

WHOSE STORIES  
DO WE TELL?

GETTING KIDS TO  
THINK CRITICALLY

THE TRUTH SAVED  
MY LIFE

IS THERE A FIX  
FOR FAKE NEWS?

# University of Toronto Magazine

Spring 2020

“The real  
downside of  
privilege is that  
we get a narrow  
view of life”

**Mary Anne Chambers**  
Policy-maker and  
philanthropist

**SPEAKING THE TRUTH**  

---

**IT MATTERS NOW,  
MORE THAN EVER**

**THE TRUTH-TELLERS**

Eleven University of Toronto grads who speak up for what they believe in



THE POLICY-MAKER – P. 21

# Mary Anne Chambers



THE MEDICAL OFFICER – P. 22

# Dr. Eileen de Villa



THE STORYTELLER – P. 22

# Jesse Wente

THE HISTORIAN – P. 24

# Afua Cooper



THE ACTOR – P. 25

# George



# Alevizos





THE ADVOCATE – P. 25

# Daniela Drandic

THE POET – P. 26

# Michael Prior



THE ENVIRONMENTALIST – P. 26

# Emily Hunter



THE SPORTS DOCTOR – P. 28

# Dr. Riam Shammaa

THE SCIENTIST – P. 29

# Katharine Hayhoe



THE JOURNALIST – P. 29

# Habiba Nosheen



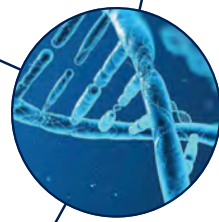
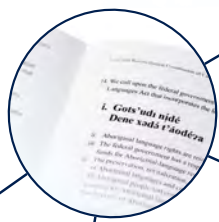


UNIVERSITY OF  
TORONTO

# THE PLACE TO INNOVATE

University of Toronto entrepreneurs have secured more than \$1.5 billion in investment and created more than 500 startup companies over the past decade. Our research strengths in areas such as health sciences, AI and information technology converge to launch game-changing startups that transform lives in Canada and around the world.

Explore innovation at U of T:  
[uoft.me/thisistheplace](https://uoft.me/thisistheplace)



**BOUNDLESS**

# CONTENTS

VOLUME 47, NO. 02

In 2016, then-U of T student Tahmid Khan was held hostage in an attack in Dhaka, Bangladesh. Now an alum, he shares his story on p. 36



## THE TRUTH ISSUE

# CAN WE SPEAK HONESTLY?

14

### FINDING A WAY IN

How do you talk about a family shattered by trauma?  
By Brenda Wastasecoot

20

### TAKING A STAND FOR THE TRUTH

As these 11 alumni demonstrate, it takes courage to speak up for what you believe in  
Portraits by Luis Mora

30

### IS THERE A FIX FOR FAKE NEWS?

Technology gave rise to the current problems, but technology alone won't solve them  
By Kurt Kleiner

36

### THE TRUTH SAVED MY LIFE

A misleading picture led to Tahmid Khan's wrongful imprisonment. His friends and family — and U of T — helped free him  
By Tahmid Khan

40

### WHOSE STORIES DO WE TELL?

The *Dictionary of Canadian Biography* records lives from history. Who is included is up for debate  
By Brent Ledger

PHOTOGRAPH BY GENEVIEVE CARON

**PLUS** A note about the coronavirus pandemic and this issue of *University of Toronto Magazine*, p. 9



- 08 **Your Comments**
- 10 **Contributors**
- 12 **President's Message**

**45 An Inquiry**  
 There is a steep personal cost to caregiving. How do we help those who minister to loved ones?  
 By **Megan Easton**

**47 A Recommendation**  
 Learning math does a lot more than boost your numeracy  
 By **Megan Easton**

**48 An Encounter**  
 When U of T Mississauga prof Rhonda McEwen learned that her daughter was on the autism spectrum, she began to think about technology in new ways  
 By **Sadiya Ansari**

**51 An Origin**  
 If it weren't for Professor Barker Fairley and his wife, Margaret, the Faculty Club might have looked quite different when it opened in 1960  
 By **Megan Easton**



"Satire plays with its audience; fake news preys on it" p. 60



The Faculty of Dentistry's museum, on the second floor of the Edward Street building, is crammed full of thousands of intriguing objects that tell the story of the profession in Canada

**52 A Closer Look**  
 The Faculty of Dentistry Museum overflows with vintage portraits, antique dental instruments, tooth powder bottles and more  
 By **Diane Peters**

**54 An Innovation**  
 Smart thermostats and other building sensors could help reduce energy use by 10 per cent. Full retrofits could go much further  
 By **John Lorinc**

**56 An Investigation**  
 How do children learn to think critically? It turns out "talking back" has benefits  
 By **Cynthia Macdonald**

**58 A Contribution**  
 How AI could transform the performing arts  
 By **Kevin Temple**

**60 A Conversation**  
 Aaron Hagey-Mackay talks about satire in the fake news era  
 By **Scott Anderson**

## ON THE COVER



Luis Mora photographed the five Toronto alumni featured in our "truth-teller" series in a local studio in early March. Three of them appear on the cover - in three different editions of this issue.





UNIVERSITY OF  
TORONTO

# THE LANDMARK PROJECT

## LEAVE YOUR MARK AND HELP REVITALIZE U OF T'S HISTORIC CORE

As we prepare to break ground, excitement for the Landmark Project continues to grow, with more than 2,600 alumni and friends from around the world supporting commemorative gardens, trees, benches and pavers.

The initiative is one of the most significant open space projects to take place on the St. George campus in the past 200 years. The renovations will introduce vibrant new plazas, safe and accessible pedestrian pathways, and glorious green spaces. This initiative will also move surface parking underground and install the largest urban geothermal field in Canada beneath King's College Circle.

**Supply of commemorative pavers is limited, but opportunities are still available.** With a gift of \$1,000, your name—or that of a loved one—will be engraved on an elegant 12" x 12" granite paver placed on front campus.

Take advantage of this unique opportunity to leave your mark in the historic heart of the University of Toronto and help create a special place for generations of students, alumni and visitors to gather and enjoy.

Learn more and support the Landmark Project at: [landmark.utoronto.ca](http://landmark.utoronto.ca) or by calling **416-978-4928**.



Actual Size 12" x 12"





