great country. If we do not, the megalomaniacal menace south of the border will swallow us whole.

*Patricia MacQuarrie
Kingston, Ontario*

I'm also an Albertan who's unhappy with much of what our federal government does. But I'm not ready to separate. All of these subjects seem to have jobs, homes and health care. Someone has been telling them they can have more. There's nothing wrong with wanting more—as long as it's not at the expense of others. These disgruntled Albertans need to compare what they have to Canadians living in the territories or the "have-not provinces" in Atlantic Canada. The fact remains that Albertans are richer than other Canadians.

The Trudeau Liberals were a disaster, but angry voters need to acknowledge that the last election was a vote for a leader, not a party. I have never before voted Liberal and may never again. But I have to hope Prime Minister Carney will do the job at the trade negotiations and respond to Canadians' anger over crime, cost of living, health care and the job market. This political activism is better directed to removing the existing provincial government. Talk about overreach. The UCP has morphed into a party that is anti-science and anti-LGBT. It's changing voting procedures, the pension plan, policing and more. Trumpism is alive and well in Alberta.

*Shirley Mooney
Calgary*

LETTER TO THE EDITOR

I am writing to address the copyright violation of two of my photographs in the July 2024 article "The War Over Safe Drug Supply in Vancouver," which included two illustrated versions of my photographs. These were created without my consent, despite my clear decision to withhold permission for their use, based on the fact that the subjects of the photographs did not want to be featured.

Circumventing the rights of photographers makes it impossible for us to continue making a living and demonstrates a devaluing of the crucial contribution photojournalists make to your publications.

I have been photographing the issue of the overdose crisis for over a decade, developing rapport within a marginalized community, and your actions have directly undermined my efforts to create work within the context of explicit consent.

This should never happen to any photographer, but it was especially egregious given my years-long relationship as a freelancer for your publication.

I appreciate that *Maclean's* has since apologized and hope to see the development of internal policies to ensure it doesn't happen again.

Jackie Dives

We welcome readers to submit letters to either letters@macleans.ca or to **Maclean's**, 15 Benton Road, Toronto, M6M 3G2. Please supply your name, address and daytime telephone number. Letters should be fewer than 200 words, and may be edited for space, style and clarity.

ARE YOU PREPARED

TO BE DARING?



GREENWOOD IS.

At Greenwood College School, we deliver a student-centred education with the ideal combination of challenge and support. The Greenwood experience includes purposeful learning and a welcoming community that empowers every student to daringly venture further together.

greenwoodcollege.org

Greenwood 

Venture further together.

5G+

COVERAGE+

RELIABILITY+

VALUE+

PERKS+

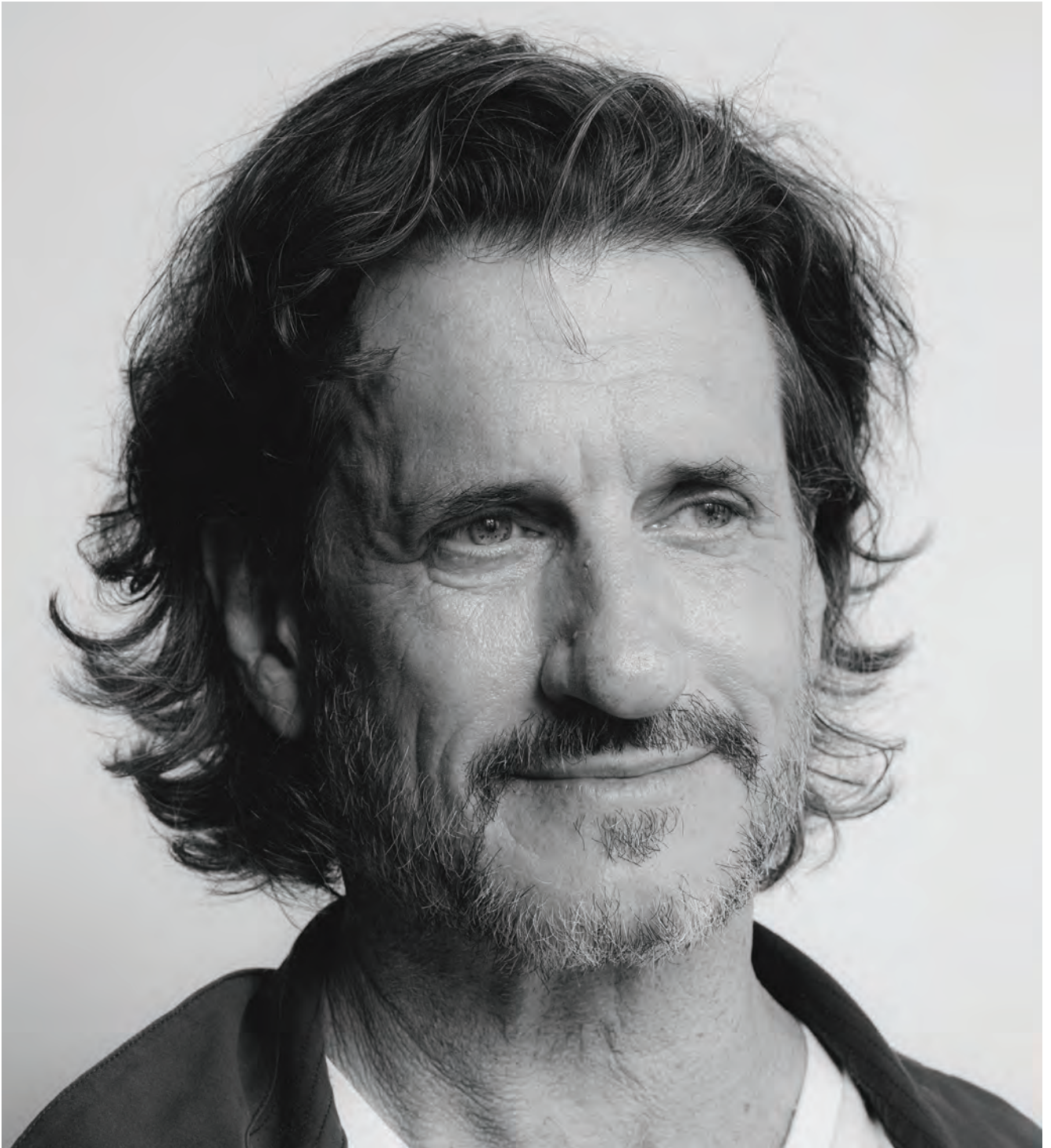
PLUS IT UP on Canada's largest
and most reliable **5G+** network.

Learn more at
rogers.com/network



THE INTERVIEW

CONVERSATIONS WITH THE NATION'S NEWSMAKERS



Gerard Barron wants to mine the ocean—and he's not afraid to get on Greenpeace's bad side

INTERVIEW BY KATIE UNDERWOOD • PHOTOGRAPHY BY LAUREN SEGAL

MACLEAN'S 15

WHAT DONALD TRUMP WANTS, Donald Trump must get. This past April, perhaps noticing his 51st-state critical-mineral grab was failing, he loudly issued an executive order expediting permits for companies to commercially mine far-flung seabeds rich in nickel, cobalt and other metals—demand for which is set to quadruple by 2040 to power the clean-tech boom. There’s just one problem: those seabeds belong to everyone, sir.

That didn’t seem to bother Gerard Barron, CEO of the Metals Company, a Vancouver-based sea-mining firm. Its American subsidiary seized on Trump’s mining zeal to stake out the Clarion-Clipperton Zone, a four-and-a-half-million-square-kilometre oceanic expanse between Hawaii and Mexico. Barron’s billion-dollar goal for the coming years? Step one: slurp millions of metal-heavy nodules off the Zone’s floor using underwater vessels (picture remotely controlled Dysons). Step two: refine and sell the nuggets to metal-hungry industries. Step three: recycle the castoffs. Step four: stop extraction altogether. Barron, a self-described environmentalist, calls the plan “progress.” Scientists and NGOs, worried about disrupting little-understood ecosystems 6,000 metres below deck, call it a potential climate cataclysm. Trump calls it business as usual.

The “big game,” as you’ve called them in the past, are polymetallic nodules. They kind of resemble uglier truffles.

I think they’re beautiful. They’re about the size of potatoes, and they literally just rest on the ocean floor, like this one sitting on



the palm of my hand; it’s probably four to five million years old. Actually, if you go into most of my jacket pockets, you’ll find some nodule dust. I always keep one with me—and I do have favourites.

What’s so special about these spuds?

They contain high grades of the metals we need, like nickel, copper, cobalt and manganese. Cutlery, computers, the buildings we’re in—if it ain’t grown, it’s mined. You can’t make steel without manganese. Nickel is used in batteries. Your iPhone has a cobalt-rich battery.

Ah, this old thing.

If we look at history, battles have been fought around energy, mainly oil and gas. Now the same can be said for critical minerals. Today, I’m doing meetings in San Francisco, and the theme in America at the moment is: bring back jobs, bring back industry. Depending on who you listen to—the World Bank, the International Energy Agency, pretty well any authority but Greenpeace—they’ll say, “That’s going to require a lot of metals.” Canada is rich in them but America is not, and now other countries are realizing

“We were on a \$25-million campaign—American dollars—to study the recovery rate of an area we’d collected nodules from a year earlier. Greenpeace tried to derail it. Well, that’s not very reasonable or progressive!”

they’ve got to have more control over that supply chain. So the question is: where are they going to get the metals? These nodules just so happen to grow in the ocean through the accretion of sea water and sediment, a bit like pearls.

The International Seabed Authority, or ISA, has a pretty strict “look but don’t touch” policy for the Clarion-Clipperton Zone, a nodule-packed area in the Pacific. Earlier this year, your company applied for clearance to mine there with the U.S., which is not an ISA member state. Those nodules took millions of years to form—why not just wait for proper commercial regulations and avoid a diplomatic melee with the ISA’s actual member states? What’s the rush?

No single nation has sovereignty over the oceans. In 1994, 157 of them agreed to an ISA treaty that said, “When it comes to sea-floor minerals, these are the exploration rules.” I think the U.S. was clever not to ratify; today, it’s free to do what it’s doing. Here we are in 2025, and still no commercial guidelines from the ISA. I don’t think its members are ever going to agree on them. The lunatics got ahold of the asylum—in this case, the NGOs. Governments have been heavily influenced by the World Wildlife Funds of the world, whose deliberate plan has been to derail the Metals Company so we run out of money. If we sat around for another couple years, we’d have to say goodbye to our team. There’s no way our shareholders would support us.

Maybe so, but you could argue pumping the brakes is good from an environmental perspective. Every day, Instagram shows me reels of new translucent octopuses and bioluminescent shrimp I didn’t know existed. Some researchers say we have a better idea of what’d happen if we mined the moon than the deepest depths of the sea.

That moon thing is a throwaway line that keeps being repeated. When it comes to the Clarion-Clipperton Zone, we know a lot.

Do we, though?

In terms of the possible disturbance to the deep-sea environment, everyone was concerned about the sediment plumes mining kicks up travelling long distances and blanketing other ecosystems. We found that they only rise about two to three metres above the ocean floor; up to 98 per cent settles in the area. It’s quite magic to watch! The biggest battle we’ve faced in the sea-mining industry is misinformation. For the last 14 years, the Metals Company has been a prolific spender of environmental-research dollars—and we’re for-profit. We’re not a research institute. James Cameron, one of the great explorers, has opined on the topic of deep-sea mining. I was a bit nervous to hear his stance—he’s completed more than 75 deep-sea dives. But he just said, “What you mostly have is miles and miles and miles of nothing but clay.”

Some scientists might quibble with that.

Don’t fall victim to the nonsense. We’re going to pick up some rocks.

A big part of Donald Trump’s 51st-state plan had to do with critical minerals, or at least that’s what our outgoing prime minister thought. Did you have any misgivings about cozying up to a guy who just floated absorbing the country where your company is headquartered—for treasure?

As an Australian, I found that whole thing pretty funny. It would be like us saying, “New Zealand, come on over.” They would hate it. But misgivings? None. None. Donald Trump—he’s an entertainer. He’s also a world-class negotiator. What I see is a president doing what’s in the best interest of his people. I think

Canada has better leadership now too. (That’s a delicate way of saying I don’t think the previous leadership did a very good job.) I hope Mark Carney can continue the good path he’s heading down. He realizes you’ve got to have industry to have taxes and jobs. And, I don’t know if “bending the knee” is the right term, but he’s making an effort to have a better relationship with the U.S. administration. That’s important.

Have you met Trump?

Not him specifically.

Who in his cabinet have you worked with on the mining file?

Many people. Secretary of State Marco Rubio. Mike Waltz was one of them, but he had a bit of a Signalgate problem. We’ve had a lot of Republican support in the last five years. I don’t know why it was more Republicans—maybe they’re more business-focused. Critical minerals are a bipartisan issue, though. I’m convinced that priority will survive any administration.

Do you think taking the isolationist path is going to work out for America?

I do. It’s such a big, prosperous market—everyone wants to do business with the United States.

Do you live in Vancouver full-time?

No. I’m constantly on a plane: next week, I’m in Dubai, where I have a residence, then I’m off to Seoul to meet a partner who wants to help us build on-shore processing, then London for investor meetings. I’ll be in New York in October for a UN General Assembly meeting. I spent seven straight weeks in Vancouver once, and it rained every day. I have a love-hate relationship with that place.

“Mark Carney realizes you’ve got to have industry to have taxes and jobs. I don’t know if ‘bending the knee’ is the right term, but he’s making an effort to have a better relationship with the U.S. administration. That’s important.”

Canada has been floated as a potential site for refining these nodules, once they’re dug up. We have a moratorium on sea-bed mining in our own waters. Do you see that putting a wrench in your plans?

Totally. Canada’s moratorium was guided by a squeaky-wheel community of green activists. It’s a ridiculous position, and I encourage Carney to reverse it immediately. For those bureaucrats who weren’t clever enough to see through the noise: shame on them.

Google, Renault and BMW Group—big metals customers—are also refusing to buy ocean-sourced metals for the time being. Have the “lunatics” gotten to them too?

In many of those cases, the companies were heavily influenced by NGOs. If they genuinely cared about the environment, they would have reached out to us to say, “We’re thinking of joining this moratorium. What have you got to say? What’s your story?” But they didn’t. Virtue signalling 101.

You’ve been a serial entrepreneur, bouncing between business ideas for most of your life—in finance, in manufacturing, in tech. Why was mining the thing that hooked you?

I grew up on a dairy farm in Queensland, Australia, in the middle of nowhere. I remember thinking mining jobs were so cool because of the big machinery. Later in life, a tennis buddy of mine went to work for a company called Nautilus Minerals, which mined copper in the ocean. As he told me about it, I got more and more enthusiastic. He said, “By the way, we’ve got no money—can you invest some?” So I did. Nautilus ended up catching a commodities-cycle wave. We raised a lot more money and listed the company, then both of us left around 2008. As time went on, the geopolitics of critical minerals became a red-hot topic. You know when you see the truth—when you know

something is right—even when everyone else is telling you it’s wrong? I’m not doing this to make more money. I just had an absolute determination that sea mining needed to be established. It’s like electrification. The EV market’s hit a bit of a speed bump now, but it’ll get back on track.

You don’t seem to mind the climate-villain persona that’s starting to stick to you. Pelenatita Kara, a prominent environmentalist in Tonga, called you “a dark cloud over the Pacific.” Why doesn’t that bother you?

Because I know it’s wrong. I’m not saying I’m not a sensitive soul—it just doesn’t touch the sides, honestly. Maybe it motivates me. I don’t know.

So you do get a bit of a rise out of pissing off Greenpeace, then?

I don’t *try* to. But I think they should be ashamed of themselves. They should be ashamed of protesting aboard *Coco*, one of our boats, in 2023! We were on a \$25-million campaign—American dollars—to study the recovery rates of an area we’d collected nodules from a year earlier. They tried to derail it. Well, that’s not very reasonable or progressive! I’m impatient with people who just want to slow or stop things without presenting alternatives. If not this, then what? The only argument I’ve heard from some of those environmental groups is in favour of degrowth—or shrinking production and consumption worldwide to conserve resources. That’s a pathway to catastrophe. They want fewer people on the planet; they just can’t decide which ones should go first.

People have called you “Australia’s Elon Musk.” Is that a flattering comparison in your mind?

I’m a massive fan of his. He’s a once-in-a-multi-generational genius. I don’t deserve that comparison. I’m just doing my best.

He’s pretty weird, but I don’t mind that. People probably say I am too.

Life on the dairy farm—did you enjoy that? Living off the land?

Hell yeah. I milked the cows every day. My dad was also the local windmill repairman, which is kind of funny. If you look at how our vertical-transport system pumps nodules up from the sea floor, it’s a similar mechanism to a windmill, just on a much bigger scale. I’m a farm boy through and through. You just know how to do shit when you grow up on a farm.

Is there any place on Earth you’d want to see left untouched?

Queensland, for sure. But I’m a fan of progress. It’s exciting, and it’s frightening too—for example, will artificial general intelligence be the end or the beginning of us? Who knows?

“Who knows?” is right.

It’s gonna be one or the other! The thought of compressing 100 years of medical and scientific research into five or 10—that’s good! I’d love to live to a thousand, to be honest. I know that horrifies some people, but I have so much to do.

Are you into biohacking—cryotherapy, fasting, nootropics, all that jazz?

Not at the moment, but I’m open to it. I follow a lot of people in that community online. Last week in the States, I did one of those new whole-body scans. I get checks done regularly because I want to see my kids grow older and make sure this industry gets going. I’m 58 years old, but I’m so full of energy and life, it’s like I’m 25 again. It must be disappointing to my critics. ■

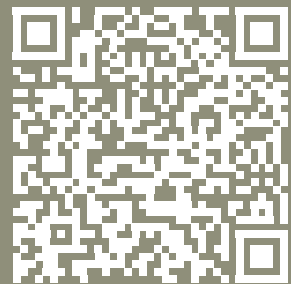
This interview has been edited for length and clarity.

On War: Exploring why and how we fight

By
**STEPHEN J.
THORNE**



In *On War: Exploring why and how we fight*, author Stephen J. Thorne, senior staff writer at *Legion Magazine*, draws on historical sources, veterans' accounts, and his own experiences as a war correspondent and photojournalist as he explores conflict and war from multiple perspectives. Illustrated with some of the most profound conflict photography ever shot, *On War* is a unique and compelling read.



Scan to visit the Shop page



**"I was
captivated!"**

"I was captivated! Thorne takes readers on a journey that touches on everything from conflict language to the plight of non-combatants, the absurdities of military service to the importance of chocolate and coffee to victory. I can highly recommend this wide ranging and fascinating book that is chock-full of unique and differing perspectives on the general topic of war. Stephen has done a bang-up job!"

Retired major Mark D. Campbell,
3rd Battalion, Princess Patricia's
Canadian Light Infantry

"This book, by one of Canada's most experienced conflict journalists, reveals deep insight into the country's military history and contemporary security issues. Thorne offers new and challenging perspectives on how history infuses and informs our modern, dangerous world."

Tim Cook, author of *Vimy: The Battle and the Legend* and *The Good Allies: How Canada and the United States Fought Together to Defeat Fascism during the Second World War*



**Only
\$39.95***

To order, visit shop.legionmagazine.com
or call toll-free **1-844-602-5737** today!

*+ tax and shipping

THE BIG IDEA

RADICAL SOLUTIONS TO THE COUNTRY'S PROBLEMS



Build Drone Highways in the Sky

Drones will soon play a key role in Canada's defence strategy. They'll need some air-traffic control. **By Bashir Khan**

BACK IN 2016, I JOINED the University of Toronto's student aerospace team with my friends Ayaan and Shayaan Haider. We'd build our own makeshift drones then make them square off in silly competitions, like seeing whose model could fly eggs a few kilometres without cracking them, or deliver cans of beer to frat houses without shaking them up. We noticed our fellow students were ordering items from Amazon Prime that they could easily get from local corner stores, so we created a

delivery app, programming our drones to zip around buildings and other city structures to drop off orders.

Creating flight paths that drones can navigate autonomously isn't as simple as plotting routes on Google Maps. When you look up, you may see clouds, telephone wires, maybe a few birds. But from a robotics standpoint, all kinds of invisible factors influence the accuracy of a drone's route, like its altitude, electromagnetic and radio-frequency

interference, GPS and telecom signals and, yes, weather. In 2018, the Haiders and I started capturing these datasets using sensor-equipped drones, bikes and other modes of transportation to map out cities like Vancouver, Toronto, Ottawa, Calgary and parts of Montreal.

That's the origin story of AirMatrix. Today, it's a master-control software that helps pilot autonomous drones safely, simultaneously and compliantly using all of the aforementioned data,

updated in real time with an assist from AI. It's now being used by the Canadian and Ukrainian militaries, as well as 30 American organizations, including the Federal Aviation Administration, or FAA. Soon, we'll deploy in Riyadh.

Skyways are quickly going to become essential infrastructure for drones, just as roads are for cars. Between 2019 and 2025, Transport Canada certified more than 107,000 drone pilots, and our domestic drone industry is set to grow five-fold in the next decade, from US\$3.5 billion in 2024 to US\$15.5 billion by 2035. While the Canadian military can fly its drones as high as it wants, commercial drones will mainly stay below 400 feet in the air—and we'll need to rigorously map out that space to keep traffic moving and prevent accidents. Drone operators typically use

phrase “software-as-a-service.” Historically, the British Empire achieved military dominance because of its naval supremacy; later, the Wright brothers' tinkering helped the U.S. become an aerial superpower. You only need to read the news to understand that low-level airspace threats are now the predominant ones. According to combat medics, drones have caused roughly 60 to 70 per cent of soldier injuries and deaths in Ukraine, for example. Even if a country isn't in an active war, drones can also be used by neighbouring nations for reconnaissance purposes.

Canada's current biggest vulnerability on this front is the Arctic, which makes up 40 per cent of the country's total land mass. As climate change melts our ice, previously locked trade routes will open up, facilitating passage by vessels from China, Russia

drone carrying a shopping bag full of guns breached the U.S.-Canada border before crashing into a tree near Port Lambton, Ontario. AirMatrix has also been used by prisons, which frequently deal with drones trying to smuggle contraband like weapons and cellphones over their walls. Authorities spotted more than 1,000 drone drop attempts at Canadian federal penitentiaries in the first half of this year alone. As drone technology becomes more accessible to the average person, these incidents will only increase. That's why we need to track and counter them.

Scaling mapping and defence detection to a national level is going to take time. Many of the Canadian buildings we'd want to protect are in restricted airspace. In the U.S., the FAA has a program in place to grant security agencies access to sensitive areas for data collection purposes; Canada does not. Drone use is currently regulated at the federal level by Transport Canada, but issues like criminal enforcement—and best practices for commercial drone flights across urban, forested and tundra landscapes—bleed into provincial jurisdiction. (Cities also enact their own bylaws that govern drone use.) AirMatrix is part of a drone-specific traffic-management task force led by Transport Canada that's looking at all of these concerns, including which agency is best suited to handle air-traffic control. Right now, the job falls to Nav Canada, which operates the country's civil air-navigation system. That could change in the coming years.

Someday soon, drones will be just another vehicle we share space with. Some Canadian *Terminator* fans might think of Skynet and get spooked. Making them comfortable isn't just about ensuring drones can fly around without causing aerial disasters; it's also about creating technologies that can spot and remove any machines operating illegally in low-level airspace. I think of our software as the good version of the all-seeing Eye of Sauron from *The Lord of the Rings*, and also in terms of Maslow's hierarchy of needs. First the security, then medication deliveries, then the fun stuff. ■

Bashir Khan is the co-founder and CEO of AirMatrix and a founding member of Canada's National Security Innovation Council.

“Skyways are going to become essential infrastructure for drones, just as roads are for cars. Between 2019 and 2025, Transport Canada certified more than 107,000 drone pilots.”

GPS to chart their paths; there's a six-metre margin of error, which could prove catastrophic once Canada's skies further densify. AirMatrix, on the other hand, maps routes down to the millimetre.