**SHE'S NOT JUST  
STEPPING INTO A ROLE.**

**SHE'S UNLEASHING  
HER CREATIVITY.**



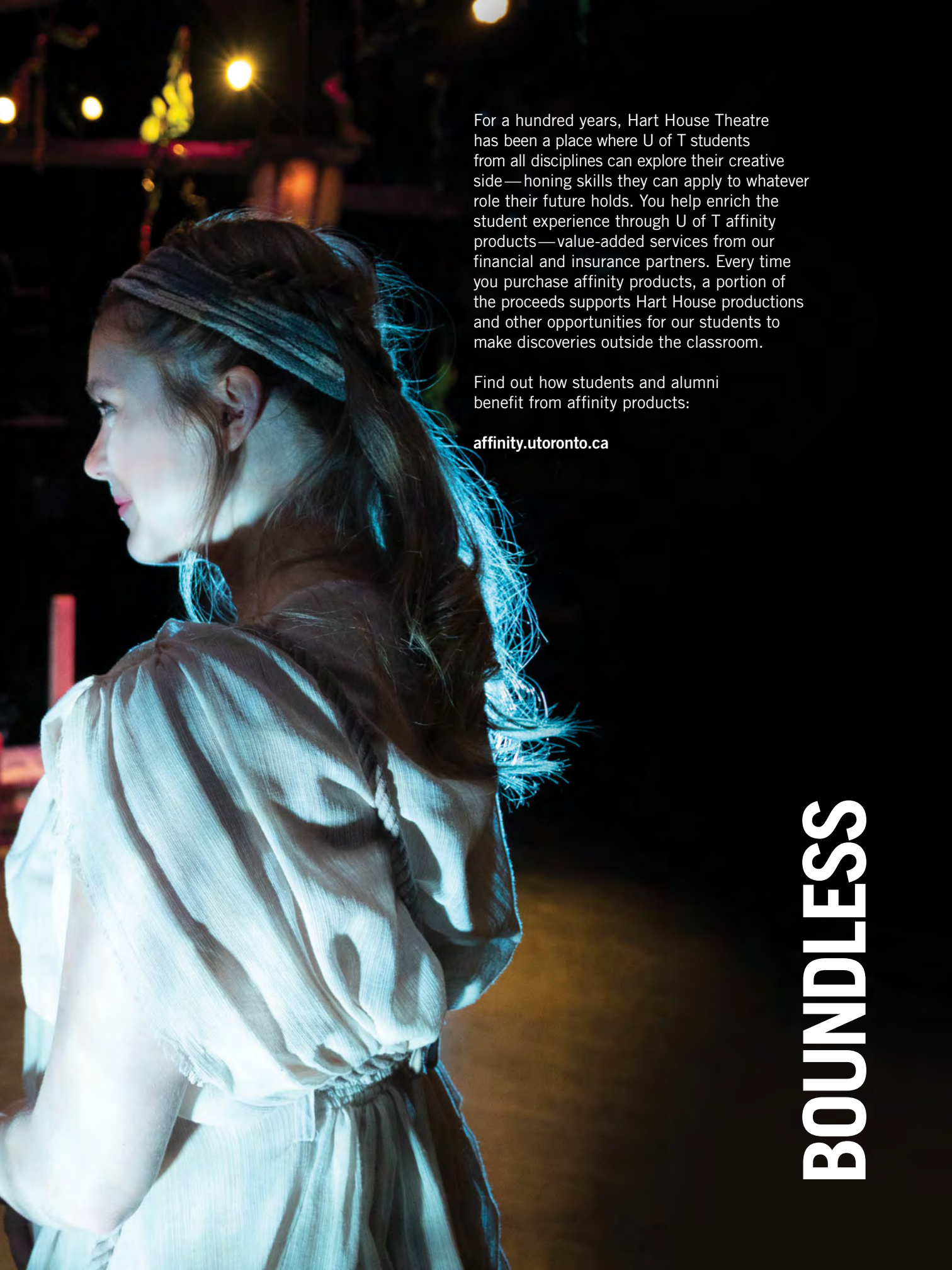
**Manulife**

**mbna**



**TD Insurance**





For a hundred years, Hart House Theatre has been a place where U of T students from all disciplines can explore their creative side—honing skills they can apply to whatever role their future holds. You help enrich the student experience through U of T affinity products—value-added services from our financial and insurance partners. Every time you purchase affinity products, a portion of the proceeds supports Hart House productions and other opportunities for our students to make discoveries outside the classroom.

Find out how students and alumni benefit from affinity products:

[affinity.utoronto.ca](https://affinity.utoronto.ca)

**BOUNDLESS**



“Thank you, Canada, and thank you, U of T, for creating and maintaining the conditions for multiculturalism and pluralism in a free society under the rule of law.”

**ANDREI GULNEV,**  
MASTER'S STUDENT, FACULTY OF LAW



**The Immigration Debate**  
*The Autumn 2019 issue contained a series of stories about immigration. Readers were generally appreciative of Canada's private sponsorship program for refugees but mostly opposed to the idea of open borders even if, as Prof. Joseph Carens argues, it can be morally justified.*

My five siblings and I sponsored a family of four from Syria, after seeing our parents sponsor an 18-year-old from Vietnam in the 1970s. It's been a transformative experience for me, and I think for the family too. I appreciate the attention paid in “The Power of Good Intentions” to power imbalances between refugees and sponsors, and it was great to read about the Parity matching program.

**ANNE MARIE CHUDLEIGH,**  
DIPLOMA IN CHILD STUDY 1983,  
MED 1993, TORONTO

Regarding the article “What Do Borders Really Do?”: Migrations have occurred for various

How often do you say something that you know to be untrue?



**14%**  
Every day

**41%**  
Every week

**29%**  
Every month

**8%**  
Every year

**8%**  
Never

Honesty is not always the best policy, according to the majority of U of T students polled: they admit to telling a lie at least once a week. Why? Almost half say they tell white lies to protect another person, make someone feel better or spare their feelings. Eleven per cent of students say they utter untruths to avoid conflict or getting into trouble. A similar number use lies to embellish a story or “prove” a point; some make up excuses to get out of doing something; and a few are untruthful to avoid revealing something private about themselves.

This highly unscientific poll of 100 U of T students was conducted at Sidney Smith Hall on St. George Campus in February.



Editor and Manager  
**Scott Anderson**

Deputy Editor  
**Stacey Gibson**

Administrative and Editorial Coordinator  
**Sally Choi**

Art Direction and Design  
**Studio Wyse**

Vice-President, U of T Communications  
**David Estok**

Co-Publishers

**Barbara Dick**

Assistant Vice-President, Alumni Relations

**Erin Lemon**

Executive Director, Communications and  
Public Engagement

**Editorial and Advertising Inquiries**

416-978-0838

uoft.magazine@utoronto.ca

**All correspondence and undeliverable  
copies:** University of Toronto Magazine,  
21 King's College Circle, Toronto, ON, M5S 3J3

**Visit us online** [magazine.utoronto.ca](http://magazine.utoronto.ca)

**Twitter** @uoftmagazine

**Instagram** uoftmagazine

University of Toronto Magazine, with a circulation of 360,000, is published twice a year by U of T Communications. All material is copyright 2020 Governing Council, University of Toronto, and may be reprinted with permission. Alumni receive the magazine free of charge. Donations accepted at [magazine.utoronto.ca](http://magazine.utoronto.ca).

**Do we have your correct name and address?**

If not, or if you wish to be removed from our mailing list, please call 416-978-2139 or toll-free 1-800-463-6048 or email us at [address.update@utoronto.ca](mailto:address.update@utoronto.ca).

The University of Toronto respects your privacy. We do not rent, trade or sell our mailing lists.

Publications Mail sales agreement  
No. 43500088

Non-profit postage paid Buffalo, NY

Permit No. 3415. U.S. Postmaster  
send address corrections to  
P.O. Box 29, Lewiston, NY 14092  
Printed in Canada by Dolco Print Solutions  
Group Inc. Prepress by DM Digital+1  
ISSN 1499-0040



UNIVERSITY OF  
TORONTO

reasons, such as famine and drought, but countries that do not have borders do not survive. The U.S. and Canada must have borders for national and economic security. We should remember that Canada's health care, education, pension and social programs all have been made available within secure borders.

**MAUREEN HAY**, BA 1973  
ST. MICHAEL'S, CALGARY



### **A Courageous Friend**

Several readers shared their knowledge of Rodney Bobiwash, a former director of U of T's First Nations House, who was profiled in the Autumn 2019 issue.

Chi-meegwetch to Rodney. He was a professor with a strong work ethic who pushed his students to always give their best. He introduced me to a broader, more inclusive North American art history that unapologetically included Native People and our history. He was political, funny and a general badass. He showed me that being smart and Indian go together. He was a mentor and is missed.