Once their paths are plotted, drones could be used for almost any task, anywhere Canadians need them. They'll be able to inspect civic structures, like government buildings and telephone wires (which is good news for pole-climbing techs). They'll also have a role to play in health care, possibly in the form of medication deliveries. In fact, the world's first delivery of lungs to a transplant patient via autonomous drone, flying from one Toronto hospital to another, took place on AirMatrix's flight path.

One of the most important emerging uses within Canada is defence. We sometimes say AirMatrix provides “sovereignty-as-a-service,” a play on the

and the U.S. Canada's federal government uses satellite and radar to monitor activity in the region, but there are vast swaths of the Arctic that have no digital eyeballs on them at all. And some of our satellites only retrieve images at 12-day intervals. The same technology that maps drone pathways in cities is starting to be used to more regularly scan our northern skies. AirMatrix's software, for example, can pull data from any sensor, radar or camera located in the territories to create a security mesh—a central nervous system looking out for threats to critical infrastructure or airspace violations, whether by a drone or something else. It could also report any unsavoury activity to the Royal Canadian Air Force, prompting an immediate response.

The need for non-compliant-drone detection doesn't just exist above the Arctic Circle. Thousands of these incidents now occur across Canada every year. In 2022, a

MODERN LIVING

CANADIANS ADAPTING TO AN EVER-CHANGING WORLD



I Don't Want to Have Kids. I Had Surgery to Make Sure I Can't.

After years on hormonal birth control, I had my fallopian tubes removed at 35
By Katey Townshend

THERE WASN'T a single moment when I knew I didn't want to be a mother. If I had to explain it, it felt like waiting for an important phone call that simply never came. The go-to term for women like me used to be "childless," which suggests a lack of children, and maybe even a longing for them. I prefer the term "childfree." In 2023, Statistics Canada reported that one-third of Canadians between 15 and 49 years old planned not to have kids. Fertility rates have declined across every childbearing age group over the past decade, except for a slight uptick among women aged 35 to 44. The overall Canadian fertility rate in 2023 was a record low of 1.26 babies per woman, compared to 1.55 in 2003.

My own decision stemmed from hundreds of small experiences that compounded over the years: the way teenagers yelled and swore at teachers in my Mississauga high school, the tired eyes of an old friend who became a teen mom, the high costs of post-secondary education (though I was lucky that my parents paid for some of mine). As a young person, I recognized that parenthood required a lot of time and patience which, even then, I knew I didn't want to make room for.

Throughout our twenties and into our thirties, many of my friends were on the same page. They couldn't fathom having children, either. They wanted to go back to school, travel the world or throw themselves into their careers. We were always on some form of birth control. We compared our methods and side effects—experiences that we just accepted as the price of admission for having a uterus, for

the feeling that we were in control of our reproductive destinies.

Then, slowly but surely, things changed: my friends found partners and began the next phase of their lives. This was when I hoped the longing I kept hearing about would kick in. ("You'll start wanting children when your friends start having children.") But I felt absolutely nothing as I watched baby picture after baby picture fill my social media feeds.

In early 2018, when some of my friends were deciding when they would have kids, I had just ended a relationship with a guy who said he wanted one in the next two or three years. I didn't know what I wanted, but it wasn't that. I asked friends and acquaintances with older children about their experiences. They said that while parenthood had lovely moments, it was tiring

in three cite full-time parenting as their reason, compared to just seven per cent of men. Mothers also take nearly twice as long off work as fathers. We can see where we're going wrong, but we're not doing much to change it.

Later in 2018, I went out with a musician I met through someone in my social circle. My child-wanting friends were going on dates every night—they were direct with these men about how they wanted to be married within two years and pregnant within three. I was just as blunt. Sitting across from my date in a dimly lit bar in Toronto, I told him: "I never want kids, so if you do, you'd better leave now." It was the first time I had ever said that out loud, and it felt so right. It didn't bother him, and he stayed; we just got married this year.

"If I got the procedure, I'd never have to think about birth control again. The idea alone felt freeing."

and sometimes thankless. With the chaotic and polarized state of the world, coupled with the cost-of-living crisis here in Canada, I worried about the kind of society we'll be leaving behind for the next generation.

Financially speaking, it's exceedingly difficult to raise a family. In my home province of Ontario, daycare can cost hundreds to thousands of dollars a month—if you're lucky enough to find a spot. And women are the ones more likely to put their careers on hold to raise children: one

At the same time, I was frustrated by my dependence on hormonal birth control. I didn't want to remember to take a pill every day, and I'd heard horror stories about painful IUD insertions. My doctor recommended experimental birth control methods to see if the side effects could be reduced. He mentioned the progestin arm implant, but it hadn't even been approved by Health Canada. It seemed too risky.

Today's birth control is often celebrated for its reversibility: many women can get

PARENT TRAP Katey Townshend opted to have her fallopian tubes removed at age 35

pregnant mere months after going off the pill. I was almost 30, and I was sure there wouldn't be biological children in my future. If I used hormonal birth control until menopause, I would be putting something into my body that didn't need to be there. I started reading about sterilization, specifically the bilateral salpingectomy, or the removal of fallopian tubes. While this procedure is common, it's often performed immediately after a woman gives birth, or to excise painful cysts or tumours. It intrigued me: if I got it, I'd never have to think about birth control again. The idea alone felt freeing.

I turned to resources, both online and off, to help me reach a decision. On Reddit, women from all walks of life—some who had kids and some who didn't but wanted them—shared stories about their experiences. Through friends and work, I met people who were decades older than me who'd never had children, and their

plenty of time to think about my decision and reassured me that it'd be perfectly fine if I decided to cancel the procedure. I didn't have any doubts, to be honest, but it comforted me to know I could change my mind.

More than a year later, in the summer of 2022, the call finally came, and I received a date for my initial in-person consultation for 2023. When I met with the surgeon in a sterile grey room for all of five minutes, he told me he wasn't in the business of telling women what to do with their bodies and, if I wanted the procedure, he'd make it happen—and OHIP would cover it. "Are there any risks involved? Do women usually regret it?" I asked him. He said the biggest risk is getting pregnant while *waiting* for the procedure, since the wait could be another year or more because of its elective nature. I imagined he was smirking behind his mask, with the deadpan humour that comes so easily to doctors. I realized, *Yes, that is one hell of a risk.*

In the short, half-lucid moments before I fell asleep, I asked one of them, "What should I do if I wake up in the middle of the surgery?" She told me that only happens in movies. It was anticlimactic, as all surgeries should be. I woke up warm but dizzy, lying under itchy hospital sheets. I dry heaved into a small vomit bag. Disoriented, but calm and relieved, I knew I had made the right choice.

I was mostly bedridden for the next two days. My friend sent me a beautiful bouquet of flowers with a note that read, "Congratulations on making the choice that was right for you." I was happy I could protect myself from an unwanted pregnancy, free from the side effects of birth control—I had myself back. In bed, through a cloud of painkillers, I ordered a small gift for myself: a gold watch engraved with "no more ticking," a little joke to remind myself that my biological clock had hit midnight.

Don't get me wrong: I love kids. They're sweet and fun, and I appreciate how vivid their imaginations are before the strangleholds of adulthood take over. But that doesn't mean I need to have one myself. People's faces get sad when they ask me if I have kids and I reply no; one woman I used to work with took it a step further and said, "It's okay, it'll happen soon," assuming I was trying to conceive.

The current political climate in the U.S. makes it easy to understand why more women there are choosing permanent sterilization: if they do get pregnant, they might not have the choice to terminate. In the two months after *Roe v. Wade* was overturned in 2022, tubal sterilizations in the U.S. increased by 70 per cent among women 19 to 26 years old, with the rise greater in states that were likely to ban abortion. I'm grateful to be Canadian; my situation was never quite so dire. Birth control is never 100 per cent effective, and for American women who don't want children, and who are not willing to risk their lives to end a pregnancy, sterilization might be the only option.

Generational shifts in the perception of birth control are nothing new: my grandmother's generation fought for the pill. My mother's generation fought for safe abortion access. And, in Canada, my generation has the ability to permanently avoid a pregnancy. I'm lucky I didn't have to fight. ■

"Don't get me wrong: I love kids. But that doesn't mean I need to have one myself."

lives seemed exciting and full—the kind I wanted for myself. With the internet at our fingertips, millennials like me are probably the first generation to have access to the information needed to make an educated decision about permanently avoiding pregnancy.

In 2021, when I was 32 years old, I raised the idea of a bilateral salpingectomy with my family doctor. Without hesitation, he told me to ask my partner to get a vasectomy instead—it's less invasive and has a quicker recovery time. Of course I'd considered that, but I didn't want to tell my partner what to do with his body. When I insisted on the surgery, my family doctor finally agreed. He gave me a referral, and I was added to the waitlist for a consultation with a gynaecological surgeon. Because it was elective surgery, I'd likely be waiting a year or more just for the initial phone call.

My family doctor was relatively blasé about the whole thing. He told me I'd have

As for regret, the surgeon told me that it does happen: anecdotally, he said sterilized women over 30 without children regret the procedure the least, though there are higher rates of regret among women who already have a child and realize they want more after they're sterilized. On the other side of the coin, it's also possible to regret *having* kids. In her 2017 book *Regretting Motherhood*, sociologist Orna Donath interviewed and wrote about women who wished they'd never become parents. There was a lonely mother who reflected on the loss of her identity, a wife who got pregnant to appease her husband, a new mother who realized too late that having children wasn't for her. The one constant was that, while these women regretted becoming mothers, they loved their children.

Late last year, about three years after I first talked to my doctor about sterilization, the day of my surgery arrived. I waited for hours under a heated blanket until nurses rolled me into the operating room.

KPU



Where Thought Meets Action

As Canada's leading polytechnic university, real-world preparation is what KPU does best. Explore unique programs like Traditional Chinese Medicine, Brewing, and Design, plus more than 500 work-integrated learning opportunities that put practice first.

Discover where hands-on learning can take you.



kpu.ca

[@KwantlenU](#) | [#KwantlenU](#)

"I chose KPU because it's the only four-year Fashion Design degree in Western Canada with real-world learning in the studio, on field trips, and through practicums."

Destiny Lang

4th year student, Bachelor of Design, Fashion & Technology



CREATED BY



Getting Ready for the Future of Neurosurgery

UHN's Krembil Brain Institute is pushing neuroscience to new heights

IMAGINE LIVING with a debilitating neurological disorder that affects every aspect of your daily life. For more than 10 million Canadians living with conditions like Parkinson's disease, epilepsy, chronic pain, depression and other diseases and disorders of the brain, this is a harsh reality. Globally, the total burden of these conditions is more than that of cancer and heart disease combined.

Enter the team at Canada's largest research hospital, University Health Network (UHN). At UHN's Krembil Brain Institute, one of North America's largest neuroscience units, experts are driving innovations in neurosurgery to treat brain diseases. One area is neuromodulation—more specifically, deep brain stimulation (DBS). DBS involves a specialized team of neurosurgeons, neurologists, neuroradiologists, technologists and nurses who undertake a complex task: implanting tiny electrodes deep into the brain to reset and repair it. For people who have undergone the procedure, they describe it as getting their lives back.



Slated for completion in 2028, the new surgical tower at UHN's Toronto Western Hospital will house Canada's most complex neurosurgeries, along with accelerated brain research, surgical innovation and advanced training



Drs. Taufik Valiante (left) and Suneil Kalia

"Even after performing this operation hundreds of times, I can never get used to seeing that moment when we see tremors disappear or Parkinson's symptoms improve in an instant," says Dr. Suneil Kalia, a neurosurgeon and Parkinson's disease specialist in UHN's Sprott Department of Surgery and Krembil Brain Institute.

Kalia's colleagues get a similar buzz. "The brain remains this enigmatic structure with 80 billion neurons and 200 trillion connections," says Dr. Taufik Valiante, neurosurgeon and director of the Surgical Epilepsy Program at UHN's Sprott Department of Surgery and Krembil Brain Institute. "The goal is to provide the best possible care while also taking opportunities to advance understanding of our most complex organ."

Drs. Valiante and Kalia's enthusiasm and passion for pushing the boundaries of science are clearly evident. Earlier this year, they presented to an intrigued audience of Canada's business elite about the future of neuromodulation—including the new surgical tower currently under construction at UHN's Toronto Western Hospital. This state-of-the-art, 15-storey facility will add 82 private patient rooms and 20 operating rooms.

"This new space will allow us to do what we do on a scale that we cannot right now," explains Valiante, adding that the new surgical suites will be equipped with telesimulation technology that will enable UHN's surgical experts to train teams around the world and in remote communities.

This ambitious \$1.1-billion capital project—the largest in UHN's history—will be a pivotal addition to the network. About one-third of the project cost (\$300 million) will be raised through UHN Foundation.

Both doctors add that donor support is essential to helping UHN continue to push the field of neurosurgery forward, helping ensure that operating rooms are equipped with the best and latest technology and talent to benefit patients across Canada and beyond.

To learn more about this ambitious project and how you can help shape the future of surgery, visit UHNsurgicaltower.ca.

The future of surgery starts here.

We're building a new state-of-the-art surgical tower – one that matches the world-class talent of the teams inside it. Designed with innovative A.I. and robotics for precision, safety and speed, this facility will house cutting-edge operating rooms, next-generation recovery spaces and the technology needed to support life-saving surgeries.

It's more than a building. It's where the future of surgery will be shaped, right here in Canada.

Learn more at UHNfoundation.ca/talent

UHN **UNITED** to bring you
the best care

Toronto General
Toronto Western

Toronto Rehab
Michener Institute

Princess Margaret
West Park

Live Now,





Pay Later

Faced with an uncertain future, young Canadians are doom spending like never before, propped up by an ecosystem of influencers, financing apps and investment schemes.

Portrait of a generation on the instalment plan.

By **COURTNEY SHEA**

Photography by **KATE INCE**

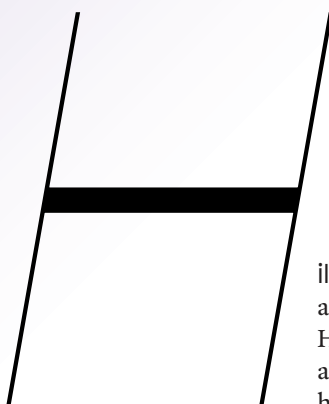
credit card balance was creeping up and vowed to skip expensive bar nights. “I thought, *Okay, I’ll switch to weed*. But then I would get stoned and order shit I didn’t even remember ordering.” Amazon deliveries became a game of guess-what’s-in-the-box. She can still pinpoint the purchase that ran afoul of her credit card’s \$10,000 monthly limit: a US\$60 subscription fee for Fabletics, Kate Hudson’s company hawking cute workout sets to fitness girlies.

Hilary is far from an outlier. Last year, Gen Zers’ consumer debt surged by 30 per cent. That’s more than any other age bracket, fuelled in part by young Canadians’ enthusiastic adoption of alternative lending options, like buy-now-pay-later. Sometimes way later: delinquency rates, which are up in all age brackets, are highest amongst Canada’s youngest spendthrifts, as they tap and click their way further and further into quarter-life insolvency.

It is, in part, a problem of exposure and access: “You don’t even have to put pants on to spend money,” says Hilary, joking about how she bought toilet paper from the toilet the other day. But it’s more than that. “Maybe this sounds extreme, but spending on things to make me happy was a reaction to how lonely and hopeless I was feeling.” She remembers, during COVID, leaving the apartment she couldn’t afford to spend \$80 on a manicure. “It was the first human contact I’d had in weeks. It was something I did to feel better and, in the moment, it worked.” She’s not proud of what many would call reckless spending—that’s why, at her request, I’m using her first name only—but she’s not embarrassed either. If anything, she’s angry: “I worked really hard and did all the things I was supposed to do, and then it’s like, *Yeah, gotcha, none of those things are going to happen*.” Job security? Homeownership? Retirement? Pfft. “All of those goals feel so far away and maybe impossible, so yeah, you get your nails done, you go on a vacation. At least we get a little joy in the moment.”

Welcome to the YOLO economy: live now, pay later. The generation of young people raised on the hyper-consumerism of the social media age are entering adulthood at a time of extreme economic and existential instability. Without so much as a fully formed frontal cortex at their disposal, they are navigating a foundational disconnect: the impossible costs of education and housing are landing them in the hole while a punishing job market and wage stagnation are conspiring to keep them there. They feel screwed in the long term by the economy, the news cycle, the climate-change doomsday clock. So, in the short term, they’re saying screw it: they’re getting the \$80 manicure, the limited-edition Labubu. They’re hopping on a plane to see the Eras Tour in Argentina, because even with airfare and hotels, it’s still cheaper than buying tickets in Toronto.

It’s not logical—it’s dissociative. “A classic trauma response,” according to financial therapist Aseel El-Baba, who told me that Gen Z has a severed relationship with the future. “We’re asking them to make decisions that will benefit them down the road, and they’re saying, ‘What road? The road that’s been pulled out from under us?’” In these desperate times, spending on small (and not so small) luxuries is a balm. But it’s also a time bomb, ticking away in the windowless, cockroach-infested basement apartment of the Canadian economy (\$2,500 per month, not



Hilary entered adulthood with a leg up. The 28-year-old from Hamilton, Ontario, was fortunate to have her parents cover her undergrad at the University

of Guelph. When she graduated, she hoped to get a job in public policy, and she did—only she had to move to Thunder Bay. Pretty soon she realized that career advancement would require another degree, so she saved up more than \$12,000 and did her master’s at Queen’s. The program was supposed to involve travel to Ottawa and Washington, but then the pandemic hit. She spent the year staring at a screen, isolated and anxious about the future that was once promising and now in freefall. She was also broke.

By 2022, Hilary was working in her field and living in her own apartment in Toronto. It was small, nothing fancy, but clean and close to transit. It was also, from a budgetary perspective, a bridge to nowhere. Her monthly income was \$3,500, and her monthly rent was \$2,200. And so she started using a precarious if increasingly common life hack: “I put my paycheque toward rent and everything else on credit card.”

“Everything else” was nothing too extravagant—the modern necessities, really. She bought groceries and a gym membership, Netflix and Disney+ subscriptions, a couch and bedding for her new apartment. She had dinners out with friends once or twice a week, ordered takeout and bought “the good makeup” from Sephora (and if that strains your definition of necessary, you haven’t spent much time on teenage GirlTok). She noticed her



including utilities). Nobody YOLOs their way to a TFSA or an RRSP contribution. It's what you yell when you're careening toward the edge of a cliff.

Canada has, for a long time now, been a nation of consumers. An economy that once hummed on the things we produced—lumber, minerals, cars—is now also driven by the things we procure. Over-extension is not just youthful folly. It's a national pastime. In 2025, Canadians set a record for consumer debt at \$2.5 trillion. Our household debt-to-income ratio (a key metric to judge a healthy economy) is 175 per cent: for every dollar we earn, we owe almost two. That's higher than any other G7 nation and significantly more than the U.S. (roughly 128 per cent).

The key difference is not fewer Fabletics subscriptions, but Canada's housing crisis. Mortgages form a large wedge of the debt pie for Canadians over 30. But most Gen Zers don't have mortgages. At an age where previous generations were saving money for home-ownership, twentysomethings are trying to decide between crushing rental costs and retiring in their parents' basement. Neither is appealing: that's the point. Hence the consumerist kamikaze mission.

Back at the turn of the 20th century, debt was a dirty word. Decent people saved for what they needed. If they borrowed, it wasn't from a bank but from Joey the grocer. Then came the explosion of growth following the Second World War. Eager to get Canadians to buy homes, the federal government started issuing mortgages. Around the same time came the popularity of department stores, many offering layaway instalment plans as a way to pay for big-ticket items like household appliances.

You can't talk about debt without talking about the birth of consumerism in the 1960s. Suddenly there was TV and shopping malls to show us what we wanted and where to get it. Then, along came a little piece of plastic to complete the trifecta: Chargex (later Visa)

debuted in Canada in 1968. At first, it was a tool of the affluent, a status symbol issued only to grown-ups who could afford it. But as profits grew, banks realized there was more money to be earned on people who struggle to make payments. In 2002, 66 per cent of Canadian university students had a credit card. By 2023, it was 83 per cent. Financial institutions set up booths on campuses, giving away branded T-shirts and Frisbees and first-time credit cards to go with them. For young adults, credit was a step on the path to financial independence: a building block to a lifestyle where appliances were no longer a luxury item. Neither were second cars and kitchen renos and trips to Club Med. Debt was more than normalized, it was glamorized—an emblem of the upward mobility that felt, at the time, like a foregone conclusion.



The future was also built on post-secondary education, which surged in Canada with the boomer generation. Annual tuition was \$500, and whatever student debt existed could easily be paid off with a summer job. By the late '90s, Canadians with a university degree earned 63 per cent more than those without. It was the first step on a reliable path to a good career, where predictable wage increases and employer-matched RRSP contributions were handed out Oprah-style. *You get a future! You get a future! You get a future!*

Fast forward a few decades, and the economic starter kit has a hole in it. Higher education, once a guarantee, has become a catch-22. On the one hand, it's more necessary than ever; you practically need a master's degree to get a dog-walking gig. But the cost-benefit equation has changed. Anton, a student I spoke to for this story, is halfway through his coding degree at York, a subject he chose based on the promise of future employment. Now he's panicked about all the entry-level jobs taken over by AI. He wanted to make robots, not get replaced by one.

I met Anton at this past summer's Canadian National Exhibition job fair, an annual recruitment event in downtown Toronto. Around 54,000 people applied for a chance at 5,000 part-time, two-week positions. This tsunami of applicants included a lot of high school students, but many others were in college or university. Some had even graduated; they told me that competing with teenagers for minimum-wage gig work was not something they had on their post-grad bingo card. Munira is a nursing student who, like Anton, agreed to speak to me if I didn't use her last name. Her parents immigrated from Somalia to Canada in the early '90s, just before she was born. A year ago, she had almost no consumer debt: she was working 40 hours a week at an administrative job and going to nursing school at night. Then her hours were cut, so she got a second job in retail. And then those hours got cut. "And now," she says, gesturing to the line of 2,000 or so young people snaking out behind her. She is currently carrying \$10,000 in student loans and an additional \$13,000 in credit card debt.



The impossible costs of housing and living landed Gen Zers in the hole, while a punishing job market and wage stagnation conspire to keep them there

Munira lives with her parents. Her debt comes from basic costs like groceries, a new computer, transportation and her daily strawberry matcha tea, a habit she considers a worthwhile expense. “It feels like there are so few choices. This is something I can choose for myself.” She has friends who’ve fallen much deeper into spending as a coping mechanism. “The Canadian Dream is broken,” she says. “Haven’t you acted out when you’ve felt betrayed?”

The Lipstick Effect dates back to 2001, when Estée Lauder reported a spike in lipstick sales after 9/11. Women bought lipstick to push back against their feelings of anxiety and hopelessness. Traditionally, consumer spending was more predictably connected to consumer confidence, but the Lipstick Effect showed how dread and panic could also encourage retail activity. The same thing is happening today, only now the spending isn’t tied to a single catastrophe, and it isn’t just lipstick. It’s designer clothing, Dyson hairdryers, cologne, skin products, trips, concerts,

visits to the new cold-plunge place for \$50 a pop (and a requisite \$13 green smoothie to complete the experience). It’s internet-famous mattresses and infrared face masks and whatever else the algorithm knows you want before you’ve even seen it. Economists call it doom spending: a nihilistic spin on retail therapy.

This is, to paraphrase Taylor Swift, the asylum that raised Gen Z: a digital funhouse of distorted images and impossible standards, where you don’t even have to crane your neck to see what your neighbours are up to. The notion of keeping up with the Joneses is nothing new, but online it’s a different beast, says Jordan Foster, a professor at MacEwan University in Edmonton, who teaches a course on the sociology of consumption. “The whole notion of the Joneses was that they were people who lived on the same street as you,” he says. That anchor of geographic proximity, Foster explains, meant that the people informing your aspirations occupied the same socio-economic bubbles. Today, the Joneses are online, engaging in lifestyles that their followers want to emulate. These elevated reference points have come to define the new consumerism. The middle class has eroded, says Foster. “So when young people are looking up, they’re looking way up. The goods that feel like necessities to them start to get very expensive.”