**PROF. MARIA HUPFIELD**,  
DEPARTMENT OF VISUAL STUDIES, UTM

### **The "Mans" of Newfoundland**

Prof. Derek Denis discussed his research into Multicultural Toronto English, also known as Toronto slang, and the use of words such as "mans" and "ahlie" (Autumn 2019).

The intrusion of "mans" into the pronoun system (for "I") is

interesting and unusual for all the reasons Prof. Denis says. Newfoundland English has a similar intrusion with "buddy" for "he/him" (but not apparently "she/her"). Here is a sample from Memorial University files (1982): "and certainly when he jumped in over the fence, buddy's left the grave and he runned for the woods." The *Dictionary of Newfoundland English* has other citations from the 1980s but it is certainly older than that in the vernacular.

**JACK CHAMBERS**, PROFESSOR OF  
LINGUISTICS, U OF T

### **A Note about COVID-19**

As you read this issue of *University of Toronto Magazine*, you will see only a little coverage of the coronavirus. To explain: work on this issue began in November and continued through the winter as the number of cases of COVID-19 worldwide remained relatively low. By mid-March, though, the university's main communications channels were devoted to what was now a global pandemic (see [utoronto.ca/news](http://utoronto.ca/news)), and we debated whether to release this edition at all. In the end, we decided that the issue's theme – of pursuing the truth – remained as important as ever.

In these extraordinarily challenging times, on behalf of our staff and contributors, I'd like to thank, in particular, our alumni who work in the health-care system and other essential services, and to wish you all the best in the weeks ahead.

**DAVID ESTOK**, VICE-PRESIDENT,  
U OF T COMMUNICATIONS

#### Write to us

University of Toronto  
Magazine welcomes comments  
at [uoft.magazine@utoronto.ca](mailto:uoft.magazine@utoronto.ca).  
All comments may be edited for  
clarity, civility and length.



@uoftmagazine



## DENTAL DAYS OF YORE

No one likes having a tooth removed, but at least it's relatively painless. Not so in the 19<sup>th</sup> century, says Dr. Anne Dale, the sprightly 87-year-old curator of U of T's Dentistry Museum. Back then, dentists paid house calls, extracting a tooth with nothing more than a shot of whiskey to ease the patient's pain. Spring-loaded dentures fit poorly and often popped right out of your mouth. Looking back at how the profession has evolved may not always be pretty, says Dale, but it shows how far we've come.

Read more about the Faculty of Dentistry's amazing museum on p. 52.

↑  
Dr. Anne Dale, surrounded by treasures in U of T's Dentistry Museum



For her doctoral thesis, **BRENDA WASTASECOOT** (PhD 2017) wanted to shed light on the devastating impact of Canada's residential school policy on Indigenous families and communities. To do so, she used a form of writing called "autoethnography," in which she describes her own childhood through the lens of her Cree culture. In an excerpt (p. 14), she recalls how a visit to the site of a torn-down residential school in Brandon, Manitoba, helped her reveal the story of her own family's experience. Wastasecoot is an assistant professor at U of T's Centre for Indigenous Studies.



Writer **BRENT LEDGER** has been researching the life of an early 20<sup>th</sup>-century art dealer for more than a decade and so knows the pleasures and

pitfalls of historical research first-hand. As he notes, "Sometimes people say one thing and the documents say another. Sometimes you know something's true, but don't have the evidence to prove it." Which is why he found the *Dictionary of Canadian Biography's* insistence on getting the facts right "truly inspiring" (p. 40).



Photographer **GENEVIÈVE CARON** says she tries to capture her subjects in a completely relaxed state, with a lack of artifice that leaves room for the viewer to interpret what they see. For her shoot with Tahmid Khan (BSc 2019 St. Michael's), Caron aimed to portray him in a bright and positive light – reflecting his resilience in the aftermath of a harrowing experience (p. 36). "A person is so much more than their trauma," she says. Originally from northern Quebec, Caron is now based in Toronto. View her work at [genevievecaron.com](http://genevievecaron.com).

Want to contribute? Send your ideas to [scott.anderson@utoronto.ca](mailto:scott.anderson@utoronto.ca).



# JORDANA SEES HERSELF IN A SYMPHONY ORCHESTRA

First-year flute student Jordana aspires to a career in performance. Thanks to a bequest from Ian Dalton (BASc 1950), her dreams of playing in a symphony orchestra are closer. “The career path of a professional musician can be daunting, especially financially,” says Jordana. “The **Dalton Scholarship** has lightened my financial burden and given me the opportunity to study and perform with a variety of ensembles to build my skills and gain experience. I’m so grateful for Mr. Dalton’s passion for the flute and his generosity.”

By leaving a bequest to the University of Toronto, you can help talented students like Jordana fulfill their dreams.

Find out more from [michelle.osborne@utoronto.ca](mailto:michelle.osborne@utoronto.ca),  
416-978-3811 or [uoft.me/giftplanning](https://uoft.me/giftplanning)



UNIVERSITY OF  
TORONTO

# HEROES OF OUR TIME



**T**he rapid transmission of the novel coronavirus has forced us all to get used to making decisions with limited information.

As I write this message in late March, it's impossible to know how our situation will have evolved by the time you read this, almost a month later.

This burden weighs heaviest on our public health officials and government leaders, as they respond to the global COVID-19 pandemic. They have been working flat out for weeks, often lacking accurate data on key measures such as rates of infection and mortality. We owe them all huge gratitude and respect for their efforts in this incredibly difficult time. This includes many U of T graduates, such as

Toronto's medical officer of health, Dr. Eileen de Villa (MHSc 1994, MD 1998), who is featured in a Q&A on p. 22 of this issue.

Our front-line health-care workers are also bearing an enormous load on behalf of the rest of us. Here too, our U of T alumni in public health, medicine, nursing, social work, pharmacy and other crucial fields are demonstrating their high professionalism and deep commitment. Working alongside their colleagues across the country and around the world, they are truly the heroes of our time.

These health-care heroes are also inspiring a new generation of caring, creative leaders. Among many examples, four U of T medical students – Jordynn Klein, Daniel Lee, Tingting Yan and Orly Bogler – organized their peers to provide relief on the home front to health-care workers and hospital support staff by babysitting, delivering groceries and doing household tasks. Within days, more than 200 students in the Faculty of Medicine and the Lawrence S. Bloomberg Faculty of Nursing had signed up. Over in the Faculty of Applied Science and Engineering, first-year student Shrey Jain mobilized dozens of his classmates to create an online tracking platform, Flatten.ca, to provide neighbourhood-level data on the outbreak in Canada.

Of course, our U of T researchers and innovators have also risen to the challenge of this historic crisis. Among so many examples I could cite, professors David Fisman and Ashleigh Tuite, epidemiologists at the Dalla Lana School of Public Health, along with Dr. Isaac Bogoch at the Toronto General Hospital Research Institute, have developed mathematical models to predict the spread of the infection. Professor Keith Pardee, in the Leslie Dan Faculty of Pharmacy, is working to provide faster and cheaper testing for COVID-19 to enable widespread use in remote parts of the world.

The pandemic may still be far from over by the time you read this. But I know you will be proud, as I am, to see how members of the University of Toronto community are contributing to our society's collective response.

**MERIC GERTLER**





Rotman School of Management  
UNIVERSITY OF TORONTO

**R**

## **Inclusion by Design**

---

**Innovate for diversity with  
data, design and behavioral  
science.**

***Rotman***  
Here's where it changes.

Questions? Talk to us.  
416-978-8815  
[advisor@rotman.utoronto.ca](mailto:advisor@rotman.utoronto.ca)

[rotmanexecutive.com](http://rotmanexecutive.com)



**FINDING A WAY IN** How do you talk about a family



The author's parents,  
Harold and Maria Wastasecoot





## shattered by trauma?

BY BRENDA WASTASECOOT

Photography by Della Rollins

*Brenda Wastasecoot is the youngest of 11 children born to Maria and Harold Wastasecoot in the Flats, an Indigenous village near Churchill, Manitoba. She did not attend a residential school, but she witnessed the changes in her siblings, who all did, when they returned home every summer. Her stories from the past show, with art and memory maps, what happened in a Cree girl's home in the 1960s when Canada's Indian education policies intentionally fractured Indigenous families and communities. This article is an excerpt from her U of T doctoral thesis.*

**ONLY TWO OF MY SIBLINGS** have told me bits and pieces of what their life was like at residential school. The school officials would not allow my sister to attend my late brother Horace's funeral. She cried about this once. She said they told her, "You didn't know him well enough." They had attended the Mackay School in Dauphin, Manitoba. My brother Walter told me he often felt he had to protect our younger brother, Frank. The weight of this responsibility for his baby brother affected him right up to the day of Frank's death three years ago, and still does.

Early in my career, I taught a course at Assiniboine Community College in Brandon, Manitoba. The Brandon Indian Residential School, located on the north hill of the city, had been torn down; it rested in a pile of rubble. I went to these ruins on several occasions – once with a group of students from the course. At that time, I took a small piece of concrete and did a sharing circle with them as a way to open up this part of our shared past as Indigenous and non-Indigenous people and to begin voicing our thoughts and feelings about the history of residential schools. At the end of that course, the students and I returned to the site, where they placed offerings for the spirits of the children buried there: homemade bread, jam and a wooden plaque engraved with words of love. Each of the students spoke as they presented their gift as a way to honour those children left there, whose spirits still linger near that place. We said a prayer together and walked away.

There are not enough words to express the emotions felt when all of your sisters and brothers are survivors of these institutions. There are no words – only bits and pieces of pain. I went to the ruins with a purpose. In looking back at my history and

trying to understand what happened to my family, I walked and climbed the massive pile of rubble with hopes of finding some answers to my question: How does this connect to my own story?

On one visit to the leftover heap of the Brandon school, I found a steel door. It called to me, “Try opening this door!” I photographed it. My daughter and I tried to lift it. It was too heavy. I had hoped we could stand it up so I could see how tall it was. Would it tower over a child’s head? Could a small hand open this steel door?

Once back to the house I showed the photos to my niece and her husband. They both said, “Let’s go get it!” My niece, who is an artist, wanted to see what she could do with it as an installation piece. The feeling of excitement overtook us; we got into the truck and sped to the old residential school site. The sky began to darken; clouds started to gather and move in the direction of the steel door. We had to hurry to avoid the storm. As we got closer to the site, the wind gained momentum, as if it too wanted to lift the door for us, and open its hidden secrets. To the rest of Canada, it may be a piece of rubble – a piece of history thrown away and forgotten – but to us, it was a way in.

The thought of whether it would still be there did come to me, but then I wondered, who would take it? Who would be interested in a door that was more than 120 years old? Only an artist would want it – an artist who would never forget the suffering of generations of her people. I climbed back up the heap of history and led my niece and her husband to the door. We all stood around it for a moment, looking at it as if it would start speaking right there on the spot, telling us what so many children have gone to their graves not saying. But no, it would not speak so readily. It would need to be studied for many years to come by scholars like me.

We each grabbed a corner trying to lift it from its place; it would not be taken easily. My niece’s husband grabbed the door handle and raised it up a few inches, enough to drag it toward the vehicle. I took a hold of the other side of the door handle. My niece pulled it along. Just then I could feel the raindrops hit my face, my hands; tears began to roll down from the sky. We got the steel door and all together lifted it into the back of the truck, securing it down for the drive back into town.



Why was this door so important to me? I talk about the finding of this steel door because it illustrates how my family continues to struggle with the past. It shows how I have tried to grasp their residential school experience so that I could begin to understand what happened to my brothers and sisters.

**WHEN I BEGAN LOOKING BACK** at this time in my past,

I received a dream about a white man sneaking children out of my house. In the dream, I am a child, standing in a darkened room, in a house from long ago. In the darkened room, I can see there are people passed out on the floor. As I try to reach the door to get out, one man on the floor tries to grab my

***My parents, who loved their children, lost control of them. They were forced into submission by laws enacted by Canada to prevent their cohesion and closeness as a family***



→

As a young girl in northern Manitoba, the author (left), watches her mother's cousin sew a pair of boots, or mukluks



leg. Quickly I jump back, out of his reach. I try to escape again, and the same thing happens. I become overwhelmed with fear and feeling vulnerable and unsure how to get around him. I imagine the inevitable will happen once again – rape, that is. Then a white man appears and he is holding a small child in one arm. I think she is his daughter. Very quickly, he steps across all the bodies with such excellent footing and precise timing that he is able to traverse safely to the door without waking anyone. I am aware that the people on the floor are hurt and would not be there otherwise, so with a sense of compassion, but also a feeling of dread, I try my best again to get across to the door safely, but again the drunken man tries to grab me. I ask the white man to take me on one of his feet, and he does while holding the other child. On his foot, I am able to get across to the door and then out of the house. That is how I escaped this situation.

As I often do, I wonder what message is in this dream. I wonder for the years that follow. Then it finally comes to me; the dream is about the white man stealing the children from those who have become incapacitated. My parents became incapacitated by alcohol. This became their strategy of escaping an impossible situation. It could have been why they were not at the train station when my siblings were leaving for residential school; they were in the bar again. With Canada's laws in place to uphold the assimilation policies, parents were powerless to rescue their children.

The nightmare also alludes to my feeling overwhelmed and trapped. As an Indigenous scholar, I often feel like I have no supporting arguments. I need the assistance of

the more learned or advanced researchers of this vast industrial complex called Education. Scholar Kathleen Absolon very cleverly provides this “leg to stand on” in her petals of methodology. She writes: “Enacting re-search that is of Indigenous ways means that Indigenous re-searchers work to advance Indigenous perspectives, world-views and methods in all areas of education, searching and scholarship.” This is why I have chosen to do autoethnography; I want to add my Indigenous perspective, so that others who may follow can have a “companion” as they write their life story.

An Elder thought this dream was about how I had to navigate through trauma. Traversing trauma is about finding a clear path out, placing your feet carefully to not create more damage, but to free oneself from the wreckage. As a child, I did not understand the difficult situation my siblings were placed in. I think about my siblings and how they had to leave me there in a community devastated by alcoholism and violence. I realize now that it was never their choice to leave me there. Families were torn apart. My brothers and sisters had to leave their baby sister, their parents, their cousins, aunts and uncles. To this day, we have not spoken about this time. If I could, I would tell them that it was not their fault. They did what they had to do under those conditions. I do not blame them for what happened to me, nor do I blame my parents. This is something that Canada did to us.