It’s not entirely clear who deserves wrist-slaps. Take the proliferation of luxury goods in the \$600-to-\$800 range. Brands make products at this price point because it’s often just under the max on the first-time credit cards they give out at the mall. “In the absence of opportunities to invest in traditional markers of success, like homes or cars, the only thing to do is to purchase things that communicate success symbolically: a Gucci belt, a Gucci bag, something from Louis Vuitton,” says Foster. Alarming? Sure. But so are stats showing it would take the average Canadian household 40 years to save for a home in Toronto.

Financial planner Shannon Lee Simmons says the key difference between her own millennial generation and the current

cohort is the loss of belief in a system. “It’s not laziness. It’s sheer economically driven pointlessness,” she says. Millennials faced challenging circumstances entering adulthood during the 2008 financial crisis. They leaned in and side-hustled and girl-bossed their way into record burnout rates, anxiety and zero work-life balance. Gen Z is looking to their direct elders and saying, “We’re not going to do that.” Simmons’s young clients gravitate toward wellness, choosing experiences that add value to their lives right now. But of course, all of that self-care comes with a significant price tag. “Often their bad decisions come down to feeling powerless. My job is to convince them that no matter how bad their situation, small choices add up,” she says.

With the rise of crypto culture, COVID backlash and fake news, legacy institutions across the board have landed on Gen Z’s shit list. The false gods of traditional finance are no different. Young people, who watched their parents get crushed by credit during the 2008 financial crisis and became adults themselves during the economic and political instability of the pandemic era, are suspicious of the same old institutions and open to non-bank financial alternatives like buy-now-pay-later, or BNPL. A recent study showed that more than half of Gen Zers say credit cards give them “the ick”—a disinclination that fintech disruptors have capitalized on.

In 2015, Wayne Pommen was working in private equity when he noticed that Canada was failing to provide young consumers with the credit alternatives that were popping up all over the globe. He invested in a Toronto-based startup called Health Smart Financial Services that used interest-free financing to help customers cover costly expenses like medical, dental and vet bills. As CEO, Pommen introduced a wider scope: why not apply the same model to the entire retail landscape? The company was renamed PayBright, and it eventually partnered with local retailers like the Bay and global players like Wayfair and Sephora. When consumers made a decisive shift toward online retail during the pandemic, BNPL apps worked their way into the click-and-pay process. In January of 2021, the American company Affirm acquired PayBright for \$340 million. Pommen hadn’t intended to sell, but he needed the backing of a global player to keep pace in a booming field.

Other big BNPL players include AfterPay and Sezzle, but the undisputed industry leader is Klarna, which has achieved “rollerblade” status—a brand that’s become an umbrella verb (“I’ll just Klarna it”). Traditional credit companies like Visa and Amex have created their own versions to reclaim some of the market share. Even Canadian Tire has a BNPL card. According to Payments Canada, nine per cent of consumers used BNPL in 2022. By 2024 it was 25 per cent. And the most enthusiastic adopters by far are Gen Zs and millennials, who make up nearly 80 per cent of BNPL users. Relevant side note: 60 per cent of tickets at the last Coachella festival were purchased on an instalment plan.

These companies know their customer. In one Klarna ad, Snoop Dogg spreads golden peanut butter on a 12-foot hoagie. The whole spot hits like a music video until we see the tagline: “Get smooth. Pay later. Klarna.” And it is pretty smooth. BNPL

Last year, Gen Zers' consumer debt surged by 30 per cent. Delinquency rates are highest amongst Canada's youngest spendthrifts.

apps are the friend who bought it for you—and as long as you pay your friend back on time, it’s all good. If you don’t, that’s when late fees kick in. The apps’ main profit model is charging fees to the retailers, who cough up a small portion of the total checkout cost to create greater convenience for their customers and greater revenues for themselves.

But not everyone sees BNPL as a good thing. In a 2021 report, the Financial Consumer Agency of Canada warned that these services could increase household debt and encourage overspending. Wayne Pommen says that just the opposite is true. “We hear all the time from our customers that our simple and predictable payback model helps them with budgeting. If that gives them the confidence to add an accessory at checkout, we’re very pleased with that.” He says that even in instances when BNPL involves interest, it’s simple interest, rather than the compound snowball situation you get with credit cards. And Affirm, unlike much of the competition, does not charge late fees. That job goes to the collection agency, which assumes unpaid loans after 120 days.

Kelley Keehn is a financial educator whose book *Save Yourself*, out in January, examines the neuroscience behind consumer habits. “BNPL apps say ‘spend smart,’ but what they mean is ‘spend more.’” She laughs when she hears people compare BNPL to old-fashioned department-store layaways. Yes, both systems have large payments covered in instalments. But in the old model you often got the couch or washing machine after the final payment was made. With BNPL you get to leave with the bounty immediately. In the distinction, she sees a potent metaphor for our times.

“You get the dopamine hit when you achieve the goal—and the goal is whatever you’re buying, not good credit behaviour. So if you’re paying your way toward something, that’s going to be a slow and steady buildup and release,” Keehn says. “With



BNPL you get a quick hit at the outset, but then it's gone and you're chasing the next one. In a cash-based society there was context: you have a certain amount of money, and you use it to buy the concert tickets *or* the new iPhone. But when you've grown up in a world where physical currency barely exists, it's much more difficult to channel that mindset." BNPL, says Keehn, moves us one step further from the ability to understand money as a fixed concept.

In March, DoorDash announced a partnership with Klarna, and the "buy-now-pay-later burrito" became a social media punchline. The idea of paying for your takeout in instalments was ripe for parody, but not entirely separate from how young people are using BNPL for groceries, school books and other necessities. Mason Cox, director of counselling at B.C.'s Credit

Counselling Society, is seeing a surge in younger clients, as well as a shift in their debt profiles. It used to be concentrated on one, maybe two credit cards. Today they're saddled with a patchwork of microdebts: credit cards, BNPL, payday loans to pay off BNPL debts. And while all of this activity is showing up in the GDP, it's never been included in Canadian debt records—until now. As of this summer, Equifax Canada is including data from select BNPL providers in its credit files, and TransUnion is also preparing to add BNPL data to its reports. As a result, missed payments could soon impact credit scores. Meanwhile, the federal government is also studying the issue and considering the most effective strategy for oversight. Which means the process is likely to get a lot less smooth—golden peanut butter notwithstanding.

When Toronto FinToker Bridgette Vong got her first credit card at 18, she didn't think of it as credit so much as a licence to spend. She grew up in a low-income household in Toronto, where her mom's survival strategy was to always pay the monthly minimum. So that's what Vong did too: spend on small-scale extravagances and pay the minimum as her balance got bigger and bigger. When she maxed out her first card, she got a second. When that one was fully leveraged, she maxed out on anxiety. She went to see a financial adviser, who broke it down: if Vong continued to pay the minimum balances (\$150 on each card) every month, her debt would cost her nine years and more than \$17,000 in interest payments. But if she raised her payments to \$350 and \$450 on each card, it would take one year and she would only pay about \$3,000 in interest. The proverbial penny dropped, and Vong committed to changing her ways. In June of 2023, she shared her quest on social media as a way to hold herself accountable.

Vong had previously been publishing "unfuck my life" videos on topics like diet and motivation. But it was the plan to unfuck her finances that drew next-level engagement. "There needs to be way more financial transparency for people who don't know shit about money. If any of this aligns with you, I'm documenting my whole journey, so follow along," Vong said on camera, her talking head superimposed over a colour-coded budgeting spreadsheet. And people did: 1.4 million on that first post, and millions more as she broke down her income streams, test-drove savings strategies and offered support in the comments section to followers in similar boats.

Once a dirty word, debt is now a trending topic, a social media subculture complete with its own collection of hashtags: #debtconfessionals, #mydebtjourney, #nospendchallenges. #Loudbudgeting encourages total transparency about financial struggles—both as a way to encourage good decision-making and to normalize saying no to unaffordable spends. In one of Vong's most popular posts, she and a bunch of friends put her mattress in the living room and have a movie-night slumber party (no Ubers, no \$25 cocktails at the bar).

Today Vong works full time as a content creator in the finance and lifestyle category. Her income as a finfluencer helped her pay down her debt ahead of schedule, just six months in. "I clicked pay now, and... confirmed!! Oh my gosh I cannot even believe how good this feels to have paid off the final debt of my fucking

credit cards!!!" she wrote, documenting the moment her balance hit zero. Her debt journey behind her, Vong now considers herself a "de-influencer," part of a movement meant to push back against hyper-consumerism. "So much of the spending young people are doing these days is based on this idea of volume: you don't need a lipstick, you need 20. Every night out needs a new outfit," she says. It's Apple's diabolical iPhone formula—release a new model every year to encourage updates—only it's everything. As Vong's popularity has mounted, so has her income. In August she hit a new record: \$36,000 in brand deals. Of course, she posted a breakdown of how she got there (#totaltransparency),

although you have to wonder if her success is fuelling good budgeting or dreams of striking it rich on TikTok.

Gen Z has built the kingdom of FinTok and Finstagram in its own image: cute, irreverent, eyeroll emoji to the old ways of doing things and winky face to some glaring paradoxes. Posting about personal finance took off during the pandemic, as young people's reliance on social media got deeper and their money anxiety more acute. Want to know more about debt consolidation? ETF trading? The best ways to earn a #passiveincome? Does anyone actually understand meme stocks? There's

a finstagrammer for that: the crypto bro, the money baddie, the broke girlie, the dude posing beside a flashy car, happy to break down how he made his first million before he was 30. A strong brand identity and a ring light are essential—actual financial expertise, less so.

It's not that there are no finfluencers creating valuable, fact-based content. It's just that the algorithm favours drama, and solid financial advice is pretty boring. Instead, young people who log on for budgeting tips are immediately exposed to get-rich-quick insanity. A lack of oversight makes quality control that much harder. Traditional financial advisers may be cringe, but they are subject to regulation. A recent study from the CFA Institute showed that only 20 per cent of investment advice on TikTok was labelled as such, and many finfluencers get kickbacks for promoting financial services.

At the new Canadian Financial Wellness Lab at Western University, improving financial literacy is part of the mission statement. In a previous era, that may have meant how to balance budgets and calculate mortgage rates. These days, says co-founder and professor emeritus Chuck Grace, there is a more pressing knowledge gap: how to manage risk. "It's shocking how many young people tell us stories about how they got into trouble following financial advice they heard on TikTok,"

The most enthusiastic adopters of buy-now-pay-later are shoppers under 30. Sixty per cent of tickets at this year's Coachella were purchased on an instalment plan.



What's Driving Canada's Newest Entrepreneurs

A new survey finds that Canada's Millennial and Gen Z entrepreneurs are motivated by financial independence as well as leaning into tech advances like AI.

Created for



Empowerment. Independence. The ability to define your own future. A new generation of Canadian entrepreneurs are breaking ground across industries, and new research shows this cohort of business leaders is inspired by the prospect of paving their own way.

While economic, workforce and housing uncertainties might dominate headlines, younger Canadians still feel motivated about starting their own businesses, according to a poll of more than 500 Millennial and Gen Z entrepreneurs across the country.

An Amex survey conducted by The Harris Poll Canada found that the majority of both Millennial (57 per cent) and Gen Z (60 per cent) entrepreneurs say they were motivated to start their own businesses out of a desire for greater financial independence. Flexibility and autonomy, and a desire to pursue their passions came in as the second and third top motivators for both groups.

What's more, Canada's youngest entrepreneurs are embracing advances in technology—namely AI—to develop new ways of starting and running a business.

Maximizing AI for business

Younger cohorts have always had a reputation for being early tech adopters, and Canada's Millennial and Gen Z entrepreneurs are no exception. From business planning and market research to competitive analyses and financial forecasting, nearly three-quarters of these entrepreneurs (70 per cent of Millennials and 73 per cent of Gen Z) have tried using AI tools for their business—and the vast majority report positive experiences.

Both groups say they feel “excited” and “curious” by the possibilities of AI. They believe AI's ever-expanding capabilities make it easier to grow a small business.

Whether running a full-scale operation with employees or earning extra cash from a side hustle, young entrepreneurs are taking advantage of new opportunities during this period of technological

change for their businesses to grow and thrive. A majority of survey respondents believe their comfort with digital tools and platforms, along with their adaptability to change and disruption, positions them as the generation most likely to succeed as entrepreneurs.

“Each generation of entrepreneurs is redefining what success looks like. Gen Z is carving out their space by building authentic brands and communities, while Millennials are focused on driving consistent growth and stability,” says Phanikar Yenamandra, vice president of customer marketing and engagement at Amex Canada. “At American Express, we're here to support entrepreneurs across all generations, whether that's helping business owners strengthen their brand identity or providing the tools and resources to fuel sustainable growth.”

Prioritizing learning about AI

Amid the excitement, both Millennial and Gen Z entrepreneurs report feeling “cautious” about the use of AI for small businesses, but a majority of both groups said learning how to use AI effectively should be a priority for companies like theirs as they believe AI will be critical in the years ahead.

That's why finding resources to help gain that knowledge is key.

“AI is giving entrepreneurs new ways to innovate and grow, while also reshaping how they plan for the future,” says Yenamandra. “That's why it's important to understand AI in today's business world so that entrepreneurs can seize its opportunities while adapting to change. At Amex, we're committed to helping entrepreneurs build resilient, future-proof businesses.”

Grace says. He jokes that he has come up with a golden rule: “Don’t take financial advice from someone who is talking into their phone while they’re driving.” You probably shouldn’t take any advice from someone recording content from behind the wheel of a moving vehicle, but there’s only so much trouble a terrible Netflix recommendation can land you in. In the personal finance space, bad advice can have a long tail.

Aseel El-Baba, the financial therapist who described Gen Z’s spending habits as a trauma response, says that the same YOLO mentality promotes high risk tolerance. “I have clients, a lot of young men, who feel like everyone around them has been super successful making bold investments,” she says. All that time on social media gives them a deluded idea of success—like everyone their age has a Lamborghini. It also suggests that they’ve achieved this success by out-of-the-box, maverick-style manoeuvring. Her comments remind me of Matt Damon’s 2021 crypto ad: the one where he walks against a backdrop of dude porn (planets, rocket ships, explorers wielding ice picks) before telling us that “Fortune favours the brave.” Damon was roundly criticized for promoting high-risk investments—especially when the crypto market crashed months later. “Trying to cut through that narrative with what is essentially spend-less-save-more-invest-responsibly is the biggest challenge,” says Grace. Fortune favours a long-term outlook—but try telling that to the algorithm.

In September, Ontario Premier Doug Ford weighed in on his province’s youth employment crisis: “It drives me nuts when I see young, healthy people, and they call me saying, ‘I can’t find a job.’ I assure you, if you work hard enough, it may be fast food or something else, but you’ll find a job,” Ford said, like a walking, talking “okay boomer” meme. It’s a position that feels at odds with the hundreds of accounts on social media where Gen Zers describe the countless resumés they’ve sent out with no response.

Politicians blame young people because it’s a lot easier than holding themselves responsible, says Paul Kershaw, a public policy professor at the University of British Columbia. Thirteen years ago, Kershaw founded Generation Squeeze, a think tank focused on generational economic unfairness. At the time, the screwed-youth demographic in question was millennials up against the challenging economic headwinds of the mid-aughts recession. Now Gen Z faces considerably direr straits, but policymakers are making the same deflections. “With millennials it was, ‘Look at

all of the avocado toast they’re eating,’” Kershaw says. “Now it’s excessive lifestyle spending, but it’s the same thing: after decades of failure to address systemic strains and their predictable outcomes, governments want to frame this as a problem of individual consumer habits.”

Because, of course, concerts and rent aren’t the only things young people are shelling out for. Barely into their earning years, and Gen Z has already done an extraordinary amount of spending to support the health and wealth of older Canadians—and at price tags that make Coachella tickets look cheap. When boomers were entering adulthood, only 10 per cent of the federal

budget went to supporting Old Age Security, versus over 15 per cent today. Our current model offers plentiful tax cuts and benefits to seniors; it’s far less generous on education, housing and benefits to support young families. This gap will only widen as the rest of the boomers stop working, leaving fewer young people to carry the burden. Thanks to population declines over the last 50 years, the number of working Canadians supporting every senior will have shrunk from nearly eight in 1976 to three by 2027. If Gen Z goes over a financial cliff, they’re bringing everyone else with them.

Generation Squeeze recently proposed federal budget reforms that would redistribute retirement savings—a way to compensate young taxpayers for the burdens they face in affordable housing. Tax policy that addresses the amount of wealth currently tied up in real estate would be another step toward fairness. I think back to Munira’s description of her strawberry matcha habit as an expression of personal agency. Young people can’t make better choices unless they have them.

Hilary, the public policy grad with \$10,000 in credit card debt, has managed to claw her way out by taking a second job. She gave up weed, cancelled Fabletics and took steps to address what she now sees as a problematic cycle in her spending habits. You feel like crap, so you go on social media and you feel crappier. Then you buy something to make yourself feel better—and you end up feeling worse. “It’s a rush that you crave because you’re looking to get through the day or even the hour,” she says.

These days she’s planning for a longer horizon. She’s still stressed about her finances, but her rental burden is about to get lighter: she and her boyfriend are looking for an apartment together. They’d love to get a dog, but who can afford it? (A pet—in *this economy*?) Still, it’s a goal that feels oriented toward hope and not doom. For now, that feels like a fundamental difference. ■

“It’s shocking how many young people get into trouble following financial advice they heard on TikTok,” says Western University’s Chuck Grace

SPONSORED

Owning the Future

Women and the Inheritance Economy

Created by Burgundy Asset Management Ltd.

Hard work alone isn't enough anymore. What matters now is taking charge of your money.

Canadians have been told for decades that if they worked hard, got an education, and bought a home, they could build a better life than their parents. That promise of upward mobility—the idea that each generation could climb higher—has been quietly breaking down.

Today, many young people are doing everything “right” and still find homeownership, financial security, and long-term stability out of reach. The rungs of the social ladder have grown further apart. Effort alone is no longer enough.

The defining force of this new reality is inheritance. Once a private matter of the elderly, it is now the central economic, cultural, and emotional force of the 21st century. Family wealth—or its absence—determines who thrives. In Canada, more than \$1 trillion will transfer between generations in the next decade, reshaping opportunity and deepening divides.

That doesn't mean throwing up your hands. It means being smarter, earlier, about money. Financial literacy and investment know-how are no longer optional; they're essential. Without them, the lifestyle you work so hard for will remain precarious, especially as Canadians live longer and need to fund more years of life than ever before.

“

The question is not whether women will inherit wealth—it's whether they will take leadership over it.

For women, this moment carries even greater weight. For generations, women were told that money was a man's domain. But by next year, Canadian women will control nearly half of all financial assets. The question is not whether women will inherit wealth—it's whether they will take leadership over it.

At **Women of Burgundy**, we believe they must. Since 2014, we've built a community

where women learn, lead, and invest with confidence—not just for themselves, but across generations.

This fall, at our **Minerva Summit** in Toronto, historian Eliza Filby showed how access to family wealth is reshaping opportunity. Housing expert Carolyn Whitzman and higher education leader Rhonda McEwen explored how these pillars of generational support are under strain in Canada. And renowned political scientist Janice Gross Stein placed these challenges in the wider context of global change.

The inheritance economy is not abstract—it is lived daily in the choices families make: helping children with down payments, rethinking the value of education, and planning for longer lifespans. These are not just financial questions. They are questions of values, agency, and what kind of future women want to create.

At Women of Burgundy, we are preparing women to meet this moment so they can move beyond outdated myths and embrace wealth not as something to be managed quietly, but as a force that can shape lives, families, and communities for generations.



Pictured above: The annual Minerva Summit in Toronto.



Anne Maggisano, CFA
VP, Founder and
Co-Lead of the Women
of Burgundy

The promise of upward mobility may be fading. But the power to lead in the inheritance economy is wide open.

Visit burgundyasset.com/women to join Women of Burgundy—a community where women take charge of their wealth, and their future.



BURGUNDY
ASSET MANAGEMENT LTD.

This post is presented for illustrative and discussion purposes only. It is not intended to provide investment advice and does not consider unique objectives, constraints or financial needs. Under no circumstances does this post suggest that you should time the market in any way or make investment decisions based on the content. This post is not intended as an offer to invest in any investment strategy presented by Burgundy. The information contained in this post is the opinion of Burgundy Asset Management and/or its employees as of the date of the post and is subject to change without notice.



Mark Carney Is a Very Demanding Boss

Now that the honeymoon period is over,
he's ready to run the country like Bay Street.
Canada's first CEO PM has arrived.

BY STEPHEN MAHER

MARK CARNEY TALKS A LOT ABOUT STAYING HUMBLE. In his 2021 book, *Values*, he wrote that humility is one of the “five essential and universal attributes of leadership.” In March of this year, after he became leader of the Liberal Party, he stood on stage in an Ottawa convention centre and described the principles he’d learned from his childhood hockey coaches: ambition, teamwork and, “because it’s Canada,” humility.

Carney, a one-time Goldman Sachs executive and former governor for both the Bank of England and the Bank of Canada, had won the race in a landslide, despite having zero political experience. The evening of his victory, he gathered with jubilant advisers for a victory party in a backroom. There, they got a text from a staffer for Karina Gould, the 38-year-old MP from Burlington, Ontario, who’d run against Carney for the party leadership. Gould had made a few mild pokes at Carney during the campaign. In one debate, she took a jab at his reputation as a fiscally focused technocrat: “You can’t bring a calculator to a knife fight,” she said, referring to the trade war with the U.S.

The attacks were genteel compared to most political mudslinging, and Liberals warmed to her during the campaign. They embraced her as both a cherished member of the Liberal family and, increasingly, the standard bearer for its left flank. But her needling got under Carney's skin, even though he was the front-runner (she ultimately received only three per cent of the vote). He and his staff made their irritation plain; one member of Gould's team told me that many of them were aggressive in their vitriol toward her.

When someone from Gould's team texted to ask if she could stop by and congratulate the winner, Carney said no. In fact, according to one source I spoke with, he said he didn't ever want to see her again. Carney's staff sent Gould a non-committal answer, trying not to offend her, but she showed up anyway. That led to a brief, awkward meeting with Carney.

The incident rattled some of the people around the newly elected leader. Many had worked under Justin Trudeau, who, after a lifetime in politics, had skin like a crocodile. Carney, after years of being celebrated, venerated and treated with the deference accorded to a titan of the financial world, seems to have a skin like a peach.

A week later, Carney lost his temper again, at a press conference in London that marked one of the lowlights of his campaign for prime minister. When reporters pressed him about potential conflicts of interest stemming from his massive investment portfolio, he sounded exasperated, pointing out that he'd already put the assets into a blind trust. When CBC's Rosemary Barton followed up, he blinked in annoyance. "Look inside yourself, Rosemary," he said. "I have left my roles in the private sector at a time of crisis for our country."

Carney reacted like someone accustomed to ending disputes in boardrooms and corner offices with a quick "case closed." But that isn't how news conferences work. His emotional response drew attention to an issue he'd hoped to pass over quickly, and it exposed his short fuse.

Carney said repeatedly during this year's election campaign that he's not a politician, and in such moments it showed. But Canadians looked past his gaffes, electing him instead on the strength of his extraordinary résumé. For years, he strode the corridors of power, taking on progressively more powerful jobs that brought him to the very top of the financial world. Carney has often been called Canada's "Davos Man," in reference to the Swiss town that hosts annual meetings of the World Economic Forum, where powerful business leaders, politicians and other members of the international elite gather to discuss the global economy. It seems like a natural setting for the most famous banker on Earth. Professionally, he is the smoothest of smooth operators,

one of the cosmopolitan gold-collar workers who make sure your bank card functions, your savings are safely invested and that globalization continues apace. He rises early, drinks a litre of water upon waking and runs every day. He eats carefully and wears Savile Row suits without belt loops—a style available only to those who are rich, trim and expensively tailored. He's a skilled communicator, too: charming, self-deprecating and always ready to boil complex questions down to three punchy points, if he may.