The white man has stepped everywhere across this land without seeing the people and how they have been injured or incapacitated by his exploits. They have also taken our children and removed them from their communities for generations until they are no longer connected to their family and community. In the dream, I ask him if I can step on only one of his feet. What does this say about me? How have I used the

←

Prof. Brenda Wastasecoot: “I have used education as a tool for my own survival”



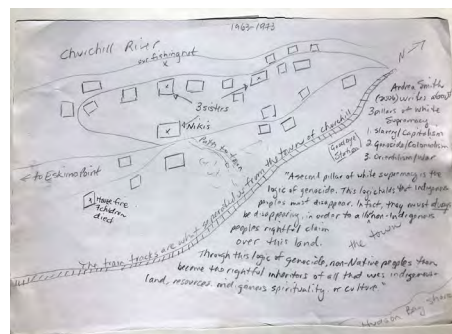
The steel door Brenda Wastasecoot found at the remains of the Brandon Indian Residential School in Manitoba. “It called to me”

white man's systems for my own survival? I would have to say I used the systems of education but only on one of his feet. With this foothold I am not completely taken by his ideas of "civilization" or "progress" and have only used education as a tool for my survival as an Indigenous woman, as an *Ininu Iskweh*. I have freed myself and continue to walk in the path of my ancestors who have survived many hardships. I am walking out of that house of tragic events.

I bring in this dream of "trying to reach the door" because this is where it all began in our history together. We were supposed to be travelling along in our own canoe and boat, without interfering with each other's lives. But the white man could not keep to himself, he had to have more: more land, more gold, more fur – more of everything that existed here on Turtle Island. He learned that by taking and removing our children we could not sustain our future. By attacking the very centre and heart of our people, our social fabric would weaken and fray – our lives shattered by this removal of our purposes in life. We lost our direction. This is what happened to my family. My parents, who loved their children, lost control of them. They were forced into submission by laws enacted



→  
**The author created a "memory map" of her lived experience of the Flats, an Indigenous village in northern Manitoba**



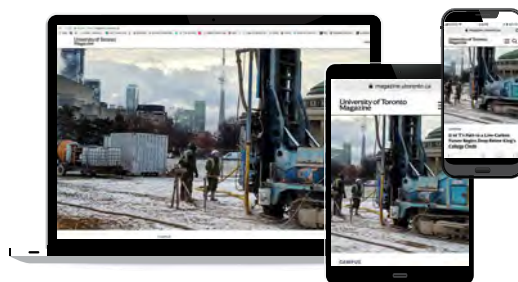
by Canada to prevent their cohesion and closeness as a family. With Canada's interference in their lives as parents, they were left with a "wait and see" approach to parenting. Where would their youngest and last child go to school? They didn't know, they could only hope they could keep me with them at home. ■

←  
**Brenda Wastasecoot's childhood home in the Flats in 1968**

*Brenda Wastasecoot is a Toronto-based writer, poet and storyteller teaching at the Centre for Indigenous Studies at U of T. She is a member of the York Factory Cree Nation.*

PHOTOGRAPHS COURTESY (LEFT) UNIVERSITY OF MANITOBA ARCHIVES AND SPECIAL COLLECTION, WINNIPEG TRIBUNE FRONTS, PC 18 (A81 - 12); (TOP) BRENDA WASTASECOOT

# Green your Blue



**Switch to a strictly paperless subscription**

Reduce your environmental footprint with a digital-only subscription to *University of Toronto Magazine*. A low-carbon future, with greener campuses, is underway at U of T. Everyone has a role to play – including this magazine.

Visit [uoft.me/gopaperless](http://uoft.me/gopaperless) to make the switch today.







## Not all surprises are good ones.

Especially the ones that could cost you hundreds or even thousands of dollars – like a sprained knee, a medical emergency abroad or even a broken tooth. That's why there's **Alumni Health & Dental Insurance**.

It can help protect you against the cost of routine and unexpected medical expenses not covered by your government plan\*. Coverage options include dental care, prescription drugs, massage therapy, travel emergency medical and more. The icing on the cake is that it helps you keep more money in your pocket. And who doesn't want that?



Get a quote today. 1-866-842-5757 or  
[Manulife.com/utoronto](https://www.Manulife.com/utoronto)

Underwritten by The Manufacturers Life Insurance Company.

Manulife and the Block Design are trademarks of The Manufacturers Life Insurance Company and are used by it, and by its affiliates under licence. ©2020 The Manufacturers Life Insurance Company. All rights reserved. Manulife, PO Box 670, Stn Waterloo, Waterloo, ON N2J 4B8.

\*Conditions, Limitations, Exclusions may apply. See policy for full details.

Accessible formats and communication supports are available upon request. Visit [Manulife.com/accessibility](https://www.Manulife.com/accessibility) for more information.

THE TRUTH-TELLERS

# Taking a Stand

AS THESE ALUMNI  
HAVE DISCOVERED,  
IT TAKES COURAGE TO  
SPEAK UP FOR WHAT  
YOU BELIEVE IN

PHOTOGRAPHS BY Luis Mora

TEXT BY  
Stacey Gibson and Scott Anderson

**T**hese 11 grads pursue the truth in important and different ways. Some have criticized government policy, others have pushed for changes at their workplace or questioned a prevailing view. They may not always have won people to their perspective, but they epitomize the expression, “You will never lose if you fight for the truth.”







---

1.

## The Policy-Maker

Mary Anne Chambers (BA 1988 UTSC) served in the Legislative Assembly of Ontario from 2003 to 2007.

She supports the Imani Academic Mentorship Program at UTSC, which aims to inspire Black students in grades 7 to 12 to pursue post-secondary education.

“There is a tendency to think that because we mean well, we will do well. But how we define ‘meaning well’ is influenced by what we understand to be true – and this is shaped by our experiences, our social circles, our work and, crucially, whom we listen to.

Decision-makers need to appreciate how public policy will affect different communities and individuals. We can do this through a willingness to listen to as many different voices as we can – from the broadest possible spectrum of society. Only then can we get the full ‘truth’ of the potential impact of our decisions.”

←

“The real downside of privilege is that we get a narrow view of life”

---



**2.**

## The Medical Officer

In recent weeks, many Torontonians have become familiar with [Dr. Eileen de Villa](#) (MHSc 1994, MD 1998), the city’s medical officer of health, who is holding daily public briefings about the pandemic. She answered the questions below in late March.

**What “truth” do you feel you most need to communicate to Torontonians right now?**

We all have a responsibility to protect ourselves, our friends, our families and our communities from the spread of COVID-19. Toronto still has the opportunity to slow this virus spread, but we need to work together. We all need to practice physical distancing and stay home if you can and only leave if you have to. People returning from travel from anywhere outside of Canada, including the United States, need to stay home, even if they don’t have symptoms of illness. Staying home not only protects you from this virus spread, it also protects our city’s most vulnerable

residents: people who are elderly and those with a chronic health condition. Evidence shows these groups are more likely to be severely affected by COVID-19.

**How do you combat misinformation about the pandemic?**

We provide credible, up-to-date, evidence-based information to the public as facts. This ensures that people are aware of the changing environment and of the latest recommendations from local, provincial, and federal governments and health officials. Toronto Public Health is constantly updating its website, doing daily media briefings and responding to the public through its hotline and on social media.

**3.**

## The Storyteller

[Jesse Wente](#) (BA 1996 Innis), who is a member of the Serpent River First Nation, talked to us about the recent Wet’suwet’en protests and the truth of Indigenous Peoples’ experience in Canada. He is the executive director of the Indigenous Screen Office in Toronto, which supports and develops Indigenous storytellers.

**“M**uch, if not almost all, of what we now call Canada is actually not Canada because the original nations on this land never gave up the right to govern themselves. This is not the truth that most Canadians have been taught, and it’s not the truth that most Canadians believe. But it’s a universal truth for Indigenous Peoples here on Turtle Island in 2020. Acknowledgment and understanding of this is the key to moving past it. It will require a fundamental rethink and reimagining of what Canada is as a country.