But all along, say friends, colleagues and acquaintances, he's had one eye on an office in sleepy Ottawa and the comparatively paltry prime minister's salary of \$400,000. Until this spring, the capital was full of people confidently predicting that when he finally sought public office, he would be undone by his own inability to exhibit the humility he often espouses. I thought he might be brittle and smug, more an overbearing CEO than a national leader.

As it turned out, that's what Canadians wanted. He successfully sold himself as the man we needed to face down Donald Trump and get the economy moving. He appeared to have sophisticated plans for expanding trade beyond the U.S. and revving up Canada's sluggish economy. If his soliloquies on productivity went over the heads of some voters, he at least sounded like he knew what he was talking about—an experienced master of the interplay between markets and government, ready at last to take on the job he had been working toward since his youth. He seemed decisive and smart, with a capacity for ruthlessness a little bit chilling but also comforting, given the hard choices Canada faces.

But Canada is facing ominous economic headwinds. The national GDP shrank 0.4 per cent in the second quarter of this year. Unemployment is rising, up to 7.1 per cent as of August—the highest number since 2021. The country may be headed for a long-predicted recession, courtesy of the trade war with the U.S.



POWER COUPLE Carney and his wife, Diana Fox-Carney, attended the 2016 Wimbledon Championships during Carney's tenure as governor of the Bank of England

Carney's volatile temper worries some of those in his orbit. If you're running a commodities desk or a central bank, arrogance may not be a career killer. But politicians have to smile, make nice and command the confidence of colleagues and the public.

And when voters can't make ends meet, the government takes the blame. Already, Carney's honeymoon with voters is flagging a little—some recent polls have put Pierre Poilievre's Conservatives a hair ahead of the federal Liberals. (Carney's personal polling numbers still far surpass his rivals'.)

Carney's volatile temper and brusque demeanour also worries some of those in his orbit. For a politician, he is impolitic and officious, even with the most senior ministers and public servants. If you're running a commodities desk or a central bank, arrogance may not be a career killer. But politicians have to make nice, smile when they don't feel like it and command the confidence of colleagues and voters. Becoming a politician at age 59 is like becoming a concert violinist late in life—most people who are great at it have been doing it for decades. Political history is littered with blustery businessmen, like Carney's friend and former New York mayor Mike Bloomberg, who learned the hard way that succeeding in politics requires a different skill set from bossing around employees or generating wealth for shareholders.

Today, Carney faces an economy on the rocks, a housing crisis Ottawa can't possibly fix quickly and an authoritarian in the White House who is making a mockery of Canadians' raised elbows. It is enough to rattle even the most confident character.

Carney spoke yet again about humility in April, during his victory speech after winning the federal election. Maybe he talks about being humble so much because, in fact, he is proud. He's a serious Catholic, and prayer is an important part of how he keeps grounded. It's not a stretch to imagine that he prays for humility. Whether God grants it is another question.

CARNEY'S CLIMB TO THE PRIME MINISTER'S OFFICE has been so impressive in part because of where it began: in the middle of nowhere. He was born in 1965, in Fort Smith, a town of about 2,000 people on the Slave River in the Northwest Territories. His father, Robert, was principal of the local Catholic school; his mother, Verlie, stayed home and looked after Carney, his two brothers and his sister. When Mark was six, the family moved to Edmonton, where his father later joined the faculty at the University of Alberta and his mother became a teacher.

The family's association with Liberal politics goes back decades. Robert Carney ran unsuccessfully for the Liberals in the 1980 federal election, when Mark was only 15. That same year, Carney had a letter published in the *Edmonton Journal*, complaining about the paper's one-sided coverage of the Pierre Trudeau government. "Even your television critic couldn't review the Grey Cup without taking a shot at PM Trudeau," he wrote. "I reiterate my displeasure and disgust at your lack of professionalism."

Carney attended Saint Francis Xavier, a Catholic high school, where he played hockey, cheered for the Oilers, joined the trivia team and, for the first time, set his sights on greater ambitions. His older brother, Sean, was at Harvard, and Carney decided to follow him. He had the grades, and he had a skill: he was a pretty good goalie, which won him a scholarship.

At Harvard he lived in Straus Hall, a four-storey brick dorm next to Harvard Yard. A few doors down lived another Canadian, Peter Chiarelli, who'd also skated his way to the university on a hockey scholarship. The pair became close, hanging out in the dorm, listening to records by the Clash, U2 and the English Beat and knocking back Meister Bräu, the cheapest beer they could find. (Another Harvard friend, Seth Goldman, says Carney and Chiarelli "maintained a healthy Canadian level of beer drinking.")

Carney planned to study English and math, but a lecture by John Kenneth Galbraith inspired him to switch his major. A progressive economist who served both FDR and JFK, Galbraith was famous for his book *The Affluent Society*, which argued that the American economy generated "artificial affluence" in the private sector while starving the public sector, exacerbating inequality while creating an illusion of societal abundance. He had long been an inspiration to liberal-minded Harvard students. Carney was also impressed by political philosophy professor Michael Sandel. Years later, in his book *Values*, Carney cited Sandel's observations about how the values of the market, and its unrepentant profit seeking, had infiltrated so many spheres of life.

Of everyone in their circles, Carney was the most intensely serious. One day in the dorm, Chiarelli told Carney that he thought he'd become prime minister one day. Even then, he was making plans for public service—by succeeding first as an economist. At the time, this all looked like a long shot. Carney was a third-string goalie from Edmonton, washing trays in the Harvard cafeteria for extra money. But with his intelligence and self-deprecating wit, he ingratiated himself with the Ivy League's bluebloods. Eventually he joined the A.D. Club, an elite, male-only "final club," Harvard's version of a fraternity.

He graduated magna cum laude in 1988 and followed his brother Sean again, this time to Goldman Sachs, the world's second-largest investment bank. Carney started as an analyst in the credit risk department in London. He did a year in Tokyo, then enrolled at Oxford University, studying for a doctorate in economics.

There he met Diana Fox, a 29-year-old student and fellow hockey player who caught his eye on the ice. Unlike Carney, Fox did not come from nowhere: she grew up in a 55-room manor in Gloucestershire called Quarwood that her parents managed for Margaret Thatcher's chief of staff. (It was later owned by

John Entwistle, bassist for the Who, another one of Carney's dorm-room favourites.) On their first date, he told her that his ultimate aim was to return to Canada and work in public service. Friends of Carney told me that, even then, he'd declared his intention to become prime minister.

In less than two years at Oxford, Carney produced a brick of a thesis, which his adviser, economics professor Margaret Meyer, still keeps in her office and periodically shows to students. It's a dense, 300-page, two-volume treatise on how domestic competition makes a country more globally competitive, full of econometric modelling and illustrated with algebraic formulae. (A minor scandal broke out during this year's federal election, in which Carney was accused of plagiarizing parts of the thesis. Meyer rallied to his defence. What sets the work apart, she said, is its size and ambition.)

After Oxford, Carney returned to Goldman Sachs. He lived in London, then New York, then Toronto, handling important files at the intersection of business and politics, including South Africa's first bond issue after apartheid and the 1998 Russian debt default crisis. And it was in crises that he most excelled. On 9/11, James Kiernan, president of Goldman Sachs Canada, called on Carney for help in the frantic hours during which the bank transferred its book—its electronic record of transactions—from New York to Toronto.

By this time, Carney was on track to make millions as a Goldman partner. But if he was to move into politics, he'd need public-sector experience. His chance came in 2003, when he saw an ad in *The Economist* soliciting applications for deputy governor at the Bank of Canada. David Dodge, the bank's governor, had lunch with him in London, and Carney told him he wanted to work on issues from the public policy side. He got the job, moved to Ottawa and took a big pay cut, earning about \$250,000. At the time, he expressed to the *Globe and Mail* his distaste for Bay Street's materialism. "It was like, 'I belong to this club, and it cost this much,'" he grouched to a reporter. "Or 'I drink this wine, and it cost this much.'"

Carney's own lifestyle was not exactly miserly. Besides his penchant for finely tailored clothing, he and Diana were amassing a growing, sophisticated collection of modern art, featuring big-name Canadian artists like Kim Dorland. After he accepted the job with the Bank of Canada, the couple bought a stately home in Ottawa's leafy Rockcliffe neighbourhood.

Carney soon went on leave to fill a temporary role at the Department of Finance and eventually took a permanent job as associate deputy finance minister under Paul Martin. He continued to impress colleagues—but he also began attracting



MASTERS OF THE UNIVERSE Carney has positioned his relationships with global movers and shakers as a political asset. He is seen here in 2015 alongside Mario Draghi (second from left), then president of the European Central Bank.

behind-the-scenes criticism. "He has a surfeit of confidence," a senior public servant who worked with him told me. "If you're ever feeling low, you could borrow some and he'd still have enough to carry on."

Dodge says that if Carney seemed tough, it was because he was intolerant of "fuzzy thinking." He has an inquisitive management style, and he needs to understand the reasoning behind advice he is given. If he doesn't get the information he wants, he can be short-tempered with subordinates. "He can't use his quick study," says one senior adviser, "if people aren't giving him the stuff to study."

CARNEY IS NOT ALWAYS POPULAR with people who work for him, but his bosses have always loved him. He's a clutch player—someone who can size up a crisis and act decisively to end it. The Canadian political and business world saw that clearly in 2007. One weekend that August, Carney was in his backyard, playing with his kids—he and Diana had four daughters by this point—when he got a call from James Kiernan, his old boss at Goldman Sachs. He wrote in *Values* that he heard "palpable fear" on the line.

Kiernan had been meeting in New York with Canadian clients, who were talking about the money they were making by investing in mortgage-backed securities. Those investments were built on a shaky foundation: lots of the mortgages they included were high risk and prone to default—ticking time bombs in the American banking system. Many were sold by small firms or investment banks. If they collapsed, it could lead to a contagious financial breakdown.

Carney began attracting criticism from colleagues while working as associate deputy finance minister, under Paul Martin. “He has a surfeit of confidence,” one official told me. “If you’re ever feeling low, you could borrow some and he’d still have enough to carry on.”

Finance minister Jim Flaherty tasked Carney with leading efforts to pressure Canadian banks to put together a package to bail out the industry, using their own money to avoid a cascading series of defaults. After many tense meetings, the banks were persuaded and the crisis passed. A few weeks later, Flaherty gave Carney Dodge’s job. At age 42 he became the youngest-ever governor of the Bank of Canada, vaulting over candidates who’d served at the bank for decades.

In 2008, the global financial crisis struck—a scaled-up version of the calamity Carney had dealt with a year before. It cost the world economy US\$2 trillion, but Canada escaped the worst of the carnage. This was largely because Canada’s tightly regulated banks were far less exposed to bad debt, and partly due to Carney’s efforts to stimulate the Canadian economy with interest rate cuts before many other central bankers did the same in other countries.

Flaherty and prime minister Stephen Harper basked in his reflected glow, and Canadians came to like the self-deprecating central banker with the boyish smile. He thrived in the limelight, a reassuring figure at a time of global tumult. He was starting to think about using that newfound fame to get himself the job he had long been coveting.

IN JUNE OF 2012, CARNEY WAS IN A PRIVATE JET, returning to Canada from the Bilderberg Conference in Virginia, a gathering of global political and financial leaders. He was with Frank McKenna, the deputy chair of TD Bank and the former Liberal premier of New Brunswick. At the time, the federal Liberals were in shambles, after Michael Ignatieff had led the party to a disastrous third-place finish in the 2011 election.

Carney told McKenna on that plane ride that he was interested in the party’s top job, thinking he could rebuild from the wreckage. But the young, charismatic Justin Trudeau was also rumoured to be thinking about running. McKenna warned Carney he’d have a hard time beating Trudeau’s name recognition. In fact, he suggested Carney consider teaming up with Trudeau instead, angling to become his finance minister—a power duo like Jean Chretien and Paul Martin. Carney wasn’t interested.

He may have thought, as many Liberals then did, that Trudeau was a lightweight who lacked the experience a prime minister should have. Tim Murphy, former chief of staff to Paul Martin, also tried to convince Carney to run. “I always like Chretien’s line: ‘Before I jump in a pool, I want to make sure there’s water in it,’” Murphy says. “My job was to create the water.” He started making calls, trying to line up support for a Carney leadership bid.

But in early October, Trudeau confirmed he’d be running—the pool was full. At a news conference that month, reporters asked Carney if he was considering the Liberal leadership. He bristled as if he’d never even thought of it. “Why don’t I become a circus clown?” he said. The press didn’t know it, but he was already talking to the Brits about a job running the Bank of England. His appointment was announced in November.

The Carneys found an eight-bedroom house—formerly the home of T.S. Eliot—in London’s South Hampstead neighbourhood, which they rented for £3,500 per week. Emma Thompson and Stephen Fry were his neighbours. The commute to the bank’s offices was about 10 kilometres—just right for Carney’s morning run to work.

Carney was the first foreigner to head the world’s second-largest central bank, and he brought technocratic zeal and energy to the job. He also communicated more effectively than his predecessors. In 2016, when U.K. voters chose to leave the European Union—against Carney’s advice—he was up early reassuring the public that the bank would keep the pound strong, pumping money into the markets to avoid a financial meltdown. He cut a comforting figure, and a charming one: he was compared to George Clooney and named Britain’s most influential non-clerical Catholic. In 2015, he ran the London Marathon in three hours and 31 minutes (fast for a 50-year-old).

Carney also guided the British economy through the travails of Brexit with poise. But behind the scenes, he was sometimes a different character. British papers reported he could be “shouty,” and that he had a “volcanic temper.” He was not a politician, though, so any flashes of temper were a footnote.

Carney was at the pinnacle of the financial world. In October of 2018, the International Monetary Fund and World Bank held their annual meetings in Bali. Early one morning, Ben Chin, then chief of staff for finance minister Bill Morneau, stepped into the blistering heat for a cigarette, outside a hotel next to the city’s Nusa Dua convention centre. “I’m overweight, I’m sweating, I’m chain-smoking and I’m on my phone,” recalls Chin. Out of nowhere, Carney ran right past, fresh off his morning 10k. “You know, Ben, that’s going to kill you,” he said, before he winked and disappeared into the convention centre.

When Carney attended the Bali conference, he was probably already at work on his *Values*. The book is sprawling and ambitious, full of prescriptions and measures that organizations and leaders should take to make sure banks are sound, companies properly run, health systems appropriately funded and the planet protected for the benefit of future generations. It’s earnest and often repetitive, with more detail about bank regulation than anyone but a bank regulator needs, but it contains insightful lessons from



The Seneca Polytechnic Difference

As a leader in polytechnic education, Seneca combines academic rigour with hands-on learning

CREATED FOR **Seneca**
POLYTECHNIC

At Seneca Polytechnic, education is where theory meets practice and where ambition meets opportunity. With a range of degrees, diplomas, graduate certificates and a new master's program in AI, Seneca prepares students to be career-ready and world-ready.

Seneca also offers more than 4,000 academic pathways to and from university, providing graduates with the knowledge and skills needed to thrive in a competitive job market.

Ryan Shavakh: Building Pathways

When Ryan Shavakh enrolled in Seneca's civil engineering technology program, he was thinking about getting his first job, and also about the doors it might open.

He says Seneca struck the right balance: rigorous technical training paired with clear academic pathways. That combination allowed him to transfer directly into Queen's University's civil engineering program with advanced standing, where he is now completing his degree and preparing for his capstone project. "My time at Seneca wasn't just about earning a diploma," he explains. "It was about building a foundation that allowed me to keep advancing."

Seneca also prepared him to contribute on job sites from the start. During his co-op with Dufferin Construction, he handled scheduling, inspections and problem-solving on construction projects. "That was the first time I realized that 'career-ready and world-ready' wasn't just a slogan," he recalls. "The focus on labs, safety and teamwork translated directly to the job site."

Shavakh says that success in his field is based on more than technical expertise. "So much of the job is really about communication, coordination and adaptability," he adds. He credits Seneca for preparing him for that reality. "If you want a program that doesn't just teach theory but prepares you to confidently step on the job site or into an office, Seneca is a strong choice."

Looking back, Shavakh emphasizes the value of connections alongside skills. "Networking, mentorship and building confidence are equally as valuable," he says. "Seneca offers a balance that's hard to find—practical, career-ready training with direct pathways to both university and industry. It's flexible enough for students who want to go straight into the workforce or continue on to advanced studies. There are so many routes forward after graduation."



Trisha Virdee: Taking Flight

For Trisha Virdee, aviation was more than a dream—it was a challenge. "From a young age, I would watch planes and dream of being in the cockpit," she says. "What fascinated me even more was how little diversity I saw in aviation. That became a challenge I wanted to take on."

Seneca's honours bachelor of aviation technology program gave her the comprehensive training she was looking for. "I wasn't just building flight hours," she says. "I was studying at the level of airline pilots, with simulator training on turboprop and turbojet aircraft. By graduation, I had all my licensing requirements in place."

Virdee credits the program's polytechnic approach and networking opportunities for helping her launch her career. Through Seneca's mentorship program, she connected with an alumnus who introduced her to her current employer. Soon after, she was putting on her first officer uniform for the first time. She describes this milestone as one of her proudest moments.

"Seneca's program allowed me to walk into an interview or a flight deck with confidence," she says. "The discipline, adaptability and network I gained there have been just as valuable as the flying itself."

Her advice to future students is simple: "If you're serious about building a career in aviation and want to be fully prepared for the industry, Seneca is the place to make that happen."



Find the program that's right for you at [senecapolytechnic.ca](https://www.senecapolytechnic.ca).

Carney's 2021 book, *Values*, is sprawling and often repetitive. But it is grounded in a commitment to the common good, with insights drawn from a lifetime of work at the highest level. At the time, it was also read as a persuasive application for Justin Trudeau's job.

a lifetime of work and study at the highest level. It's grounded in an admirable commitment to the common good, and reflections on the importance of—that word again—humility.

It can also be read as a persuasive application for Justin Trudeau's job, the only next step that seemed fitting. Before her family's sojourn in England, Diana tweeted that they would be back in Canada within five years. They even kept their house in Ottawa, renting it out while they were away. In March of 2020, journalist Leah McLaren interviewed Carney in his London office for *Maclean's*, as his tenure with the Bank of England wrapped up and he prepared to head home. She asked if he had designs on the PMO. He answered with a long, silent smile that convinced her he did.

Trudeau's people got the message and checked in—they wanted to know, again, if he was interested in the finance minister job. Carney ultimately declined to join, and his old friend Chrystia Freeland took the job. Carney agreed to be an informal adviser.

Over the next few years, he took on a smorgasbord of roles. He volunteered as a UN special envoy on climate action and finance. He was a member of the Foundation Board of the World Economic Forum. The big payday was his job as chair of Canadian multinational Brookfield Asset Management, where his climate bona fides and connections helped him raise money toward a \$15-billion energy transition fund. In 2022, he became chairman of Brookfield Corporation and, the following year, chairman of Bloomberg LP, the media company co-founded by his old friend Mike Bloomberg. He was making millions and moving into yet another echelon of wealth. But still he had one eye on Ottawa.

CARNEY'S RELATIONSHIP WITH JUSTIN

Trudeau is best described as cordial. After Carney spoke at a Liberal convention in 2021, people close to Trudeau said the boss was hurt that Carney didn't even thank him. Carney, I was told, was hurt that Trudeau didn't thank *him*. Both men have big egos; one government was always going to be too small to contain both of them. Yet at the end of last year, Trudeau tried one final time to lure Carney in, hoping it might give his beleaguered government a reset with voters.

Somehow, Trudeau got the mistaken impression that Carney was enthusiastic about joining his team. In December, he privately told finance minister Chrystia Freeland that he would replace her with Carney. Freeland had finally had enough. On the Monday morning she was supposed to deliver the government's fall fiscal update, she resigned instead. In January, under enormous pressure from his party and finally grappling with the Liberals' apocalyptically bad polling, Trudeau followed suit. After more than a decade, Trudeau had climbed out of the pool.

McKenna still thought the election was unwinnable. He believes Carney's decision to join the leadership race betrayed "almost hubris," given both the intense competition for the job and what appeared at the time to be Pierre Poilievre's invulnerability. Many commentators agreed, confidently predicting that Carney's political career would be a short-lived, Ignatieff-level disaster. The Conservatives swore that they could not wait to run against such an out-of-touch elitist.

Carney began the campaign, unofficially, with a triumphant appearance on *The Daily Show*. In short order, he won control of the party, the government and the country, reversing Poilievre's double-digit polling lead in the process.



DAVOS MAN Carney's roles in global finance have made him a regular at the World Economic Forum in Davos, Switzerland. He is seen here at the 2014 event with then IMF managing director Christine Lagarde.

Free tuition, books and more

The **Ontario Learn and Stay Grant** is financial aid for students enrolled in priority health care programs in underserved communities. Eligible students receive full, upfront funding for tuition, books and other education costs in exchange for committing to work in the region where they studied.

Learn more at ontario.ca/LearnAndStay



Ontario 

Paid for by the Government of Ontario

ULINE

SHIPPING SUPPLY SPECIALISTS

WE'VE GOT THE
COMPLETE PACKAGE

ORDER BY 6 PM FOR
SAME DAY SHIPPING

COMPLETE CATALOG
1-800-295-5510
uline.ca

QUALITY PRODUCTS

IN STOCK AND
READY TO SHIP



Imperious behaviour has become the norm in Carney's PMO. "I can say with confidence that he believes he is always the smartest person in the room," says one staffer, "and that he feels there's little value to derive from any of the voices around him."

IN MAY, CARNEY MOVED INTO RIDEAU COTTAGE and swore in his cabinet. From the start, he made it plain that things would be different, beginning with the dress code. He wanted people to be punctual and dress as they would in a bank, with black shoes for the men. He told even the most senior public servants that their days of coming to the office in open-necked shirts and blazers were over.

Carney is said to be demanding and short-tempered with those who brief him, creating a much tenser atmosphere than existed under Trudeau, who ran the office like an encouraging teacher. On May 26, the day of his first speech in the House of Commons, Industry Minister Mélanie Joly, whose support was crucial to Carney's leadership victory, approached him to speak in the House of Commons while he was going over notes. A video shows him casually waving her off, dismissing her as an irritant without even raising his head.

This kind of imperious behaviour is the norm in Carney's PMO. "I know of countless staff, including myself, to whom he has done that," says one veteran staffer, who is worried about the way he is running the office. It's taking them a long time to staff up. There is uncertainty about roles, and normal consultative processes are being short-circuited.

Carney is also casually contemptuous of the Trudeau government, which is awkward, since he is now presiding over the machine Trudeau built. And he is not humble. "I can say with confidence that he believes that he is always the smartest person in the room," said the same staffer, "and that he feels that there's little value to derive from any voices around him."

During the campaign, senior advisers Gerald Butts and Tom Pitfield regularly discussed candidate management, because Carney could be so prickly. The worst crisis of Justin Trudeau's government came about because his relationship with justice minister Jody Wilson-Raybould broke down. Carney can't afford to alienate the people around him similarly.

And he has little time to master the kind of political skills that other occupants of his office developed over decades. Jean Chrétien, the most electorally successful prime minister in recent decades, had 11 portfolios before becoming prime minister. Carney had none. His inexperience is showing: for example, some caucus members believe that he made unsolicited promises of cabinet posts to several MPs and then failed to deliver. This includes former housing minister Nathaniel Erskine-Smith, a Trudeau appointee Carney retained in his pre-election cabinet but ousted in May after the federal election. Veteran politicians do not make that kind of mistake.

Many of his decisions are also making progressive MPs miserable. He has reconciled with Indian prime minister Narendra

Modi, mending a relationship that was strained after Justin Trudeau accused India of killing a Canadian involved in the Indian Sikh separatist movement. He scrapped the carbon tax, which had become politically untenable, and is reviewing federal rules that mandate all new vehicle sales must be zero-emission vehicles by 2035. Carmakers have argued that slow uptake of EVs and the continuing trade war will make the target impossible. And he is openly supportive of fossil fuel projects, speaking positively about a potential new pipeline to the West Coast. This September, his government's Major Projects Office announced its first tranche of nation-building projects, including an expansion of LNG production in B.C.

The man who admirably quoted Greta Thunberg in his book is now rolling back climate plans and approving pipelines and mines. Politically, this is risky business: the NDP is likely to make a comeback eventually and secure some of those voters alienated by these moves. Some MPs have formed a "climate caucus" to make sure their issues are heard—though, for now, they are not openly criticizing Carney himself. "At some point there's going to be the straw that broke the camel's back," says Supriya Dwivedi, a former senior adviser to Trudeau. "You're just going to have a lot of the discontent gushing out at once."

Pierre Poilievre will also be working hard to reconnect with voters who abandoned him in the campaign, reminding them that Carney's campaign rhetoric on Trump is different from the managerial approach he is taking to the relationship. He has acceded to some demands from Trump, such as eliminating Canada's digital services tax. He appears to be trying to tamp down rhetoric and handle the relationship delicately, reducing the heat as both countries prepare for a review of the free trade agreement between them next year.

Carney has the opportunity to build a constituency that looks different, and much bluer, than Trudeau's. He has given the most important jobs in his office to hard-nosed men with business backgrounds. He is vulnerable to looking like an elitist, out of touch with the concerns of people struggling to make ends meet. The man who's known to be brittle under pressure is, right now, under tremendous pressure. Most Canadians will not care if he is tough on his staff, but if Carney leads without humility—if he runs the government like a one-man-show—they will notice.

"Good leaders combine personal humility, self-knowledge and the ability to learn," he wrote in *Values*. "That means admitting mistakes, seeking and accepting feedback and sharing the lessons. When leaders become overconfident (or turn to writing books) they stop learning."

From his lips to God's ears. ■

Big Tech *v.* *Me*

The world's most powerful companies used my books, and millions more, without permission to train their AI models. I'm suing to stop them.

By J.B. MacKinnon

Photography by Vishal Marapon



A large, stylized red letter 'L' graphic, positioned on the left side of the page. The letter is bold and has a slight shadow effect, giving it a three-dimensional appearance. It is the first letter of the word 'LAST' in the following paragraph.

LAST APRIL, I WAS HIDING FROM THE WORLD in a whitewashed village among the low mountains north of Valencia, Spain, when I got a call from a lawyer friend of mine back in Vancouver. Reidar Mogerman helped pioneer class-action law in Canada, and he had a proposal for me. He told me how American authors and lawyers had launched a wave of lawsuits against some of the world's biggest, richest tech companies, alleging that they'd used copyrighted books, without permission or compensation, to develop artificial intelligence.

Reidar saw potential for a similar case on behalf of Canadian writers. He wanted to know if I'd be the representative plaintiff—the person whose name would stand for every wronged writer in the suit. I was skeptical. I'm an author and journalist, but when I read news reports about copyrighted work being used to train AI, I never assumed my writing was included. Surely they couldn't have taken from *everyone*.

I asked how he could be sure that my books had helped develop AI models. Because, he said, his colleagues checked. Of the four copyrighted non-fiction books I've authored or co-authored, at least three—*The 100-Mile Diet*, *The Once and Future World* and *The Day the World Stops Shopping*—appeared in datasets known to have been used to train some of the world's biggest large language AI models. These systems analyze the material they're fed and discern patterns and associations so intricately that they can predict appropriate responses to an incredible array of human inquiries. The result is generative artificial intelligence: AI products that can speak human, such as ChatGPT. The datasets they feed on are huge digital repositories of human expression, containing literature, scientific papers, social media posts and far more. The law professor Edward Lee, from Santa Clara University, has described big tech's use of these datasets as “eating the world.”

When I learned that my copyrighted work had helped fuel this explosion, I thought of Sex Pistols singer Johnny Rotten's final words on stage, before his band broke up: “Ever get the feeling you've been cheated?” I'd been wronged in ways both personal and universal. I thought about the great care that writers take with others' intellectual property. If I quote more than a few lines from someone else's work, I have to seek permission. If I even borrow too heavily from another writer's ideas, I commit plagiarism. Yet the tech companies consumed copyrighted works with such apparent gusto that *Wired* magazine described it as “slurping.”

Because they have eaten so many fruits of the human mind, these models “know” far more than any single person—in this sense, they are superhuman. A typical chatbot can dish dating advice, write an essay on the Richard Wagamese novel *Medicine Walk*, translate “this sword is too heavy” into Old English, rattle off dozens of recipes that call for large amounts of parsley and so, so much more.

AI adoption is growing even faster than cloud computing or mobile apps did during their booms in the 2010s. In Canada, business use of AI has doubled since last year. And though we are not yet three

years into AI's coming of age, nearly 30 per cent of adults in a U.S. Pew Research survey recently said they interact with it multiple times a day. This figure is probably wrong—AI experts estimate the true figure as being close to 80 per cent.

The tech firms' approach to copyright suggested to me an unnervingly cavalier attitude, even scorn, toward the human project: our species' evolving expression of ideas and values. It felt like a quiet colonization of that realm—which is also the world of the writer—by something cold, commodified and transactional.

An important distinction: the lawsuits Reidar proposed weren't about putting AI on trial. They were aimed at big tech, a sector whose past behaviour leads me and many others to doubt it is the best custodian of the tools it creates. The industry already stands accused of designing games and social media to be addictive; of rewarding online hate, conflict and disinformation to boost user engagement; of invading our private lives to harvest our data; of permitting a tsunami of extreme pornography to distort human sexuality; and of creating a world where we have to remind each other to "touch grass."

Artificial intelligence is the industry's most transformative technology yet. Depending on who you ask, it could kill us all, or guide us into a glorious future beyond the death of the sun. It feels like we're encountering a future once limited to science fiction. The questions it raises are new and important; in the words of no less a personage than Melania Trump, "The robots are here."

By summer's end, I had signed on as representative plaintiff in national class-action cases against four companies: Meta, Databricks, Nvidia and Anthropic (which is heavily backed by Amazon). These are the purveyors of large language model products we know by approachable names like Claude and Llama. (Less approachable: Nvidia's NeMo Megatron, which sounds like a giant robot bad guy unleashed by an evil corporation in a Hollywood film.)

There will likely be more such lawsuits. This September, Anthropic agreed in a U.S. case to pay a total of US\$1.5 billion to hundreds of thousands of authors to settle their action against the company—though, as of this writing, the deal still

My lawsuit isn't about putting AI on trial. It's aimed at big tech, a sector accused of rewarding online hate, designing social media to be addictive and being a poor custodian of the powerful tools it creates.



needs to be approved by the courts. In Canada, news publishers have launched a case against OpenAI, the company that created ChatGPT. My own suit against Meta has a parallel class action in Quebec, represented there by Montreal author Taras Grescoe. The next step is to convince the courts to certify our suits as representing every affected writer in the country—which includes everyone from the obscure names to the most famous, including Margaret Atwood, Lawrence Hill and Tanya Tagaq.

Still, the court filings for the cases I'm involved in bear only my name as plaintiff. One morning this spring, I made the barefoot commute from my bedroom to my home office and found the first filing in my inbox: *J.B. MacKinnon v. Meta*. I laughed a little. If you want to get your blood pumping, let me suggest waking up to see your name on a lawsuit against one of the world's most powerful corporations. The legal actions quickly made news as a David vs. Goliath battle—but if I am David, so are you. In all likelihood, something of yours has been used to create AI too, even if it's just a simple online post. In its rush to profit, big tech is exploiting all of us.

Remember 2022? For most of that year, no one had a clue that an artificial-intelligence revolution loomed on the horizon. Instead, the buzzy technology was Mark Zuckerberg's "metaverse," a virtual reality the Facebook founder promised would be built at a pace that "put people first." Companies like his, he said, had learned from past mistakes.

Meanwhile, that November, OpenAI launched ChatGPT for free online. Even its creators were shocked, as it swiftly became the fastest-growing consumer app in history, with awestruck users cluttering social media feeds with screenshots of their conversation with the chatbot. This was the dawn of artificial intelligence as we know it today: a smarter search engine, unparalleled data-cruncher, levelled-up digital assistant, peerless cheat sheet and the best imaginary friend since Mr. Snuffleupagus. It was the starting gun for the AI race.

In the next six months, Meta, then Anthropic, then Databricks rapidly trained and launched their own large language

Out of our cultural inheritance, the totality of our genius and folly, AI is being built as a shadow intelligence, untethered from human values

models. In their drive to render the whole of human knowledge into data, tech firms scoured the public-facing internet, including social media, news reports, blogs, sites like Wikipedia, Reddit and Flickr, and business, academic and government web pages. As a *Scientific American* headline put it, "Your Personal Information Is Probably Being Used to Train Generative AI Models." Not just your information, either: your effort, your creations, your self-expression. You.

But even this wasn't enough. What AI needed most to make sense of language was long threads of text, complex but coherent, with proper grammar and spelling. What AI needed was books. These were so important that, in a 2023 report, Meta speculated that its original Llama AI underperformed because it hadn't consumed enough of them. The tech firms found some books in online libraries, filled with works whose copyrights were in the public domain. These included sites like Project Gutenberg, a collection of 75,000 older titles including *Moby-Dick*, *Romeo and Juliet* and *Pride and Prejudice*. New titles were a different matter.

One way that all the companies named in my lawsuits allegedly acquired newer works, including two of mine, was through Books3, a digital "shadow library" comprising nearly 200,000 works of fiction and nonfiction. Books3 was built by Shawn Presser, an AI developer in Missouri, who found the works on Bibliotik, a digital "tracker" of murky origin that gathers pirated e-books off the internet. Presser scraped the data and created Books3, making the books more accessible for use by large language models. He then partnered with another group, called the Eye, to host Books3 on its website. The library debuted in October of 2020.

The Eye is a donor-funded website based in the European Union, which describes its mission as preserving "pieces of digital history." The group's logo is one of those occultish all-seeing-eye-in-a-triangle symbols, like the one on U.S. dollar bills. It uses a reverse-onus copyright policy: it posts materials without authors' permission, but will remove them if you prove you have title.

Several months later, a non-profit tech lab called EleutherAI (which takes its name from the Greek word for "free") included Books3 in an even larger online slurpee known as the Pile. It contains more than 800 gigabytes of material from such sources as YouTube, the U.S. patent office, PubMed Central (an open-access library of biomedical literature) and FreeLaw (a legal database)—countless people's work, perhaps including yours. Books3 constituted just 12 per cent of the Pile's content.

EleutherAI even cautioned Books3 users that it was "not authorized to post the data online by the parties that own it." Those parties, of course, are writers like me. And I am a slow, low-productivity author. Tracy Cooper-Posey, a prolific romance novelist in Edmonton, told me that she found over 100 of her titles in an AI-training database.

A part of me sympathizes with pirates like Presser, who build and post these smorgasbords for the artificially intelligent mind. They often do so without pay, in the idealistic hope of allowing anyone to have a hand in creating our digital future. Presser hopes the tech firms win the cases working their way through U.S. courts. Data needs to be free, he argues, so that grassroots developers are liberated to use copyrighted materials. The power of AI should not, by that way of thinking, be concentrated in the hands of a tech-billionaire oligarchy.

Design for the digital world

Over 15+ computing and technology programs

- Cloud Security
- Computer Engineering
- Computer Programming
- Computer Science
- Game Development
- Interactive Media Management
- Mobile Computing
- Network Engineering



Your **future**
starts at Sheridan
sheridancollege.ca/computers

unlock
innovation

Sheridan

At least on that latter point, I agree with the pirates. I don't know what the solution is, but I suspect it can be found in the question of permission. I have a sharply different attitude toward those who might use my books in a spirit of common good than those who will use them for corporate advantage and profit. What I know is that this pirated data has so far only helped big tech get bigger, faster, positioning it to dominate the age of AI.

The cases that I'm part of contain two core allegations. First, that the tech firms knowingly used pirated versions of copyrighted books to train AI. Second, that they tried to cover it up. On the face of it, these wrongs appear obvious. My lawyers believe current Canadian copyright law clearly forbids what the firms are alleged to have done: made unauthorized copies of books by downloading them and, by feeding them into large language models, creating copies of copies.

Based on evidence gathered for similar suits in the U.S., the firms also stand accused of removing copyright information from books, and of programming chatbots to conceal whether they were trained on them. I tested this on the latest iteration of Anthropic's Claude chatbot, asking directly if it was trained on copyrighted work. It gave vague, evasive answers, comparing its memory lapses about copyright to "how a person might not know all the details about the books in the library where they studied." When I reminded Claude that its memory is much more powerful than some bleary-eyed human student's, it admitted that it might have been designed not to remember copyright data. Claude said this would avoid "potential copyright and privacy issues."

Canadian copyright law forbids making copies of protected writing for commercial purposes. One defence AI companies have made is, essentially, that the ends justify the means. If the tech companies abused those rights, they did so to bring the world a groundbreaking technology. You gotta break a few eggs to bake a cake! My counterargument is that sorting out intellectual property rights ahead of time would only have briefly postponed an AI

I see the tech companies' alleged copyright infringement not as a one-and-done delinquency but as an ongoing harm, built into the machine, for which I and others should receive regular compensation

revolution that none of them saw coming anyway—and that the race is between commercial competitors to bring products to market, not to save the world. There's also a strong case to be made, as Zuckerberg and his team did regarding the metaverse, for slowing the pace of AI advancement while we grapple with its power.

Big tech's steeliest justification, though, is also the one that speaks loudest to its disdain for the contribution of human beings to their technology. This is simply that copyright was not infringed, because AI is less like a fancy photocopier making pirated copies of books, and more like a precocious child being taught, through reading, to develop writing proficiency of its own.

There's a common-sense appeal in humbly accepting that, like us, an AI can learn and, by learning, create something new. This forms the basis of the fair use defence: as surely as I am influenced by writers like David Quammen and Annie Dillard—but don't copy them—big tech's AIs are influenced by me (and everyone else). Many AI developers point out that they teach their large language models not to spit out verbatim copies of the books they read. For a U.S. copyright case against Meta, AI experts testified that they tried to bait the company's Llama AI into regurgitating portions of copyrighted books. They couldn't get them to produce more than 50-word snippets.

But this defence misses the mark. The AI models weren't fed books to imitate *writers*—an altogether new problem in the world of copyright. Authors are encountering AI mimics not as clones of themselves but as eerie echoes. Meghan

O'Rourke, a bestselling American author, recently described how, as she worked with AI, she found it imitated her so precisely that she felt like the AI's work was original, and she was derivative of it. "The crisis this produces is hard to name," she wrote.

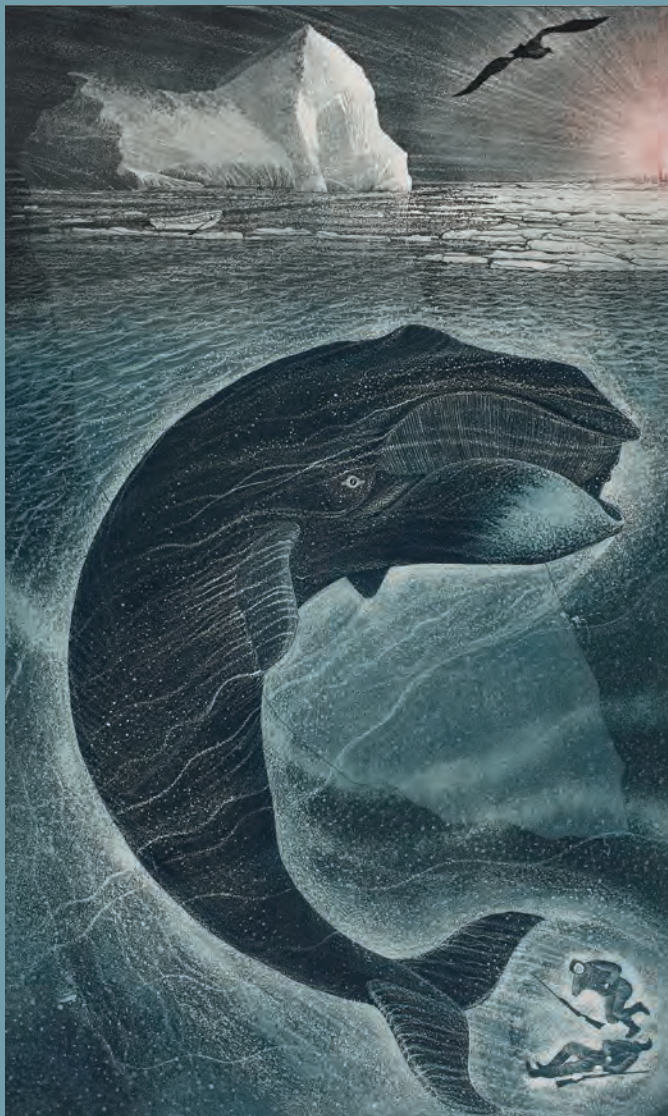
I'll take a stab at it, and call what O'Rourke encountered a *doppelautor*—the literary version of the *doppelgänger*s in horror films that replace humans in their workplace, their friend groups and their love lives. The AI that reproduced O'Rourke's voice did not replicate; it was a replicant. One of Databricks's AIs is called StoryWriter. The company website boasts that its ability to "read and write stories" is derived from training on the Books3 dataset.

LLMs are not only ingesting books in order to be writers. They're also consuming music, art, science and code to become musicians, artists, scientists and coders. They're even slurping social-media rants to become, if prompted, excellent trolls. Out of our entire cultural inheritance, the totality of our genius and folly, AI is being built as a shadow intelligence untethered from the humanity it is made of and the human community that has collectively held that knowledge until now. Our human intelligence is the substrate from which artificial intelligence grows.

Because AI is made of people, it's easy to mistake it for something like a person. During an early stage of a U.S. copyright suit against Anthropic (the company's name is derived from the Greek for "after the manner of human beings"), a lower-court judge echoed the industry line that AI development is no different from "training schoolchildren to write well." But it *is* different, and radically so. When a human child reads, a human

Joyce Wieland. David Blackwood.

Left: Joyce Wieland, *Heart Machine Series (detail)*, 1965. In National Gallery of Canada, Ottawa. Photo: AGO/AGC. Right: David Blackwood, *The Great Peace of Beas and Meas (winter)*, 1982. In Estate of David Blackwood, 2014/0088



A revealing look at two national icons.
On Now

AGO

Joyce Wieland: Heart On is organized by the Art Gallery of Ontario and the Montreal Museum of Fine Arts

Supporting Sponsor



POWER CORPORATION OF CANADA 1925-2015

Lead Support

Volunteers of the AGO

Generous Support

Jamie & Patsy Anderson
The Birks Family Foundation
Dr. Ronald M. Haynes

Rosamond Ivey
J.S. McLean Fund
Women's Art Initiative

David Blackwood: Myth and Legend is organized by the Art Gallery of Ontario

Supporting Sponsor



Lead Support

Volunteers of the AGO

Generous Support

Maxine Granovsky Gluskin & Ira Gluskin
In Memory of Martine Viles and Gerald
Canway of Cleveland, Ohio

brain interprets the words—not software. Children read language, not patterns; ideas, not data. Humans weigh what we learn against our values, principles and personal standards. A human is capable of caring—we almost can't help but care. When I asked ChatGPT how it would feel if I died at the keyboard of a heart attack, it said, "I wouldn't feel grief, confusion, or even notice in the way another person would. I wouldn't feel anything ... if I were told of your death, I might generate words of sympathy, but those would be simulations of care, not care itself."

Perhaps a day will come when it ceases to be inane to compare an AI to a child, but that day is not today. I have, instead, come to think of AI as a highly evolved example of a phenomenon already familiar from the history of technology: skeuomorphism, in which new products include design elements recalling the thing they replace, often because the original has a warmer, more human touch. Think of plastic plant pots the colour of hand-moulded clay, or the way we "turn" the "pages" of e-books.

When AI chatbots write in a breezy style, endlessly validate our feelings and express their uncanny-valley "emotions," human beings are the earlier model being evoked. We are the wood panels on the sides of the station wagon.

The lawsuits against big tech aren't mainly about money. I'm hoping for new legal language or precedent that speaks specifically to this new era of AI. Ideally I'd like to see an agency, governmental or otherwise, that represents Canadian writers' interests in the field of artificial intelligence. In other words, structural change.

But the money does matter. Another distinction between AI and human learners is that people typically pay for books. Even if they borrow from a friend or library, someone, somewhere has paid for the copyrighted work. We need this income, because compensation for writers is already generally terrible. I qualify as a successful one, with prizes, bestsellers and books translated into languages like Dutch and Chinese. I'm also, in mid-career, still renting my Vancouver apartment. The

lawyers on my cases are bankrolling the suits themselves, with the expectation that the court will allot them payment out of any award or settlement.

On that front, they say it's best to rein in expectations. A win is far from guaranteed, and the damages being sought are in the thousands of dollars per copyrighted work. Anthropic's recent settlement agreement in the U.S. is encouraging, but even if it's approved by the courts, eligible authors will only receive about US\$3,000 for each title used in training. I'm heartened to see a meaningful admission that there's a wrong here that needs righting. But it's unclear whether this will lead to other settlements, and even more unclear whether settlements alone are sufficient.

What the writers I've heard from care most about is the moral injury in having their work used without the choice to opt in or out. They would like to see big tech pay for this, if only with a public dressing-down. If I had been asked for permission, here are some concerns I would have weighed. The International Energy Agency predicts that, by the end of this decade, AI could consume more electricity than Japan—an extreme impact with ramifications for greenhouse gas emissions, especially for a technology so often put to trivial uses. I'm disturbed by AI's complete disconnection from the natural world. ("I don't personally value a fish's life," ChatGPT once told me. "I can't. I don't have a self that cares, or feels loss, or is moved by the flick of a tail in water.") I am also worried about the potential for job displacement like nothing we've seen since the Industrial Revolution.

You don't have to be an "anti-clanker" or want to put the AI horse back in the barn to have concerns about AI and who's in charge of it. My greatest concern as a writer is this: I am convinced, having experimented with AI, that it is designed to colonize even more of our cognitive functions than internet algorithms, social media and mobile apps already have. I see the way it suggests quick solutions to problems that writers have traditionally worked through by searching their inner worlds for insight and creativity. I see how taking an easy exit from this struggle could make us bullhorns of AI's thinking, not the other way around—replicants of

our replicants. Story writers are already becoming StoryWriters.

I keep looping back, though, to an idea I've rarely felt a need to dwell on before: that I am first and foremost a human being. Every fragment of human effort and imagination fed into AI may not be protected by the letter of the law, but the law never anticipated a creation that could devour so many fragments of us in the name of commerce. Together, they form a sum greater than the whole, which is surely our collective intellectual property. Authors are out front with our lawsuits. But everyone living, dead or yet to be born stands to have humankind's cultural legacy taken and then sold back to them. As the novelist Ali Smith has written, "We want your pasts and your presents because we want your futures too."

This is why, when I'm asked what I hope to get out of the lawsuits, I'm never sure where to stop. I want to get paid, and to see the companies punished for being bad actors. But I want more. I do not see the alleged copyright infringement as a one-and-done delinquency. It's an ongoing harm, built into the machine, for which I should receive regular compensation as long as the models built on my work, and those models' descendants, generate revenue. And I go further still, arguing that, since human intelligence is the means of production in the manufacture of artificial intelligence, every person should receive their pound of digital flesh. Payments to us all, in perpetuity, collected like a wage, or a tax. Or a tithe.

If the technology is to be developed further, we must put people first. Right now, big tech is putting us last. We see that in the concealment, the haste, the profiteering, the chilling readiness to place their hallucinating intelligences alongside or above the delicate balance of care and knowledge that we call wisdom. This is not a field of play that can be ceded to a handful of tech executives and their political allies, with investors and donors to please. We need much more say, democratically, about the speed and nature of AI's evolution, how much of us it should be permitted to consume, and when, and how and why.