Canada is not the air; it’s not a constant. It is not beyond our will to have it be something different. We’ve seen a huge shift – even in the last five years – in what is being taught in schools about Indigenous Peoples. I think this is already having a very real effect and will have an even greater effect in the future. The situation is still not perfect. But recent signs of solidarity with Indigenous Peoples are incredibly encouraging. It makes me imagine that Canada could one day look a lot like what my ancestors envisioned.”

PHOTOGRAPH (EILEEN) BY RYAN WALKER





“Canada could one day look a lot like what my ancestors envisioned”





4.

## The Historian

Afua Cooper (BA 1986 New College, MA 1991, PhD 2000) is a professor at Dalhousie University who specializes in African Canadian Studies.

A few years ago, there were several racist incidents at Dalhousie University directed at Black and Muslim students. Afua Cooper and other faculty members brought the issue to the president, who launched an official investigation into anti-Black racism at the institution. A major focus was the school's founder, Lord Dalhousie. "The university was gearing up to commemorate its bicentenary, yet its founder was fundamentally anti-Black," says Cooper, who led the scholarly probe. "We needed to look back in order to move forward."

As a historian, Cooper already knew a lot about the Black experience in Atlantic Canada, but a deep dive into archival documents yielded disturbing truths. Dalhousie had tried to deport Black refugees from the War of 1812 to the tropical colonies, even though the British Crown had promised a place for them in Nova Scotia. Dalhousie saw Nova Scotia as a white person's colony, so he cut the refugees' rations by more than half — starving them, essentially, so they would leave. "It was a horror story," says Cooper.

Cooper's three-year investigation culminated in recommendations to create a more diverse and inclusive campus. For her, the experience also highlighted, yet again, the importance of looking at a historical episode from different points of view to create a fuller version of the "truth."





---

5.

**The Actor**

George Alevizos (BA 2019 UTM) has acted in episodes of *Star Trek: Discovery* and a recent theatre production of *A Few Good Men*, and guest-starred on *Hudson & Rex*. He is also part of Holland Bloorview Kids Rehabilitation Hospital's Dear Everybody Campaign, which focuses on ending stigma for young people with disabilities.



“If casting directors hire somebody with a disability to play a role they are good for instead of it having to be about the fact that they’re in a wheelchair, then that breaks down stigma. It shows: Look, we’re everyday people and we live our lives and we fall in love. Just because we move around differently doesn’t make us less capable.”



6.

**The Advocate**

Daniela Drandic (BA 2003 UTM) is head of the reproductive rights program at RODA (Parents in Action), Croatia's largest parent advocacy group. Drandic advocates for respectful and safe maternity care. Below she talks about the group's #BreakTheSilence campaign.

**What is #BreakTheSilence?**

In 2014, we invited women to share their stories about how their rights were violated during maternity care. There were thousands of stories all over social media and traditional media in Croatia.

Then, in 2018, a member of parliament stood up in the house and told her story of being tied to a gynecological table and having a surgical miscarriage procedure without anesthetics. The minister of health said to her, ‘This doesn’t happen in our hospitals’ — like she was lying. It reignited our campaign, focusing on one facet of disrespect and harmful practice in maternity care: painful procedures done without anesthetics.

**Why aren’t doctors using anesthetics?**

The problem is the belief that women can, and should, tolerate pain: If you’re a good mother, you can handle it during childbirth. This is a problem in many countries. We need to rewrite that cultural wiring.

**Why is this campaign important?**

Women are realizing there is an innate power in these stories — and it’s not just women; it’s any marginalized group that doesn’t have a chance to speak or change things because they’re not in power. Just saying these things is very important. Now, if doctors make excuses about why they don’t want to give anesthetics, women are not accepting that anymore.



7.

### The Poet

Michael Prior's maternal grandparents, who were Japanese-Canadian, were subject to internment in British Columbia during the Second World War. Their families' properties were seized and liquidated to help pay for the construction of internment camps. They were cut off from many opportunities because of their race. This episode looms large in his family mythology, says Prior (MA 2015), and, along with the emotional terrain of his own mixed-race identity, inspired his new book of poetry, *Burning Province* (McClelland & Stewart). "The sort of truth that poems tell is not the truth of information but the truth of experience," says Prior. "They ask complicated questions in beautiful and memorable ways."

#### Pastoral

Wildroses, horsetails, wind's cobwebs over water:  
summers here since I first learned to swim.

The poplars across the bay shimmer and sway,  
reflections creasing under the weather  
like molten glass. To think that *mirror* once meant  
both to *wonder* and *look back*—the way  
I've stared into a funhouse pane and seen my mixed face  
split then doubled.

North, the rocks are choked with millwort.

South, starlings rustle through the cedars:  
brought by a man who spent his life importing  
every bird in Shakespeare. New worlds  
forever measured by the Old. For every measure,  
an equal and opposite erasure. How, over the fire,  
the family friend said, *Jap*, not Japanese.

EXCERPTED FROM *BURNING PROVINCE* BY MICHAEL PRIOR. COPYRIGHT © 2020 MICHAEL PRIOR. PUBLISHED BY MCCLELLAND & STEWART, A DIVISION OF PENGUIN RANDOM HOUSE CANADA LIMITED. REPRODUCED BY ARRANGEMENT WITH THE PUBLISHER. ALL RIGHTS RESERVED.

8.

### The Environmentalist

Emily Hunter (BA 2011 UTSC) is an environmental activist and storyteller. She is the director and producer of *Activism 2.0*, a short documentary, and author of the book *The Next Eco-Warriors*.

#### How do you get people to focus on important "truths," such as climate change?

The narrative around this issue is "crisis," which has mostly failed to move the public into action. For me, the most effective way to empower others to act is to tell a story about solutions — about the world we want and about the people creating that world.

#### What tactics do you use?

Every environmental organization I know starts with independent evidence to show that an injustice is happening. But simply sharing this truth isn't enough anymore. It's *how* you communicate which drives people to act — from online petitions to student strikes. This is the art of campaigning.

#### How do you counter narratives that obscure the truth?

One of our most dominant narratives tells us that happiness equals wealth. But this doesn't serve us when it leads to damaging the environment beyond repair. I consider an activist to be a storyteller who disarms these destructive narratives. I try to show that we are not in competition with each other for the planet's resources, and that we can live in a low-impact society that still meets our needs.





“For me, the most effective way to empower others to act is to tell a story about the world we want and about the people creating that world”

---

9.

## The Sports Doctor

Dr. Riam Shammaa's new book, *Looks Can Kill: A Doctor's Journey through Steroids, Addiction and Online Fitness Culture*, reveals the ugly truths behind fake fitness

When Dr. Riam Shammaa – a U of T lecturer and sports medicine physician – was a medical resident in Quebec, he began lifting weights at a local gym. He soon learned what his medical training had not taught him: many of the gym-goers were knee-deep in the use of steroids and other hormonal substances to boost muscle growth.

He realized that much of this cosmetic doping was tied to the desire to emulate the “fake fitness” stars portrayed on social media: *looking fit* was trumping *being fit*.

Shammaa reveals the dangerous truths about the fake-fitness industry in his new book, *Looks Can Kill: A Doctor's Journey through Steroids, Addiction and Online Fitness Culture*. A few hallmarks of steroid use: Cardiac arrest, kidney failure and psychological issues, such as paranoia, rage and suicidal tendencies. “For that beautiful Instagram picture, there are six months of hormone and medication abuse, including insulin, thyroid hormones and steroids,” says Shammaa, who also did a fellowship in medicine at U of T.

His book includes medical guidelines for recognizing and treating cosmetic doping because,

he says, it is vital that doctors – as well as parents, coaches and others – start connecting the dots before it is too late to save a life.

Shammaa also wants to put an end to the stigma surrounding steroid users. Like any addiction

or body-image issue, this is a mental health concern, he says, and the people who are experiencing it are vulnerable: They do not want to admit weakness, when they are trying so desperately to appear strong.





← “For that beautiful Instagram picture, there are six months of hormone and medication abuse”



10.

### The Scientist

Climate scientist [Katharine Hayhoe](#) (BSc 1994 Victoria) is the director of the Climate Science Center at Texas Tech University. She was recently named one of the United Nations Champions of the Earth. One of the most frequent questions people ask her is **“Is it too late to save the Earth?”**

Below, she answers.

“**T**he answer is yes and no. It’s kind of like we’ve been smoking a pack of cigarettes every day for decades. We don’t have emphysema, we don’t have lung cancer and we’re not dead. But the time to stop is as soon as possible.

It’s the same with climate change. I study the difference between the future where we continue to depend on fossil fuels versus the future where we transition to clean energy. And I can tell you there is a night-

and-day difference. There is the future where there are significant impacts, but we can adapt to them, prepare for them and build resilience so that when they come we’re ready. Or there is the future where the changes overwhelm us far beyond our capacity to adapt.

So in that sense, it is very much not too late. But if we decide it’s too late and we do nothing, we will ensure our failure. The choices we make now, and in the next few years, *do* matter.”

↑  
“The choices we make now, and in the next few years, *do* matter”



11.

### The Journalist

[Habiba Nosheen](#) (BA 2005 New College) is an Emmy Award-winning investigative journalist whose production company, Akelo Media, specializes in documentary films for a global audience. In 2013, she directed the film *Outlawed in Pakistan*, about a Pakistani teenager’s attempt to bring to justice the four men she accused of raping her.

“It’s a privilege to be able to tell stories about people, but it comes with a responsibility to be accurate. What helps me sleep at night is knowing I’ve vetted a story with all of the evidence available to me.”

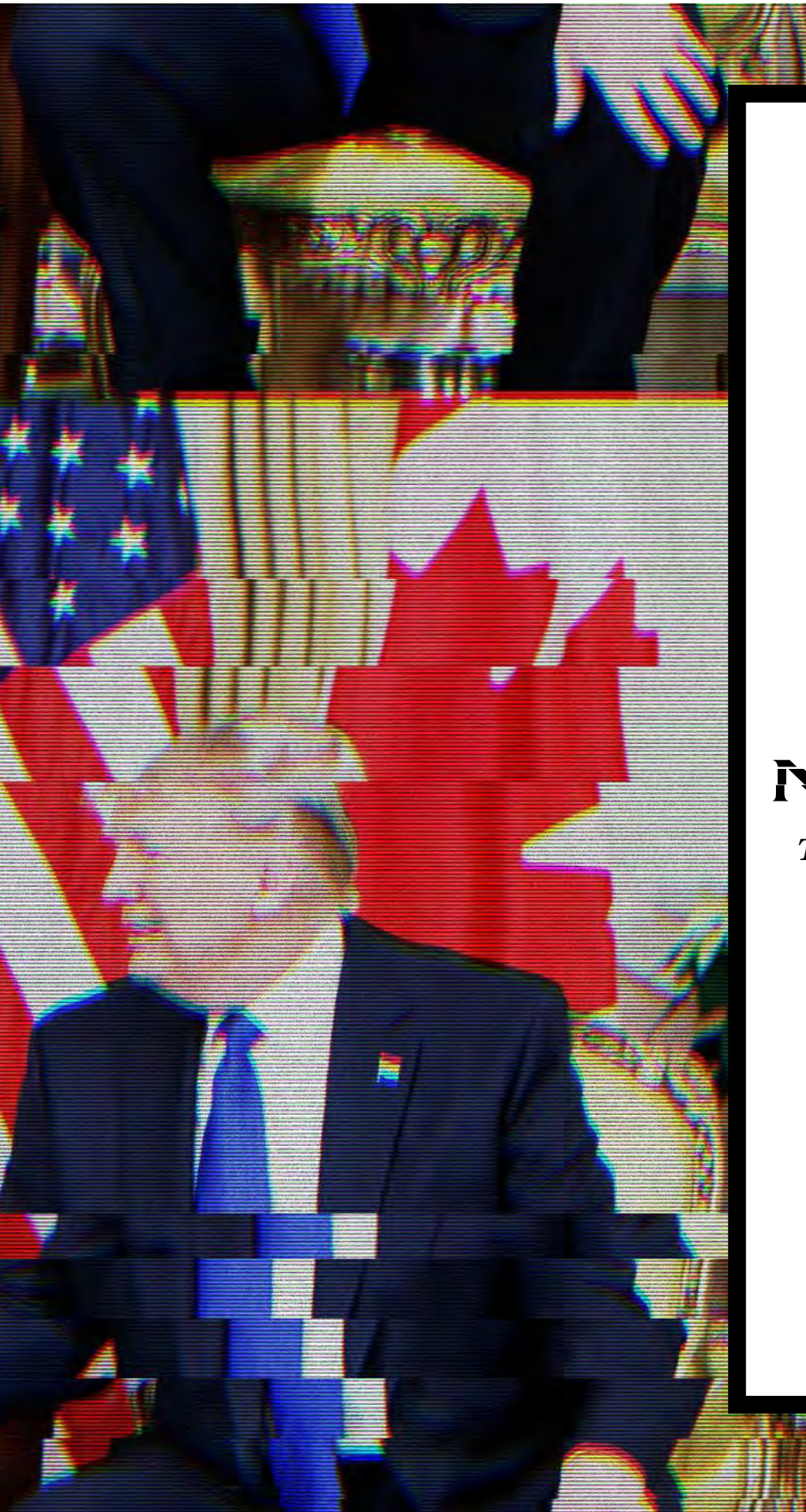
We need investigative journalism to get to the truth. But to be meaningful, and to resonate with an audience, investigative journalism needs to do more than just find out what happened. It needs to hold people in power to account.

In a ‘post-truth’ world, journalism grounds us. It reminds us that there actually is such a thing as an objective truth.”









# HOW WILL WE FIX FAKE NEWS?

*Technology gave rise to  
the current problems,  
but technology alone  
won't solve them*

**BY KURT KLEINER**



# IN THE WEEKS LEADING UP TO THE FEDERAL ELECTION,

Canadian Facebook users saw some astonishing news pop up in their feeds: Prime Minister Justin Trudeau had paid millions of dollars to an accuser to hush up allegations of sexual misconduct. There was just one problem with the story: it wasn't true. According to a joint investigation by BuzzFeed News and the *Toronto Star*, it was one of a number of dubious stories on Canadian politics that the Buffalo Chronicle, a U.S. website, paid Facebook to circulate.

It's not clear how much impact the stories had on voters – after all, Trudeau won re-election, despite the very real blackface scandal. But the incident added to the sense of disorientation and distrust elicited by the modern information ecosystem. In a world of Twitter bots, deepfake videos and disinformation campaigns run by foreign governments, how do we know what's real and what's not? And how much does it matter?

"We used to have trusted gatekeepers," says Jeffrey Dvorkin, the director of the journalism program at U of T Scarborough. "But the Internet has made the gate disappear. There's no longer a gate, and there's no longer a fence. It's like we're out on the bald prairie, without any kind of informational or intellectual support."