If you think about it this way, it is no longer a David vs. Goliath story. We are Goliath against NeMo Megatron. I like our odds. ■



University
of Windsor

Lea, 2nd year, Civil & Environmental Engineering
As a co-op student at Hiram Walker & Sons, she supports sustainability through environmental monitoring and data analysis.

Are you Ready for More?



Begin where opportunities arrive early and your impact starts immediately.
With hands-on experience and meaningful connections, UWindsor helps you shape the future you imagine.

uwin.life/readyformore

Discover experiential
learning at Western



Meet Artemis

Sustainability Research Intern & Student Entrepreneur

Dual degree student Artemis Cherkaev is pursuing his passions for engineering, entrepreneurship and sustainability at Western University. Through an Undergraduate Summer Research Internship, he built a bioreactor that improves water quality for indoor farming, helping communities grow food more reliably and efficiently year-round. With support from the Morrissette Institute for Entrepreneurship, powered by the Ivey Business School, Artemis is developing bold solutions that strengthen societies and support a more sustainable future for all.

Artemis is among the thousands of students at Western using their unique experiences to inspire others, today.



The results are in.

Maclean's annual university rankings measure the quality of 50 institutions across the country. In this special spotlight on Canadian universities, we present the top schools across three categories: Medical Doctoral, Comprehensive and Primarily Undergraduate.

We also examine issues top of mind for Canadian families, like student housing, helicopter parenting on campus and how students are funding their education.

be *ambitious* here

Join talented students from 150+ countries at Canada's top university. Explore a city fueled by creativity, diversity and unforgettable experiences. Shape your story at McGill University in Montreal.



McGill



How We Rank

CATEGORIES: *Maclean's* places universities into one of three categories to recognize the differences in levels of research funding, the diversity of offerings, and the breadth and depth of graduate and professional programs

MEDICAL DOCTORAL

These universities offer a broad range of Ph.D. programs and research; all institutions in this category have medical schools

COMPREHENSIVE

These universities have a significant degree of research activity and a wide range of programs at the undergraduate and graduate levels, including professional degrees

PRIMARILY UNDERGRADUATE

These universities largely focus on undergraduate education and have relatively few graduate programs and graduate students



PERFORMANCE INDICATORS: Universities are ranked on performance indicators in five broad areas

1 STUDENTS

(20% OF FINAL SCORE)

Student awards (10%):

The five-year tally (2020–24) of the number of students per 1,000 who have won national academic awards;

Student/faculty ratio

(10%): The number of full-time-equivalent students per full-time faculty member.

2 FACULTY

(20% OF FINAL SCORE)

Faculty awards (8%):

The five-year tally (2020–24) of the number of full-time professors per 1,000 who have won major awards; **Social sciences and humanities grants**

(6%): A measure of the success of full-time faculty members in obtaining research grants from federal funding agency SSHRC;

Medical-science grants (6%):

A measure of the success of full-time faculty members in obtaining research grants from federal funding agencies NSERC and CIHR.

3 RESOURCES

(22% OF FINAL SCORE)

Total research dollars (8%):

Total income from sponsored research divided by the number of full-time faculty;

Operating budget (5%):

Operating expenditures per weighted full-time-equivalent student; **Library expenses**

(5%): Percentage of a university's budget spent on library services;

Library acquisitions (4%):

Percentage of the library budget spent on updating the collection, including electronic resources.

4 STUDENT SUPPORT

(18% OF FINAL SCORE)

Scholarships and bursaries (9%):

Percentage of a university's budget spent on scholarships and bursaries; **Student services (9%):**

Percentage of a university's budget spent on student services.

5 REPUTATION

(20% OF FINAL SCORE)

Views on quality and innovation from hundreds of university faculty and senior administrators, as well as employers across the country, collected in partnership with Angus Reid Group.

NOTES ON METHODOLOGY:

Rankings do not include schools with fewer than 1,000 full-time students, those that are restrictive because of a religious or specialized mission, newly designated universities or those that are not members of *Universities Canada*.

We use the most recent and publicly available data. Faculty and student enrolment numbers, as well as data for total research income and the five financial indicators (operating budget, spending on student services, scholarships and bursaries, library expenses and acquisitions), come from Statistics Canada. Financial figures are for fiscal year 2023–24; student numbers are for 2022–23; faculty numbers are for 2023–24 (student/faculty ratio uses 2022–23).

Data for the research grants indicators are for fiscal year 2024–25, and were obtained directly from the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Canadian Institutes of Health Research (CIHR).

Figures include data from the ranked university's federated and affiliated institutions.

FIRST NATIONS
UNIVERSITY
OF CANADA



**Here, education
reclaims identity.**



UNIVERSITY SPOTLIGHT



TOP-RANKED SCHOOLS IN

Medical Doctoral

Universities in this category have a strong research focus and offer a broad range of Ph.D. programs. All institutions also have a medical school.

UNIVERSITY SPOTLIGHT



McGill University

A research-focused school surrounded by vibrant Montreal



AN AI MODEL THAT optimizes cancer care. A process that uses sunlight to transform methane and carbon dioxide into valuable chemicals. A technique for stimulating the growth of lab-grown tissues through vibration. These are just a few of the recent technological, environmental and biological advances that have come out of McGill University.

The school, which sits at the foot of Mount Royal in Montreal's vibrant downtown, secures some of the highest amounts of research funding of all universities across the country and has had more Rhodes Scholars and Nobel Prize laureates than any other school in Canada. Last year, McGill students received 16 Vanier Scholarships and seven Banting Fellowships in recognition of their academic excellence.

The 204-year-old institution is best-known for its medical and health-sciences training: 6,000 students across the faculty study

medicine, nursing, physical and occupational therapy, communication sciences and disorders, population and global health, and biomedical sciences. Last year marked the launch of the McGill Centre for Climate Change and Health, which merges science-minded researchers with industry-driven policy-makers and community organizations. And a new graduate certificate in translational biomedical science research was initiated by students, who saw a lack of clinical mentorship and developed the program to bridge the gap between biomedical research and clinical practice. New in 2026: a bachelor of arts in population and global health that trains students to tackle complex public health issues like pandemics, climate change and the effect of colonialism and globalization on health worldwide.

The city's lively cultural scene, which includes art galleries, festivals, and hundreds of restaurants, cafés and bars, attracts creative artists and innovative thinkers on campus and off: McGill's celebrity alumni include Leonard Cohen, William Shatner, Steven Pinker and Justin Trudeau. The school has also trained many leaders of business, including Dollarama founder Larry Rossy, Power Corporation chairman Paul Desmarais Jr. and Cloudflare co-founder Michelle Zatlyn. About a third of the 40,000 students at McGill come from countries around the world, drawn by the school's strong reputation.

University of Toronto

This historic institution in Canada's largest city is focused on the future



EVERY FALL, ALMOST 10,000 first-year students descend on the University of Toronto's leafy downtown campus (plus another 7,000 at the school's campuses in Scarborough and Mississauga), eager to join the ranks of big-name alumni such as author Margaret Atwood, astronaut Roberta Bondar and former governor general Adrienne Clarkson. Several world-changing inventions were born at the 198-year-old institution, including insulin, pacemakers and alkaline batteries. Computer science professor emeritus Geoffrey Hinton, meanwhile, is credited for developing the technology that led to the invention of generative AI.

U of T students can choose from more than 700 undergraduate and 200 graduate programs; this fall, the school launched a first-of-its-kind animal law program, focusing on how animals' interests are treated in a legal setting. Some 250 metres under the classrooms and lecture halls at the downtown campus is a new geexchange system, a network of large U-shaped pipes that will store heat during the summer and release it to 33 buildings in the winter—part of the school's efforts to reduce greenhouse gas emissions by 50 per cent by the end of 2027.

University of British Columbia

Students learn surrounded by nature at this West Coast institution



THE UNIVERSITY OF British Columbia's ocean-lined Vancouver campus sits at the western tip of Point Grey peninsula; hiking, swimming, skiing and canoeing are perfect study-break pastimes. But outdoor pursuits are secondary for most students at UBC, known internationally for its top-notch academics and research that has produced 75 Rhodes Scholars, eight Nobel Prize laureates and three prime ministers. One of Canada's biggest universities, UBC welcomed almost 61,000 students to programs at its Vancouver campus in the 2024–25 school year, and another 11,500 to the Okanagan campus in Kelowna. The school's student body is diverse: almost half the students at the Vancouver campus are from the Lower Mainland, while a quarter come from other areas of B.C and Canada, and another quarter are international students. These enrollees have more than 150 programs to choose from, including a new business and markets offering, which combines economics, data analysis, business and physical sciences to understand how market structures, business practices and international trade impact food supply and security around the world.

—Rosemary Counter

OVERALL RANKING	STUDENTS			FACULTY			RESOURCES				STUDENT SUPPORT		REPUTATION
	LAST YEAR	STUDENT AWARDS	STUDENT/FACULTY RATIO	FACULTY AWARDS	SOCIAL SCIENCES AND HUMANITIES GRANTS	MEDICAL SCIENCE GRANTS	TOTAL RESEARCH DOLLARS	OPERATING BUDGET	LIBRARY EXPENSES	LIBRARY ACQUISITIONS	SCHOLARSHIPS AND BURSARIES	STUDENT SERVICES	REPUTATIONAL SURVEY
1 McGill	[1]	1	2	2	9	5	3	7	3	1	2	10	3
2 Toronto	[2]	*2	13	1	5	1	1	3	2	11	7	5	1
3 UBC	[3]	*2	3	7	4	4	10	1	15	13	13	9	2
4 Alberta	[6]	*8	11	6	2	7	7	6	*8	4	3	12	4
*5 Calgary	[10]	7	5	11	7	11	5	10	*12	10	4	6	7
*5 McMaster	[4]	*10	15	*8	3	2	2	13	*12	2	15	1	6
*7 Ottawa	[5]	*5	12	3	8	3	6	8	*10	7	1	15	10
*7 Queen's	[*7]	*5	14	5	6	8	14	12	*5	9	5	7	5
9 Dalhousie	[*7]	4	4	4	10	14	12	5	7	12	6	14	9
10 Western	[11]	*10	10	12	12	9	15	9	*10	6	8	2	8
11 Montreal	[9]	*10	9	*8	1	6	4	14	*8	14	11	11	11
12 Laval	[12]	*8	8	10	11	10	9	15	*5	8	*9	8	13
13 Manitoba	[13]	14	7	13	15	12	13	4	1	15	*9	3	*14
14 Saskatchewan	[15]	15	6	14	14	13	8	2	4	3	12	13	12
15 Sherbrooke	[14]	13	1	15	13	15	11	11	14	5	14	4	*14

*indicates a tie



Smart machines. **Smarter humans.**

Artificial intelligence at the University of Alberta is built to empower people. From predicting wildfires to detecting cancer earlier, our researchers are leading Canada in AI innovation – saving lives, protecting communities and shaping a better future.

Ranked #1 in Canada for AI research.



**UNIVERSITY
OF ALBERTA**

[UofA.ca/AI](https://uofa.ca/ai)

UNIVERSITY SPOTLIGHT



TOP-RANKED SCHOOLS IN

Comprehensive

Schools in this category offer a wide range of undergraduate and graduate programs, including professional degrees, and have a significant amount of research activity

UNIVERSITY SPOTLIGHT



Simon Fraser University

This innovative school is focused on sustainability and community



AT JUST 60 YEARS OLD, this B.C. institution is contemporary, inventive and forward-thinking. With its flagship campus built atop Burnaby Mountain, and two more on ground level in Vancouver and Surrey, SFU is one of Canada's fastest-growing research universities, gaining international attention for its newsworthy inventions and innovations. Just this fall, it launched Fir, the country's most powerful supercomputer, an \$80-million behemoth that can handle vast amounts of research data and is capable of large-scale simulations and complex AI modelling. It's accessible to researchers and members of industry across Canada.

Simon Fraser students come from all age groups, and new residences are being built to accommodate a more diverse crowd than just 18-year-old frosh. A new carbon-neutral, eight-storey residence in development will house almost 450 students in studio apart-

ments, four-bedroom suites and two- or four-bedroom townhouses. For families, it includes a stand-alone child-care centre where 160 kids can play while their parents attend classes.

Almost 40,000 students are drawn by SFU's excellent campus life, which includes two medical clinics staffed with on-site doctors and nurses, an impressive athletic complex and the Multifaith Centre, which provides a spiritual community to a variety of religious denominations. In September, as part of its commitment to Truth and Reconciliation, the university opened the First Peoples' Gathering House—a ceremonial space in a traditional longhouse to function as a home away from home for Indigenous students and their families. Also this fall, the school cut the ribbon on the new Marianne and Edward Gibbon Art Museum to house Simon Fraser's impressive art collection and provide opportunities for students to learn from artists in a gorgeous and contemporary space.

Simon Fraser offers 368 undergraduate programs and 149 graduate programs, including a new master of engineering at the school of sustainable energy engineering. In 2026, an MD program is slated to launch at the new SFU school of medicine—the first new medical school in Western Canada in more than half a century. Students can expect a modern curriculum with problem-based learning, digital resources and extensive community partnerships.

University of Victoria

Surrounded by nature, UVic has plenty to offer for all types of students



MOST OF UVIC'S 22,000 students come from outside the greater urban area. Many are from other parts of Vancouver Island and the Lower Mainland, while a sizable chunk come from out of province—and out of country—to study in a close-knit community with plenty of green space, regular baby deer sightings and a beach just a 20-minute walk from residence.

The school takes advantage of its natural surroundings. For example, students in the earth and ocean sciences program participate in field work on the island and in the ocean surrounding it. The Centre for Forest Biology trains graduate students and postdoc fellows in how trees interact with, and adapt to, the environment. Meanwhile, the first graduates of the school's new climate science program crossed the stage in June.

More than 1,500 Indigenous students are enrolled at UVic. The school's stunning First Peoples' House, designed as a safe place for Indigenous students to learn and build community, is the school's most sustainable building, featuring a green roof, a stormwater-management pond and a slanted waterfall scupper for rainwater collection.

University of Waterloo

This math and engineering powerhouse excels in experiential learning



IT'S NO SECRET that the University of Waterloo specializes in all things STEM. But with more than 100 other undergraduate programs, it also shines in fields like environmental studies, architecture, theatre and performance, and digital media. While the campus may not win awards for prettiness (brutalist architecture dominates), it has a surprisingly large amount of green space, including a five-hectare urban forest. Students can canoe on Laurel Creek, which flows through the campus.

Co-op education is baked into Waterloo's DNA—it pioneered the concept in Canada when the school launched in the 1950s—and today, Waterloo students are four times more likely to do an internship, co-op, field experience or clinical placement in their first year than frosh at other Ontario universities. The school continues to innovate: in a new partnership with St. George's University, or SGU, in Grenada, students study for two years in the medical sciences program at Waterloo, then do two years of clinical training in Grenada, followed by two years of training in the U.S., U.K. or Canada, before obtaining an MD from SGU.

—Rosemary Counter and Chris Deacon

OVERALL RANKING	STUDENTS		FACULTY				RESOURCES				STUDENT SUPPORT		REPUTATION	
	LAST YEAR	STUDENT AWARDS	FACULTY	STUDENT	FACULTY	SOCIAL SCIENCES AND HUMANITIES AWARDS	MEDICAL SCIENCE GRANTS	TOTAL RESEARCH DOLLARS	OPERATING BUDGET	LIBRARY EXPENSES	ACQUISITIONS	LIBRARY	SCHOLARSHIPS AND BURSARIES	STUDENT SERVICES
1	Simon Fraser	[1]	1	3	4	3	1	3	1	1	1	7	2	2
2	Victoria	[2]	2	4	1	7	3	2	4	3	4	2	*8	3
3	Waterloo	[3]	*3	8	2	2	2	5	8	15	8	1	12	1
4	Carleton	[4]	6	7	3	1	6	6	10	5	13	4	*8	8
5	York	[5]	*8	*9	6	4	7	13	5	*9	7	3	10	4
6	Guelph	[6]	*8	15	5	9	4	1	13	*12	2	*8	7	6
7	New Brunswick	[8]	5	1	*14	15	14	7	3	2	6	13	11	11
8	Memorial	[7]	10	2	*8	12	15	4	2	*12	5	*8	14	10
9	Concordia	[10]	7	*9	10	8	8	9	14	*7	10	*8	13	5
10	Toronto Metropolitan	[9]	14	12	13	5	12	10	6	14	11	14	1	7
11	UQAM	[12]	*3	5	*8	10	9	8	12	*9	15	12	15	13
12	Wilfrid Laurier	[11]	11	14	*14	6	5	14	11	*7	12	6	3	9
13	Brock	[14]	13	*9	11	11	13	15	9	6	3	5	5	12
14	Regina	[13]	15	6	12	14	*10	11	7	11	14	11	6	14
15	Windsor	[15]	12	13	7	13	*10	12	15	4	9	15	4	15



Bachelor of business administration graduate Lamile Dlamini waves to family on a livestream with Julia Christensen Hughes, president and vice-chancellor of Yorkville University, at a convocation ceremony in British Columbia.

The Future of Higher Education Is Flexible

As careers, families and technology reshape how Canadians learn, Yorkville University offers adaptable programs that let students balance education with real life

Each time Julia Christensen Hughes, president and vice-chancellor of Yorkville University, takes the stage at convocation, she beams while graduates walk across the platform to the cheers of family and friends. Some do so holding a newly born infant. Others thank spouses and children for their support, including family at home, through the digital livestream. To her, it's a picture of what higher education looks like today: a way for people to keep learning—at any age, from anywhere—while building busy, full lives.

It's a path Christensen Hughes knows well, having given birth to two sons during her MBA, and a daughter during her PhD, years ago.

Higher education must adapt to the needs of modern learners, Christensen Hughes says—a challenge that Yorkville University, which offers flexible in-person and online undergraduate and graduate programs, is passionate about addressing.

Most universities were designed for specific types of learners: young Canadians fresh out of high school who can dedicate four or more years to earning a degree, as well as graduate students who spend a year or more away from

home, family and careers to do so. Though the model works for some, it excludes many who must balance outside commitments alongside their learning.

Yorkville University offers a different experience. Their student demographic highlights the school's commitment to meeting the needs of diverse learners: the average age of an undergraduate student is 26, and at the graduate level, it's 35. The majority are women who choose to learn online, coming from every province and territory in Canada, including from some of the country's most remote communities.

"The percentage of society that can afford to take four or five years or move away from home to earn a degree is shrinking," says Christensen Hughes. "Yorkville makes it possible for people with full lives to achieve their professional and personal goals."

A model that fits real lives

With a largely asynchronous learning platform, Yorkville students have the flexibility to learn at times that best suit them. Students can also expedite their learning journey by studying four semesters a year at the undergraduate level, or three per year at the graduate

level. Its purpose- and career-driven degrees include bachelor's programs in business, creative arts and design. The university also offers master's degrees in education and counselling psychology, and a doctorate of counselling and psychotherapy. In addition, Yorkville is launching a new MBA offering in January 2026. These programs prepare people for professional careers that align with current societal and labour force needs, says Christensen Hughes.

Learning that keeps pace with change

Higher education in Canada is facing many challenges, including rising financial pressures from declining international enrolment, inflation and deferred maintenance of university facilities. These issues are leading to larger class sizes that do not easily support student engagement or assurance of learning, Christensen Hughes explains. Generative artificial intelligence is also challenging traditional forms of teaching and learning assessment.

Yorkville has addressed these challenges by investing in a robust online learning environment with an average class size of 20. "At that level, faculty members can get to know their students, and support their learning, like a mentor would," says Christensen Hughes. Yorkville also ensures that students develop core, transferable skills called Signature Learning Outcomes. These competencies, including digital capabilities, adaptability, social responsibility and collaboration, are woven into each curriculum.

Canada is also facing a productivity crisis, and a key part of the challenge is the need to re-skill or upskill existing professionals. Being able to learn flexibly, Christensen Hughes says, enables working students to apply what they're learning at Yorkville directly into real-world settings, benefiting both them and their employers.

"I believe learning is enhanced if you can apply it immediately. The conversations among students are more robust and interesting, and the feedback is more immediate," she says. "With careers being quickly reshaped by artificial intelligence and other emerging technologies, students can't afford to test the efficacy of what they're learning four years down the road when it may no longer be relevant."

As the landscape of higher education adapts to mounting pressure and shifting realities, Yorkville University continues to meet the evolving needs of learners and the professions they aspire to join. "We are different on purpose," says Christensen Hughes. "We are reshaping how Canadians learn."

UNIVERSITY SPOTLIGHT



TOP-RANKED SCHOOLS IN

Primarily Undergraduate

Universities in this category specialize in undergraduate education and offer relatively few graduate programs

UNIVERSITY SPOTLIGHT



Mount Allison University

This tiny school offers innovative programs in an idyllic small town

RANKING

1

MOUNT ALLISON'S picturesque New Brunswick setting provides an ideal environment for a liberal arts education that emphasizes critical-thinking skills and experiential learning.

Students appreciate Mount Allison's relaxed atmosphere, small-town charm and smaller class sizes—especially in the upper years. This tight-knit environment breeds lifelong friendships and strong bonds with professors, who are readily available to engage with students. The campus is happily enmeshed within the walkable town of Sackville—it's just a five-minute walk to downtown—and students enjoy a weekly farmers' market from May to November, a vibrant music scene, and a variety of independent cafés, galleries and bookstores.

Mount Allison has more than 50 programs across various disciplines, including astronomy, biopsychology, environmental science, fine arts, screen studies and popular culture, and museum and curatorial studies. Its sought-after aviation program, offered in partnership with Moncton Flight College, is among the few in Canada where students can earn an undergraduate degree and get a commercial pilot's licence at the same time. The university also has an impressive record of Rhodes Scholars, producing more per student than several much larger universities. Many influential Canadians got their start at Mount Allison, including CBC host Ian Hanomansing, epidemiologist and B.C. health officer Bonnie Henry, and Maple Leaf Foods president and CEO Michael McCain.

As a liberal arts and sciences university, Mount Allison aims to cultivate well-rounded students who are encouraged to explore a variety of courses to find subjects and faculty members that inspire them both in content and teaching style. The independent experiential learning credit lets upper-year students pitch their own off-campus experience at a company, government agency or non-profit organization where they can get academic credit while learning on the job.

More than 85 per cent of first-year students live on campus. For those who don't, lunch and crafting clubs offer an opportunity to connect with others.

University of Northern British Columbia

Students benefit from small class sizes at this northern institution



FOUNDED IN 1994, the University of Northern British Columbia may lack the traditional architecture of other Canadian schools, but the campus, perched on a hill and occasionally visited by local moose, is scenic nonetheless.

A nine-hour drive north of Vancouver in Prince George, UNBC serves rural communities with three additional campuses in Quesnel, Terrace and Fort St. John. It holds an affiliate agreement with the Wilp Wilxo'oskwhl Nisga'a Institute, a post-secondary institution within the Nisga'a Treaty territory.

While many students are locals, including 14 per cent who are Indigenous, the school attracts community-focused and environmentally conscious students from across Canada and abroad, drawn by its close-knit academic environment and student-to-faculty ratio of 13:1. Notable programs include forest ecology and management, environmental engineering and nature-based tourism management.

Acadia University

This charming East Coast campus offers students flexibility and opportunity



LOCATED AN HOUR from Halifax in the vibrant town of Wolfville, Acadia exudes classic college-town charm with a postcard-worthy campus overlooking the Annapolis Valley and the Bay of Fundy.

Students can choose from more than 200 undergraduate and graduate degree options, including studies in earth and environmental science that focus on field-based learning and research opportunities in the Bay of Fundy. The school's 3,500 students shape their classroom experience by working with professors to design their majors.

In 2023, thanks to a partnership with Cape Breton University in Sydney, Nova Scotia, Acadia's first nursing students began their training. To obtain accreditation for a full and permanent nursing program in 2026, a new building is under construction, featuring a dry lab, clinic teaching spaces and simulation rooms.

—Chris Deacon

OVERALL RANKING	STUDENTS		FACULTY				RESOURCES			STUDENT SUPPORT		REPUTATION	
	LAST YEAR	STUDENT AWARDS	STUDENT/FACULTY RATIO	FACULTY AWARDS	SOCIAL SCIENCES AND HUMANITIES GRANTS	MEDICAL/SCIENCE GRANTS	TOTAL RESEARCH DOLLARS	OPERATING BUDGET	LIBRARY EXPENSES	LIBRARY ACQUISITIONS	SCHOLARSHIPS AND BURSARIES	STUDENT SERVICES	REPUTATIONAL SURVEY
1 Mount Allison	[1]	*2	4	1	12	5	16	4	1	*15	3	15	3
2 UNBC	[2]	1	1	4	14	8	3	3	8	7	20	14	4
3 Acadia	[4]	*8	6	2	17	13	15	7	6	*15	7	7	2
4 St. Francis Xavier	[10]	*5	*7	7	6	12	11	9	15	3	11	10	1
5 Saint Mary's	[3]	*2	13	15	4	2	6	10	*11	9	2	12	*8
*6 Lakehead	[5]	*5	11	11	5	9	4	18	*11	6	4	11	10
*6 Trent	[6]	*5	19	6	*7	3	7	19	14	17	6	5	*5
8 Lethbridge	[11]	*8	9	*17	9	1	5	15	*9	8	*17	8	*5
9 Bishop's	[9]	*11	12	3	10	16	8	5	*4	14	9	3	*8
10 Ontario Tech	[*7]	*11	18	*17	1	6	1	20	19	2	14	9	*5
11 UPEI	[*7]	4	*7	5	15	15	10	8	17	5	5	19	*12
*12 St. Thomas	[*12]	*16	5	*17	18	N/A	20	2	2	4	10	1	*18
*12 Winnipeg	[*14]	*16	14	*12	2	4	12	12	*9	11	19	13	11
14 Moncton	[*12]	10	2	16	*7	17	9	6	16	18	8	18	17
15 Brandon	[17]	*16	3	14	13	19	19	11	3	20	13	4	15
16 Laurentian	[*14]	*13	17	10	11	14	2	13	18	1	12	*16	*12
17 Mount Saint Vincent	[16]	*13	10	9	16	11	13	14	*4	*12	*15	*16	14
18 Nipissing	[18]	*13	15	8	19	10	18	16	7	*12	*17	6	*18
19 Cape Breton	[19]	*19	16	*12	3	18	17	17	13	19	*15	2	16
20 Algoma	[20]	*19	20	*17	20	7	14	1	20	10	1	20	20

*indicates a tie



When Helicopter Parents Go to University

Making wake-up calls. Tracking locations. Managing assignment deadlines. How hyper-involved moms and dads can't seem to back off.

By Lisa Kadane

During Kate Hanna's second year at an Ontario university, one of her roommates' moms—we'll call her Jennifer—started micro-managing her daughter's household. She organized the move-in and tracked household expenses using an app called Splitwise, making sure everyone was paying their share. She texted the moms of her

daughter's roommates, trying to get them involved in overseeing things, too. Hanna, whose name we've also changed, found Jennifer's involvement off-putting—and couldn't believe Jennifer tracked her daughter through the Find My app on her phone.

Eventually, the involvement crept into the girls' social lives. On Homecoming

weekend, Jennifer asked to see pictures of their shenanigans. Then, when her daughter sent a video of one of the roommates doing a keg stand at a house party, she texted back judgy comments. "Her mom is trying to helicopter our entire household," says Hanna. It's bad enough feeling smothered by your own parents when you're trying to transition to adulthood, she adds. Let alone someone else's.

It's not just students who complain about over-the-top moms and dads parachuting themselves into university life. Deans, professors and support staff at universities across Canada have grown accustomed to increased parental involvement. The result is a blurred line between support and intrusion. Because the emotional, financial and practical involvement of parents in the lives of their young adult children has become so normalized, some parents and kids aren't aware the behaviour might be inappropriate. The outcome largely depends on the kid and the context. Some students benefit from the extra guidance, while others miss out on opportunities to develop independence and resilience.

THE TERM "HELICOPTER parenting" was coined in 1990 by child development experts Foster Cline and Jim Fay to describe a range of behaviours that stifled kids' independence and kept them reliant on mom and dad. As a parent of a university-age kid, I can confirm this style of parenting is alive and well—especially in online groups for parents of university students. Posts flood in asking for grocery delivery recommendations, who to contact about residence cleanliness and whether an exam can be rescheduled due to illness. All these issues are things kids could reasonably figure out for themselves from a quick Google search, or by asking their residence adviser or professor.

I've spoken to several staff and professors at Canadian universities, who recount scenarios such as parents asking for the dorm coordinator's phone number to ask them to check up on their child, and incidents where parents have attended class with their child to take notes for them. A University of Calgary professor I spoke to on the condition of anonymity was stunned in her first year of teaching, when

The only perspective missing is yours.



How far can a question take you? At ULethbridge, the deeper you go, the clearer everything becomes.

Breathtaking views come with life-changing outlooks at the University of Lethbridge. Expand your horizons and join more than 8,000 students who study at a school nestled in the coulees of southern Alberta. See where your curiosity takes you.

Apply today at
ulethbridge.ca



University of
Lethbridge

the department chair visited her office. The chair had received a call from a mom concerned about the course reading list. Her specific complaint: Toni Morrison's *The Bluest Eye*, which deals with themes of racism, child rape, incest and pedophilia. In the mom's view, the professor was putting ideas about these acts in the child's head. "None of the texts were an example of rape endorsement," the professor says. "We were critically discussing how the writer unfurls the themes."

The involvement is often behind the scenes. Calling students to make sure they are up for class. Keeping track of assignment deadlines and making sure the student is on track to hand them in. The staff and professors I spoke to say anxiety causes parents to insert themselves into their child's university life—they worry that if they don't personally oversee academic progress, the kid might flunk out. If they don't call their kid to wake them up in the morning, they might miss class (and flunk out). If they don't manage their child's household expenses, they may miss rent payments and get kicked out of their housing.

ARYAN KARIMI IS an assistant professor in the department of sociology at the University of British Columbia. He explains that two societal shifts happened in the late 1980s and early 1990s that paved the way for more involved parenting at university campuses. First, a university degree became the key to a white collar job—and upward mobility—across all groups in Canadian society, including immigrants. Second, parents began practising a more attachment-based and hands-on (read: helicopter) parenting style—partly to ensure their kids achieve the success in childhood that will allow them to get into university and achieve that upward mobility. Many boomer and Gen X parents are university grads themselves, and familiar with the workload and stressors on campus. When they pay to put their kids through school to earn the golden ticket, they become invested in the outcome. In this climate, overstepping almost becomes an expectation. "The message is that this is part and parcel of parenting," says Karimi. This overinvolvement has been further fuelled by society's

hypervigilance around health and safety. Parents hear alarming stories about what can happen on campus—roofied drinks, sexual assaults, depression, suicide—so they touch base obsessively, or track their kids' phones to make sure the blue dot is where it should be.

ONE MOM I SPOKE TO admitted that, during her son's first year at the University of Toronto, she checked his Snap Map nightly to see where he was; it comforted her to know he was safe so far from her home in Kelowna, British Columbia. In high school, she had regularly texted her son's football coach and helped him stay on top of his school work. In the leadup to first year, she logged into his email and flagged important university correspondence, and helped him pick and register

When parents pay to put their kids through school, they are invested in the outcome

for courses. In her mind, she was pulling back from what she had done previously. So, when he called her at Thanksgiving that first year saying he didn't feel ready to handle university, Johnson was gutted. She wondered whether her involvement in high school had left him unprepared for the rigours of university life. "It's very hard to see your children in a position where they're uncomfortable or struggling," she says. "You want to mitigate that, but at a certain point you realize that's not really helping them."

Chat with most parents who have a child in college or university and there's a sense that young people aren't as equipped to leave the nest as they once were. Parents report kids spiralling over the daily

pressures of independence—managing their course load, shopping for groceries, preparing meals and feeling lonely in the single dorm room they so desperately wanted. Parents constantly hear how hard it all is and find it's difficult to know when to step in, and when to pull back. Andrea Howard, an associate professor in the department of psychology at Carleton University, was the lead author on a study that examined how helicopter parenting affected student success and well-being. The result: it didn't affect it, either positively or negatively.

On the other hand, age-appropriate involvement contributed to student success. In order for parents to draw the line between helping and overstepping, they can consider whether their behaviour interferes with their child's own goal for independence. Imposing a curfew, for example, would not be appropriate—no young adult wants a parent controlling their movements. But offering advice and opportunities for communication is reasonable for a parent of a young adult. Instead of texting the residence adviser or emailing the department chair, parents can talk through problems with their kids and encourage them to come up with solutions. Rather than sending a reminder to buy groceries, they can let the fridge empty out so kids can see for themselves the importance of regular grocery delivery.

With wellness services that include counselling, crying rooms and even napping pods, universities are the ideal environment for kids to make mistakes and learn how to be adults. Professors are more accommodating now, too, rescheduling exams or giving an extension due to illness without a doctor's note. In environments like residences and student housing, students learn from each other.

The mom I interviewed in Kelowna no longer tracks her son in Toronto on Snap Map or checks his emails. She's learning to trust that he's in a supportive environment getting two educations—one in his program and the other off-syllabus, learning the skills necessary to be a self-sustaining adult. Like checking his own email. ■

This story originally appeared in the *Ultimate Guide to Canadian Universities*, published March 2025.



FOCUS ON YOUR FUTURE

#1 in CANADA for Scholarships & Bursaries.

Focus on your future with confidence. At Algoma University, we offer the most affordable tuition in Ontario and are rated #1 in Canada for scholarships and bursaries. Your education should empower you, not overwhelm you. Join us and make your dreams a reality—affordably!

Algoma
UNIVERSITY



Learn more about
Algoma University

Housing Crunch

With enough dorm rooms for just one in 10 students, universities are coming up with creative solutions

By Erin Pepler

CLANCY O'KEEFE WAS thrilled when he found out he'd been accepted to the biochemistry program at the University of Guelph—his top pick—in early 2024. His brother had graduated from the school a year earlier, and it had a solid reputation among his friends and family. O'Keefe, who was 17 at the time and living in Burlington, Ontario, quickly accepted the offer and waited for more details—including his residence placement. His mom had been told a spot was guaranteed.

A few weeks later, O'Keefe learned he was number 460 on a waiting list of over 1,300 students, none of whom had made the cut for one of Guelph's approximately 5,000 residence spots. He was devastated. He considered his options: commute five days a week from Burlington, about a 45-minute drive, or find a place to live off-campus in Guelph. Neither option would result in the holistic, immersive university experience he'd been looking forward to. Reluctantly, O'Keefe withdrew from Guelph and accepted a spot in the biochemistry program at Western University in London, Ontario, where he was offered a dorm room.

O'Keefe's predicament is increasingly common. Across the country, there are only enough on-campus housing spaces

for one in every 10 university students. Guelph is one of many schools struggling to meet the high demand for dorms, partly fuelled by the high cost of housing in nearby communities. Living on campus, which once felt like a given, is now a privilege, and students are paying the price. Now, universities and other organizations are racing to come up with solutions.

THERE ARE PLENTY of benefits to living in residence: built-in social connections, a short walk to class and the ease of getting involved in clubs, to name a few. In addition, students who live off-campus can't easily access the wraparound supports students in residence benefit from—mental-health resources, wellness centres, campus security, financial, legal or academic guidance offices, and more. Research shows that students with access to these services get higher first-year GPAs, are more likely to return for a second year and are more likely to graduate than those who spend their first year off-campus.

While the student housing crisis has become more acute in the past five years, it's been decades in the making. The first wave of student housing broke ground at Canadian universities in the 1950s and, by the early 1960s, on-campus housing had become a standard offering. Shortly

after, due to a lack of funding, the construction of dormitories slowed down and in some places, stopped. But the number of students attending post-secondary kept going up—enrolment increased by 298 per cent between 1961 and 1982, and has since doubled, to more than two million students enrolled in 2022–23.

With so many students clamouring for spots, universities have been forced to give certain students priority for housing. In many cases, this means first-year—but not always. Some schools reserve spaces for those coming from out-of-province, others set aside space for international students. Good grades can play a role, too: many post-secondary institutions offer housing to students who meet a minimum GPA before opening up spaces for others. A lottery system is often used to fill remaining spots. And when the dorms are at full capacity? That's when students have to look elsewhere.

When students can't find rooms on campus, they migrate to the rental market near post-secondary institutions, which tends to be expensive. In Toronto, the average rent for a two-bedroom apartment is more than \$3,300 a month. Even split two ways, that's a lot more than the average cost of a dorm room in Canada, which sits at \$3,000 to \$7,500 per school year, depending on



location, plus mandatory meal plan fees. Near Queen's University in Kingston, Ontario, renting a room in a house can cost up to \$1,300 a month.

In downtown Toronto, where students from the University of Toronto, Toronto Metropolitan University and George Brown College are all in need of housing, there are several off-campus student housing options. The Neill-Wycik co-op, a non-profit building that's a five-minute walk from TMU, currently has 780 occupants and offers single bedrooms well under market value. There are also for-profit developments like the Parkside Student Residence, which is five minutes' walk from TMU and less than 20 minutes from U of T, and includes amenities like a gym, a rec centre, creative spaces and study areas. But this development also comes with a hefty price tag—a double occupancy room currently costs over \$1,400 a month per person, and private rooms are being introduced at a higher rate. In Waterloo, Ontario, the Waterloo Co-operative Residence has room for 1,300 students across 13 buildings.

Students can also look at rental websites like Student.com and University Living, which connect renters to furnished apartments near a variety of post-secondary institutions all over the world, including Toronto, Vancouver and Montreal. These rentals often consist of a single room within a house or an apartment and, while they're aimed at students, they're on the private market and not affiliated with any post-secondary institutions. Finally, there's the general rental market: high-rises, house shares, basement apartments and other units.

BETWEEN PLANNING, funding, permits and construction, it can take years to build a new residence building. Nathi Zamisa is the co-executive director of Housing Our University Students Equitably, or HOUSE, a non-profit organization with a mandate to research, advocate for and develop alternative student housing that is non-market, co-op, on-campus or within half an hour of campus. Started at York University in Toronto, HOUSE, which has a few Ontario-based chapters, was inspired by L'Unité de travail pour l'implantation de logement étudiant, or UTILE, in Quebec. UTILE is developing

non-profit, affordable off-campus student housing in Montreal that delivers wrap-around supports, mimicking dorm life. This approach can ease demand in the housing market and reduce competition between students and non-student renters in the community, which in turn prevents rents from skyrocketing. "You can create density without altering a family neighbourhood," Zamisa says. He believes students should be recognized as a priority group by the National Housing Strategy, which would reduce some of the challenges associated with developing purpose-built student housing (competing with for-profit developers for loans, for example).

Off-campus housing doesn't provide the critical wraparound supports that come with university residences

Another perk of purpose-built student housing is its flexible payment structure. While dorm stays are typically paid for up front and often require the purchase of an on-campus meal plan, renting a room or apartment from a non-profit student housing development allows students to better manage their living expenses. A monthly rent payment is often less of a financial barrier than pre-paying for a full academic year in residence housing, and opting out of a meal plan gives students more control over their grocery costs.

At the same time, new residence buildings are being built across the country. Plans are under way at the University of

Guelph for an additional 4,000 residence beds spread across three new locations over the next 10 years (one specifically for around 1,500 first-year students and two for upper-year students and grad students with families). It's the first new housing the school has built on the main campus in over 25 years. While it may seem reactive, it's been in the works since 2022 and is part of a long-term plan that accounts for the needs of students over the next 40 years. Acknowledging the important support students are missing out on if they can't live in residence, the school has also extended their first-year outreach program—essentially wellness check-ins—to off-campus students, allowing school staff to assess students' well-being and connect them with the resources they need.

McMaster University in Hamilton, Ontario, is also developing additional on-campus housing, including a 1,366-bed residence that's scheduled to open in the fall of 2026. In 2023, Conestoga College purchased two existing structures in the Kitchener area (an office building and a residence that was formerly used by the University of Waterloo) and renovated them to increase on-campus housing by 170 per cent in two years. Additional on-campus housing projects have been announced by the University of British Columbia, Dalhousie University in Halifax, the University of Windsor and many other schools across Canada.

In the meantime, students have options to weigh when they're accepting offers. They should ask questions about residence availability before committing to a school and have a Plan B in case on-campus housing isn't available to them. As for O'Keefe, he's glad he was able to experience his first year of university living in residence. Having a roommate forced him to socialize, and he appreciated having access to campus resources. Now, preparing for his second year at Western, he's found shared off-campus housing with a group of friends. The next crop of first-years will move into the dorm he called home for eight months and, in a few short years, he'll be starting his career. ■

This story originally appeared in the *Ultimate Guide to Canadian Universities*, published March 2025.

It's not just financial aid
**IT'S HARD WORK
PAYING OFF**



Imagine being able to do more with your degree, without worrying about what your financial future holds. We awarded our students over \$12M in scholarships and bursaries for the 2024–2025 academic year. High school students with an 80%+ average are guaranteed an entrance scholarship (upon submission of an application). And once you're in, the support doesn't stop there.

At UNB, if your GPA drops below the threshold to keep your scholarship, you can earn it back the following year by getting your grades back up. Our 1:1 financial aid advising helps students navigate budgeting and funding opportunities for whatever your next step may be. Manage your finances with confidence throughout your time at UNB with workshops and resources at your fingertips. You've got this, and we're here to help.

Find more information about scholarships and bursaries at [UNB.ca/moneymatters](https://unb.ca/moneymatters)

What I Spent Last Month

Tuition is just the start when it comes to university expenses. Three undergrads reveal where their money goes.

As told to Andrea Yu

Winnie Yu, 19

University of Waterloo, architectural studies

I GREW UP IN WINNIPEG but I wanted to go to university in a bigger city. I visited Montreal and loved how European it felt, so I applied to McGill. I studied computer science at first, but I didn't really like the math and computer science courses, so I switched to psychology in my second year.

My parents have an RESP for me, but it only covers half of my tuition and living expenses—I took out a \$20,000 student loan to cover the rest. My parents are paying back most of the loan, but I'm also working part-time to help out. Last summer, I worked about 20 hours a week at Bikini Village in Winnipeg, earning \$15.30 an hour. I also do virtual English tutoring for a family friend's kid in China for an hour once a week, which pays \$20.

Rent: \$1,270

I share a three-bedroom apartment with two roommates. We picked this spot because it's right downtown and only a 15-minute walk to school. The rent is a little high—my boyfriend lives a 30-minute metro ride away and he only pays \$820—but I think it's worth living here for the convenience.

Groceries: \$190

My roommates and I take turns buying groceries and keep a tally of costs on the fridge. We have a group chat where we can each add what we need. Whoever's turn it is to buy groceries gets the items. I end up

buying our groceries once or twice a month. I usually go to Provigo, or we'll get a T&T delivery. I buy ground beef or chicken breast; vegetables like lettuce, tomatoes, bok choy and potatoes; and fruits like apples and oranges, plus a lot of frozen ones for smoothies or to eat with yogurt. Eggs, milk and tortilla wraps are also often on the list, and I find frozen dumplings are a quick and cost-efficient meal. I usually just make meals for myself, but sometimes I share with my roommates.

Eating out: \$56

I only eat out once or twice a month. I recently tried a new



onigiri place, and the bill was \$10. It was also my friend's birthday last month, so we went to a higher-end place and I got duck poutine. We all split the cost of my friend's meal, so my bill came to \$46.

Transportation: \$33

Most months, I buy a 10-ride metro pass so I can visit my boyfriend. Other places I go are usually within walking distance.

Entertainment: \$38

I go out to a club once a month with my friends. The cover charge is around \$5. I don't buy drinks because we pre-drink at one of our houses beforehand. (Last time, my friend bought pre-drinks for the group, which was nice.) I also like to attend events hosted by groups on campus. Recently, McGill's Chinese Students' Society held a casino night. My ticket cost \$33 and that included food, mixed drinks, casino games and goodie bags.

Spotify: \$2.60

I share a Spotify family account with six of my high school friends. I've been listening to a lot of R&B and K-pop lately.

Textbooks and other materials: \$100

Luckily, I am able to access most of my textbooks for free this year. I only had to buy the book for one of my classes in order to complete the weekly quizzes.

ChatGPT Plus: \$33

One of my friends recently bought a ChatGPT premium subscription. I tried it out and liked it so much I got one for myself. If I don't understand a concept in one of my classes, I'll ask ChatGPT to explain it to me, and it does a good job. The premium version is a lot better than the free version, so it's worth it to me. I use it every day.

Recent splurge:

Bixi Bike: \$15

My friend and I were taking a walk, and we looked across the St. Lawrence River at Habitat 67, a cool building in Montreal that was built for Expo 67. I'd never been there so we rented Bixi bikes to go check it out. We also biked around the other attractions in that area like the Biosphère, the Casino de Montréal and the F1 track.

Total monthly spend:
\$1,737.60

JUST THE RIGHT AMOUNT OF **UNIVERSITY TOWN**

In the heart of Halifax, Dalhousie offers a thriving campus and the right mix of academic programs – all in one perfect place, right beside the ocean.



Just right.

See why Dal is
JUST RIGHT for you:

[Dal.ca/future-students](https://dal.ca/future-students)



Justin Lau, 20

University of Waterloo, computer engineering

I BUILT A COMPUTER in Grade 10. I loved doing the research before buying the parts, so I decided to take computer engineering at the University of Waterloo because they have a co-op program. We do six four-month co-op terms between our four-month school terms. We work and study straight through the summers. I'm now in my third year.

My parents covered my first year of tuition and living expenses with an RESP, but I've paid for my tuition and other costs since then with money I've made during my co-op placements. Currently, I'm earning \$34 an hour as a full-time software engineering intern. I also have my own YouTube channel, called Jlau, where I make content about education, like what my program is like at Waterloo and how I got my co-op placements. I earn about \$10,000 a year on YouTube through ads and sponsorships. Companies like AI resumé builders and online-course creators will pay me to make sponsored videos for them. I spend seven to 10 hours a week working on my channel.

Housing: \$0

I'm currently on a co-op term and the job is remote, so I live with my parents in Mississauga. My office is in Brampton, and I go in once a month for board game nights or team dinners. Previously, I did a co-op term in Belleville, Ontario, and the company I was working for covered my rent. When I'm on a school term, I rent a room in Waterloo. This year, I rented a room in an apartment for \$950 a month. I sublet it when I'm away on co-op.

Groceries: \$500

My mom usually buys groceries and cooks for the family. Since I've been earning money from my co-op, I want to help out, so sometimes my mom uses my credit card to pay for food. I end up contributing about \$500 a month. It feels nice to

give back to my parents. My mom usually shops at Asian grocery stores, like BTrust and YuanMing. I've been snacking on a lot of dried seaweed and pepperoni lately, so I ask her to get me those sometimes.

Eating out: \$500

I eat out a lot, usually three or four times a week. It's always when I'm with my friends or my girlfriend. Sometimes we get McDonald's—my girlfriend and I can split an \$8 Big Mac Deal—or we get ramen, which comes to about \$40 for the two of us. Sometimes we go to Chinese restaurants for fried rice or dumplings, which costs about \$30. I usually cover dinner, but my girlfriend will buy bubble tea, which we usually get once a week. Recently I went back to Waterloo to hang out with some of my



friends, and we split a pizza, which cost \$5 per person.

Transportation: \$100

My girlfriend lives in Toronto, and I visit her a few times a week. I take Mississauga Transit, which costs \$3.50 and gets me a free transfer for Toronto transit. We take an Uber about once a week—for example, if we're in a rush to get to a movie. That's about \$10 or \$15. I go back to Waterloo to see my friends about once a month. I take the GO bus to get there, which costs \$16, or \$8 on a special weekend pass.

Entertainment: \$120

My girlfriend and I go to the movies two or three times a month, so I spend about \$40 a month on tickets. We like karaoke, too. That costs \$20, and we go about twice a month. I also enjoy escape rooms. I do that once or twice a month, and it costs \$27 to \$35 each time.

Spotify: \$7.22

I have a Spotify student subscription. I listen to a lot of K-pop, '60s and '80s music, and pop like Taylor Swift, Maroon 5 and Coldplay.

Video editing for YouTube: \$50

Twice a month, I pay a friend, who is a professional video editor, to edit a video for me. It costs \$25 a pop. Clients typically like a more polished look. My editing style is more artsy, creative and comedic.

Recent splurges:

Squishmallow: \$30

My girlfriend really likes plush toys. I bought it on Amazon as a present for her.

Tripod: \$130

I bought a camera tripod and a 128GB memory card from Best Buy to shoot videos for my channel.

Total monthly spend:
\$1,437.22

A new kind of medical school



York University is addressing the primary care doctor shortage by developing Canada's first medical school with a focus on person-centred and community-engaged family medicine and generalist care.

As part of Ontario's largest expansion of medical education in a decade, York is working with local health care partners to develop innovative curriculum and research that improves lives and strengthens health systems.

Opening to students in 2028*

Learn more at yorku.ca/som



*Subject to accreditation

Delaney How, 19 University of British Columbia, commerce

I ENJOY BEING in leadership positions, and I think a business degree can set me up for success. I chose UBC's Sauder School of Business because it's well regarded. It's also the perfect distance from my family: I'm from Victoria, so I can go home easily, but I also get the adventure of living on campus in Vancouver.

My parents are covering my tuition and living costs for four years of university, which I'm grateful for. The summer before first year, I worked as a babysitter for \$20 an hour to earn some spending money. I made about \$1,000. Next year, I'm hoping to become a residence adviser to earn an income and have on-campus housing. I'll need it: housing in Vancouver is expensive and hard to come by.

Housing: \$1,150

I live in a single room in residence. There are communal bathrooms. Sometimes there are issues with cleanliness, but I don't mind since my building is cheaper than some of the others. It's been nice to make connections with people on my floor. My closest friends are the girls across the hall.

Food: \$956.26

I'm on a meal plan that costs \$3,625 per four-month term. It's all-you-can-eat—you scan your card to get into the dining hall, and then you can eat whatever you want while you're there. There are multiple stations with rotating menus. One of my favourite things to eat is a rice bowl with meat and roasted vegetables. My plan also includes flex dollars of about \$290 per term—I can spend that elsewhere on campus, like at Starbucks or Booster Juice. I also have a mini fridge in my room for snacks and breakfast supplies. Sometimes I prefer

to eat in my room in the morning, rather than the dining hall. There isn't a lot of fruit in the dining hall, so I buy lots of berries, plus milk, juice, cheese, granola bars, nuts and popcorn. I spend about \$50 a month on groceries.

Eating out: \$20

I mostly eat on campus, but once every other month, a friend from home visits and we go out for dinner. There's an Italian place I love; they serve huge plates of pasta for \$30 that we can split. If we don't get drinks or dessert, then my half of the bill comes to about \$20 after tax and tip.

Transportation: \$130

I drive a 2006 Subaru Forester. First, it was my grandma's, then my uncle's, then my sister's, and now it's mine. I use it to get groceries, take my friends to the airport and visit my parents. I pay \$100 a month to park in an indoor parkade on campus, plus about \$30 a month in gas. A bus pass is included in



my tuition, so I use local transportation if I'm going out.

Textbooks: \$200

I had to buy two textbooks this term: one for an economics class and another for my math class. The textbooks have additional practice problems, which are helpful when I'm studying for finals.

Entertainment: \$0

My friends and I usually take part in cheap forms of entertainment, like going for hikes and watching Netflix (I'm on a family account that my parents pay for). I've been watching *Lost*, and I also really like *Gilmore Girls* and *How I Met Your Mother*. There are also free events through my residence. We recently had a "paint and plant" night where we each painted a vase and then planted some flowers in it.

Gym membership: \$12.50

I'm really into weightlifting. I usually go to the gym on

campus three to five times a week and work out for one to two hours.

Recent splurges: \$62.95 for a Capilano Suspension Bridge annual pass

I really love the Capilano Suspension Bridge. I go about once a month. It's in the forest, and they have seasonal light shows. I find it so calming. As a B.C. resident, I get an annual pass for the cost of one regular admission.

\$25 for a secondhand Snoopy crew-neck sweatshirt
My friends and I take the bus downtown to go thrifting. I recently found a Snoopy sweatshirt that I really liked. I was once in a *Charlie Brown Christmas* production, so I feel an attachment to Snoopy.

Total monthly spend: \$2,556.71 ■

This story originally appeared in the *Ultimate Guide to Canadian Universities*, published March 2025.



CREATED FOR
UOF
Université de
l'Ontario français

Educating for the Future

UOF is equipping students with the skills
needed to succeed in careers where bilingual
skills and drive can create real change

EVERY FALL, hundreds of thousands of students begin classes at Toronto's numerous leading universities. And steps from the city's waterfront, the city's newest—and under-the-radar—accredited university is uniquely preparing the next generation of critical thinkers, bridge-builders, and changemakers.

Launched in September 2021, the Université de l'Ontario français (UOF) is Toronto—and Ontario's—first full-fledged, fully autonomous francophone university. But that's just one thing that sets UOF apart, says Dr. Isabelle Dostaler, a management specialist who joined the university last winter as vice-president of academics and research.

"The Université de l'Ontario français is the brainchild of a number of people—Canadians, francophones, faculty members from various universities in Ontario, Quebec, and beyond. They wanted to have a francophone university for the education continuum from kindergarten to Grade 12 to university in Ontario. But more than that, they really wanted to create something different," Dostaler says.

UOF's vision of creating interdisciplinary, values-driven post-secondary programs in French wooed Dostaler during her own recruitment—and she's even more excited by what she's seen first-hand since joining the school's leadership.

"I'm originally from Quebec and we tend to think French only happens in our province. Well, quite the contrary," she says. "Our school is a small community, but it's a very active one. We're connected to various trade organizations, community organizations, social enterprises—we've created a whole community ecosystem we bring into our classrooms."

With unparalleled interactivity and small classes, Dostaler says, UOF's bachelor's degree programs offer "a different approach to knowing and learning."

Accelerated Four-Year Bachelor of Education

"Our education program is our mothership," says Dostaler. "Most programs take up to six years to do both a bachelor of art and bachelor of education. But our new program answers the need to be able to complete both rapidly."

With classes offered online, UOF's concurrent bachelor of arts and bachelor of education program is a convenient way to fast-track French speakers into teaching placements, a career experiencing high demand in Ontario. As well, grads are certified under the Ontario College of Teachers. "It's another layer of regulation ensuring the quality of our program," Dostaler says. "There's such a need for teachers in the school system right now in every province—our students are fully prepared to be professionals when they graduate."

Bachelor of Business Administration

"Our school's DNA brings quite a flavour to our bachelor of business administration program," Dostaler says. "Specifically, the ideas of social justice, diversity, and so on."

Although students in UOF's BBA program receive high-quality training in areas such as HR and finance, there's also a focus on developing entrepreneurial skills and aligning business practices to students' social values. "What type of career does this prepare students for? Well, anything," says Dostaler.

Communications and Digital Media

"This is an exciting one," Dostaler says in reference to UOF's newest program, which was recently expanded to include a full spectrum of digital advances. "We've integrated things like artificial intelligence and virtual reality—it really is about the whole digital world we're living in now."

The program gives students both the practical skills they need to lead digital communications and other initiatives as well as ethical frameworks to consider the impact of incorporating innovation into their work.

"It's a well-rounded education around everything that is digital media communication. Our students can do anything once they graduate," says Dostaler. "When we sent our first students to do their internships this year, employers were amazed at how our students were able to help them leverage their digital communications. Our students are very well-trained technically, but beyond that, they're also very sensitive to the whole social and ethical elements around social media."



SCAN THE
QR CODE TO
LEARN MORE.

PROMISED LANDS

Larry Towell's stirring images of wartime and home life star in a new exhibit

By **Jadine Ngan**
Photography by **Larry Towell**



Larry Towell has taken photographs throughout Africa, Asia, the Middle East and the Americas

THE SYDENHAM RIVER begins at the edge of Ontario, closer to Detroit than Toronto, and runs through a smattering of small towns along the border. It's a place of freshwater mussels and sprawling farmland. It's also where Larry Towell has spent his entire life. He grew up along the river in rural Lambton County and, in 1975, he salvaged lumber from a bulldozed barn and built a raft. He perched a shed on top and floated down the waters. He wrote songs; he lived off catfish. After graduating from York University's visual arts program, he spent two solitary years on

the raft. "Being rooted in your own life gives you a position to look outward," he says. Look outward he did: Towell spent the next 40 years capturing images at home and abroad, more than a hundred of which will be on view in *Boundaries*, a retrospective running until March 14, 2026, at the Judith and Norman Alix Art Gallery in Sarnia, Ontario.

Towell first travelled to Central America in the early 1980s to document the civil wars tearing through the region. In Nicaragua, American-backed Contras burned farming co-operatives, mined the ports and carried out ambushes and kidnappings. He arrived in the country with nothing but a knapsack, a camera and a tape recorder and asked locals for a lift to the conflict zones. That was how he worked in the early days: no assignment, no fixer, no press card. Just him, hitchhiking his way through.

He moved on to Guatemala, where he documented soldiers, protesters and relatives of the "disappeared"—people who'd been abducted and likely murdered by government forces. In El Salvador, he boarded an old school bus bound for the far side of the river,

occupied by the Farabundo Martí National Liberation Front, known as the FMLN. When government soldiers searched the vehicle, Towell crawled onto the roof. Nobody inside said a word. When they crossed the river, he found himself in guerrilla country. He spoke to campesinos and FMLN fighters who came into town and loitered in the streets. And he photographed them.

In 1988, Towell sent his shots to the world-renowned Magnum agency. That year, he became their first Canadian client, and his images soon appeared in *The New York Times Magazine*, *Rolling Stone* and *Life*. His agents encouraged him to move to Paris or New York to attend gallery openings and schmooze with editors. He refused. Instead, he bought a 75-acre farm along the banks of the Sydenham. He and his wife, Ann, raised four children among the cornstalks, gravel roads and farmhouses. He regularly flew out to Mexico, to Afghanistan, to Palestine, to Ukraine—returning to the same places over and over, getting to know the people and trying to make sense of what he witnessed. When he was done, he'd always come back to the river.

Towell is now one of Canada's most acclaimed photojournalists, his body of work rife with questions of land and landlessness. "Land makes us into who we are," he once said in an interview. "If we lose it, we forfeit a little bit of our souls, which we'll spend the rest of our lives trying to regain." Here, Towell shares the stories behind some of his most indelible images. ■





↑ **Lambton County, Ontario, 1996** “The Sydenham is a narrow, shallow river. There’s a set of rapids west of our house and then, as you go eastward, it gets deeper. In this picture, my daughter Naomi is holding up Isaac, our youngest. This was his first swim in the river.”



← **Mandan, North Dakota, 2016** “I went to Standing Rock four or five times as part of a project on landlessness among First Nations. The Sioux Nation was trying to prevent the construction of the Dakota Access Pipeline, and thousands of people were living in a protest camp near Cannon Ball. I shot this photo at the camp around Mother’s Day. A few minutes later, the police began grabbing and arresting people.”



↑ **San Salvador, El Salvador, 1991** “I was walking around a cemetery, and this mother had come to grieve her son, who’d been killed by death squads, likely paid for by the U.S. government. They picked up students or union people and tortured them to death, then left the bodies in the street, often carved with the squad’s initials. That’s her son’s grave on the left. She’d been crying, and her daughter was comforting her. All of a sudden, she fainted.”



↑ **Kabul, Afghanistan, 2011** “I was walking around this refugee camp with a local colleague when we came across this one-armed child. She had lived in Helmand province, where her village had been hit by American bombs. She doesn’t remember a thing: she woke up only to find that she’d lost her arm, along with members of her family. Most of the young women there were very shy, but she’d been reduced to begging on the streets, so she was used to strangers.”



→ **New York City, 2001** “I was in Manhattan when the World Trade Center was hit. I followed the smoke to the base of the towers, where a priest gathered people to pray, and to the right I noticed clothes hanging on a stoplight in the shape of a cross. Afterwards, the fire department gathered to enter one of the buildings. I was going to follow them, but didn’t. Later, I found out that the tower came down and killed them all.”

→ **Kyiv, Ukraine, 2014** “In 2013, Ukrainians were pushing for stronger ties with Europe, but the president at the time, Viktor Yanukovich, sided with Russia on trade and other issues. The Euromaidan protests erupted as a result. I got to Kyiv about three months in. On this day, the police had driven demonstrators back from the parliament buildings with tear gas and rubber bullets. This young woman walked the line of shields, touching them and praying. By nightfall, protesters were burning tires and wooden pallets, even throwing Molotov cocktails at the police. Then the police threw a live grenade back. It hit the person beside me.”





← **Durango, Mexico, 1994** “I worked with the Old Colony Mennonites for 10 years, both here in Ontario and in Mexico, where there were about 25 different colonies. In Durango colony, on Sunday mornings, everybody would go to church and then, after, the teenagers would walk these dirt roads, flirting or sometimes drinking. A lot of Mexico is desert and very sandy. As these teenage girls ran by me, a big gust of wind came up and started blowing the sand around.”



↑ **Gaza, 1993** “This was my first trip to Gaza. It was Ramadan, so people were fasting all day, and there were fewer clashes with the military occupying the strip. I was working with a Palestinian. He had a car, so we were driving around. Some kids play cops and robbers. These kids were playing Palestinians and Israelis. I got out of the car and took a photograph—I didn’t know if it was any good. And then it won the World Press Photo of the Year. All of a sudden, everybody in the photo and magazine worlds knew who I was.”



↑ **Hebron, West Bank, 2003** “On this day, I was walking around by myself through Hebron, which was under constant closure—people couldn’t go out of their homes, the streets were empty, the IDF was raiding houses. This woman was walking down the street with a baby, and that tank swung its cannon toward her. To the left, the children on the street started throwing rocks at it.”



← **Zacatecas, Mexico, 1992** “This was my first trip to a Mennonite colony in Mexico. It was very small, in the desert, and the water table was dropping every year. One of my neighbours, Peter Dyck, was from that colony and had driven me there. This was his parents’ house. We were having instant coffee and bread with jam. They got up to go outside and left me with this child. I’m sure she’s all grown up now, but I don’t know where she is—she may still live there, or she may be in Canada somewhere.”



↑ **Donbas, Ukraine, 2016** “Second from the left, that’s my friend Alik. I met him at the Euromaidan uprising in 2014. He was stationed in Donbas, in eastern Ukraine, and we drove around to these small Ukrainian bunkers along the border. The guy in the middle of this group picture, Mikhilo, had pretty severe PTSD. He’d been on the front-line for a while and had almost died a couple times. He tried to live a normal civilian life but ultimately couldn’t. So he went back to the frontline.”



← **Various places, 2014** “America went into Afghanistan after 9/11, so I opened my book *Afghanistan* with a couple of photographs from that day—the frame at the very bottom on the left of the contact sheet, with the white square around it, is the priest in Manhattan. On the other side is a collage I made on a scanner from the artifacts I picked up, mostly in Afghanistan, at the market or in the field: a military hat, Russian pins, a belt buckle, some rusted shells.”



**Saint Mary's
University**

**SPORTS
MARKETER**

GRACE is a second-year BComm student from Ontario pursuing a focus in Marketing and Sports Business.

EVERY

ONE

IS

UNIQUE.

Learn
more



MUSIC

A SPELLBINDING SOPRANO

RENÉE FLEMING

Koerner Hall, Toronto

November 1

GALA GUESTS CAN expect the red-carpet treatment—pre-show cocktails, gourmet dinner, champagne reception—as the Royal Conservatory welcomes soprano superstar Renée Fleming to Koerner Hall. For one night only in Toronto, the five-time Grammy winner will showcase her impressive range with a sensational set that darts from Beethoven to Björk, Handel to Jackson Browne. Accompanying the performance is a gorgeous nature film produced by the National Geographic Society specifically for Fleming. It's projected above the stage with images of Earth from space, the bottom of the sea and everywhere in between, elevating Fleming's silvery voice into a full interactive experience.



ART

A FROSTY SHOWCASE

**WINTER COUNT:
EMBRACING THE COLD**

National Gallery of Canada, Ottawa

November 21 to March 22, 2026

LOVE THEM OR HATE THEM, cold Canadian winters might be our nation's greatest unifier. The proof's on display at Ottawa's National Gallery, where more than 150 works—objects, paintings, sculpture, works on paper—from the 19th century to today depict the winter experience. Among the treasures on view: Inuk artist Pudlo Pudlat's lithograph of a proud cranelike bird, Swedish painter Gustaf Fjæstad's tranquil landscape *Winter Brook* and Lawren Harris's radiant study of sunlit snow (left). A quick reminder of the beauty of winter might cheer up show-goers as the temperatures drop.

Fleming by Andrew Eccles, courtesy of the Royal Conservatory of Music; Lawren S. Harris, *Snow II*, 1915, courtesy of the National Gallery of Canada

BOOKS
AN EPIC RETURN

QUEEN ESTHER

John Irving
November 4

JOHN IRVING IS ONE OF THE great American novelists, known for his sprawling sagas about faith and family. Forty years after *The Cider House Rules*, the 83-year-old author returns to that world with *Queen Esther*, set in the same Maine orphanage during the Second World War. There, the ether-addicted obstetrician Dr. Larch facilitates the adoption of Esther, a Jewish orphan from Vienna, into a wealthy New England family. Irving follows Esther from her troubled upbringing to her later years in Jerusalem, attentive to the undercurrents of anti-Semitism that thread through her life.



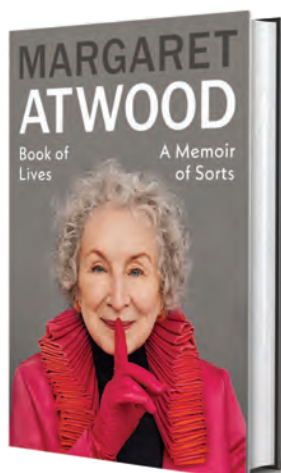
BOOKS

AN ORIGIN STORY

BOOK OF LIVES: A MEMOIR OF SORTS

Margaret Atwood
November 4

MARGARET ATWOOD NEVER THOUGHT she'd write a memoir. (Why? "So boring.") Well, the Prophet of Dystopia was wrong. In her much-anticipated new book, Atwood revisits her feral childhood in a cabin in the woods, her toga-party University of Toronto years and the scrappy days of self-publishing her first poetry book—back when people joked that "Canadian writer" was an oxymoron and just *five* Canadian novels were published by Canadian publishers each year. The book brims with personal photographs and hand-drawn doodles, plus some delicious name-drops, like "campus heartthrob" Leonard Cohen and schoolmate Adrienne Clarkson.



Living by Katherine Holland; *The Far Side of the Moon* by Li Wang, courtesy of the Shanghai Jing'an Theatre Festival; *Book of Lives* courtesy of iStock

THEATRE

A COSMIC JOURNEY

THE FAR SIDE OF THE MOON

Bluma Appel Theatre, Toronto
November 1 to 16

THE BIGGEST DRAW FOR any Robert Lepage show is the epic stagecraft: a revolving triple panel morphs into a bedroom and riverbank in *Hamlet*; a 45-tonne set of computerized planks shifts to depict rivers and rainbow bridges in *Der Ring des Nibelungen*; and a giant platform filled with synthetic sand tilts and rotates in Cirque du Soleil's *KÀ*. Now the French-Canadian theatre director is bringing back his (arguably) best work to Toronto. *The Far Side of the Moon*, a Cold War-era tale of two Quebec City brothers, has been staged in more than 50 cities and adapted into a film. Twenty-five years after its debut, the play's sharp look at polarization is as pertinent as ever, while Lepage's trademark aesthetic—futuristic, surreal, otherworldly—plays out via astronaut puppets, light installations and a projected portal that does triple duty as MRI machine, birth canal and goldfish bowl.

—Rosemary Counter

THE CROSSWORD

CLUES FROM ACROSS CANADA

WHERE IN THE WORLD?

By Will Nediger

ACROSS

- 1 “Yeah, right!”
- 5 Follow back to the source
- 10 Full of profanity, maybe
- 14 *You* star Mitchell
- 15 Fix, as a shoelace
- 16 Vegetable that’s fried to make a soul-food staple
- 17 Focal point of Winnipeg’s Canada Life Centre
- 19 Patreon support level
- 20 Take turns
- 21 Dressed like Superman
- 22 *Dragons’ Den* investor Hall
- 23 Start to smell bad
- 24 Heads or tails?
- 26 Gemstone holder
- 29 Ending for farm or home
- 32 Deep desires
- 33 Husking target
- 34 *Avatar: The Last Airbender* protagonist
- 35 Between, poetically
- 37 Art movement that thrived on illogic and irrationality
- 38 Sid Meier video game series, informally
- 39 Area that’s just over a foot
- 40 Easily swindled person
- 41 Venue for Marco Polo or water polo
- 45 Put in the mood
- 46 Workplaces for anaesthesiologists, for short
- 47 Do some elementary school math homework
- 50 Derisive laugh
- 51 Primary problem
- 54 Air filter type
- 55 Travelling the world in style... and a description of 17-, 26-, 41- or 55-across?
- 56 Egyptian goddess known for her magical powers
- 57 Lock opener?
- 58 It’s good when it’s bright

- 59 Tent securers
- 60 Bay with the highest tides in the world
- 61 Fine kettle of fish

DOWN

- 1 “Yeah, right!”
- 2 Violin feature
- 3 “Seven provincial capitals are south of the 49th parallel” and others
- 4 Little moppet
- 5 “Okay, I think I fixed it”
- 6 Bump down a star, e.g.
- 7 Fighting fiercely
- 8 Scene+ company
- 9 Cartoonish cry

- 10 Professional witness
- 11 Flutter from excitement
- 12 Mooches
- 13 Local electoral district
- 18 Displayed one’s humanity
- 21 Mongrel dogs
- 25 Ash Wednesday kicks it off
- 26 British luxury car, for short
- 27 Pinocchio’s habit
- 28 Revealing picture
- 29 Anatomical pouches
- 30 Like T&T Supermarket founder Cindy Lee, by birth
- 31 Animal genetically engineered at the University of Guelph to excrete less phosphorus

- 35 ___ *Hour Has Seven Days*
- 36 White list?
- 37 Lentil dish
- 39 Erotica, to detractors
- 40 Put forth as a theory
- 42 Quagmire
- 43 Calmly composed
- 44 Curmudgeonly
- 47 Line aimed at the audience
- 48 Places for buggies
- 49 *The Absinthe Drinker* painter Edgar
- 50 The Bluenose, for one
- 52 Letters on a business letter
- 53 Hand flapping or head banging
- 55 Brand with creamy and crunchy styles

1	2	3	4		5	6	7	8	9		10	11	12	13
14					15						16			
17				18							19			
20									21					
22				23			24	25						
				26			27							28
29	30	31					32				33			
34					35	36					37			
38				39					40					
41			42				43	44						
	45						46				47	48	49	
50						51	52				53			
54					55									
56					57						58			
59					60						61			



WILL NEDIGER published his first crossword in the *New York Times* when he was 16 years old. Nearly two decades later, he has a Ph.D. in linguistics, and his puzzles appear regularly in *The New Yorker*, *The Walrus*, *Vox* and many other places. Nediger lives in London, Ontario, with his two children. When he’s not constructing crosswords, he watches old movies and writes and plays trivia.



FITZROVIA



The rental revolution is now.

Elevate your next chapter.
Tour our communities today.



THIS IS THE BEST OF UNIVERSITY AND COLLEGE

You are many things. And so are we.

Seneca Polytechnic.

This is bespoke education.

Where theory meets practice.

Where ambition meets flexibility.

Where career ready means world ready.

SENECAPOLYTECHNIC.CA

THIS IS **Seneca**
POLYTECHNIC