Dvorkin is one of a number of researchers at U of T concerned with how we get information in the evolving online world. Taken together, their findings suggest that things are both better and worse than they might seem, and their work points the way to how we might be able to make sense of the complexities of understanding the world through the Internet.

Two recent scandals raised public awareness of the threats posed by new media. In the first, investigations by American intelligence agencies showed that networks of fake social media accounts linked to Russia conducted a co-ordinated effort to promote Donald Trump and vilify Hillary Clinton during the 2016 U.S. presidential campaign. In a separate scandal, a British private consulting company called Cambridge Analytica harvested personal information from Facebook users in order to target them with political ads.



**75%**  
of Internet users in two dozen countries say social media companies contribute to their distrust in the Internet. Cybercriminals were the leading source of distrust, at 81%.

**86%**  
say they have fallen for fake news at least once.

Source: 2019 Cigi-Ipsos Global Survey on Internet Security and Trust

In response to concerns such as these, social media platforms have instituted some reforms. Facebook introduced an effort to crack down on false content by using third-party fact-checkers and by allowing users to flag potentially problematic posts. Twitter removed millions of "bot" accounts – automated accounts that can be used to amplify a particular message. It now also refuses all political advertising. And in the wake of COVID-19 misinformation, social media platforms have announced that they are co-operating with each other to weed out falsehoods and actively promote authoritative sources.

In Canada, with its relatively short election cycles and less polarized electorate, the issue with election interference, at least, seems less urgent than in the United States. The Public Policy Forum in Ottawa and the Max Bell School of Public Policy at McGill University in Montreal started the Digital Democracy Project in 2018 to study the media ecosystem just before and during the most recent Canadian federal election. Peter Loewen, a University of Toronto professor of political science, is in charge of survey analysis for the project. He says the best news is that there was very little disinformation – that is, intentionally fake news – circulating during the election. The Buffalo Chronicle stories were concerning but not typical.





## COVID-19 PANDEMIC SPARKS ITS OWN FAKE NEWS STORIES

As a novel coronavirus began to make its way around the world earlier this year, disinformation campaigns were not far behind. Just as North Americans were being told to stay at home to prevent its spread, the European Union was warning of a co-ordinated disinformation campaign by official Russian sources designed to spread fear and confusion. Chief among the false claims: COVID-19 was the result of a biological warfare agent manufactured by Western countries.

The campaign added to and amplified misinformation swirling around the world as people tried to make sense of the new threat. In March, the *Guardian* and other news outlets quoted from a leaked report by a European Union team that monitors disinformation campaigns. "Pro-Kremlin media outlets have been prominent in spreading disinformation about the coronavirus, with the aim to aggravate the health crisis in western

countries by undermining public trust in national healthcare systems," the *Guardian* quotes the report as saying.

Kerry Bowman, who teaches bioethics and global health at U of T, fears people may be more likely to believe false claims at a time of crisis, adding to their sense of alarm. "Because they're already anxious they're more likely to jump on the misinformation," he says. "The fundamental public health principle we need to stick to right now is that we have to have the trust of the public. Information has to be clear and accurate." —Kurt Kleiner



"If you look at the totality of false things that would appear in credible news outlets, the vast majority of them are coming from political parties, and not from anybody else," Loewen says. "But that doesn't mean that people aren't misinformed. The argument we make is that there is, in fact, a fair amount of misinformation in Canadian politics.... But a lot of misinformation is attributable just to what people are reading in normal news."

Rather than retreating into partisan "echo chambers," where they only hear information that confirms their views, the majority of Canadians consume news from the same traditional news sources. "Basically, everybody in Canada is consuming some of their news from the CBC, and from the big national broadcasters and the big national papers," says Loewen. "It's not that we're in silos."

Oddly, and unfortunately, people who consumed the most news during the election, regardless of the source, were also the most misinformed when asked factual questions such as the size of the federal deficit or whether Canada was on track to lower carbon dioxide emissions.

It seems paradoxical. But Loewen points out that even an accurate story from a mainstream news source rarely consists only of verifiable facts. It will

also necessarily report the views and assertions of a number of sources, such as politicians and political parties, who may provide misleading or false information. Combine this with the tendency of people to seek out and remember information that confirms their views, and it explains why taking in more information might actually lead to being more misinformed.

And although everyone might be consuming news from the same sources, the facts and stories they

tend to share with other users aren't the same. The most partisan social media users were much more likely to share stories from the mainstream media that were in line with their own political beliefs.

Finally, although Canadians are not becoming more extreme in their beliefs, they are becoming more "affectively polarized." In other words, they are more likely to see people with different political beliefs in a negative emotional light. "We have problems, but our democracy is working pretty well," Loewen says.

For Alexei Abrahams, the picture is more problematic. Abrahams is a post-doctoral researcher at the Citizen Lab at the Munk School of Global Affairs and Public Policy. He is especially interested in social media in the Middle East and North Africa. There, governments have responded to the openness of social media by finding ways to use it to manipulate and misinform their own citizens and those of other countries. "It's a case of data poisoning," Abrahams says. "You don't know what to believe."

Social media gained importance in the region during the so-called "Arab Spring," a string of popular protests between 2010 and 2013 that were organized in part through Twitter and Facebook. Social media is an especially important outlet for public expression in the region because most of the countries are authoritarian, leaving few other outlets for civic engagement, Abrahams says.

But since the Arab Spring, governments in the region have made increasing efforts to manipulate social media. One example is through the use of hashtags on Twitter, such as #Tahrir\_Square or #Iraq\_Rises\_Up, which are used to label and organize content. They provide a way to engage in a conversation, and also give an indication of what issues are important to people and where they stand on them. However, they are also vulnerable to manipulation.

For instance, in the ongoing diplomatic crisis between Qatar and Saudi Arabia, one Saudi demand was that Qatar shut down the Al-Jazeera news agency. On Twitter, a hashtag translating as "We demand the closing of the channel of pigs" quickly trended. But researchers discovered that 70 per cent

## “WE HAVE TO DEVELOP MECHANISMS THAT ALLOW US TO REJECT CERTAIN FORMS OF INFORMATION BECAUSE THEY ARE DAMAGING TO OUR CULTURE. HOW DO WE MANAGE THAT?”

**Percentage of Americans who trust the information they get from:**



**82%**  
Local news



**77%**  
Friends and family



**76%**  
National news



**34%**  
Social media

\*Source: Pew Research Center

of the Twitter accounts using the hashtag were part of a co-ordinated network – either automated bots or human-operated accounts that had been set up primarily to promote that hashtag.

Likewise, #Get\_out\_Tamim! trended in Qatar, apparently aimed at Qatar's ruler, Tamim bin Hamad Al Thani. But closer examination showed that it was being promoted by a network that included Saudi influencers and Saudi-controlled bots. In other instances, popular hashtags are flooded with non-sense tweets, making them unusable.

Efforts like these have made it difficult to tell what people in the region are really thinking. Even worse, these efforts make it hard for people living in the region to trust what they read on social media – and discourage them from using social platforms to get politically involved, since it's never clear what's real and what isn't. Although social media started as a "liberation technology" in the region, it is increasingly used as a tool of repression, Abrahams says. "Now it's a means by which authoritarianism will reassert itself. It's a means by which human beings will be dominated, rather than liberated."

Abrahams says it's difficult to come up with technical fixes for social media's vulnerability to manipulation. "Algorithmically, how are you going to stop political influence? How do you distinguish malign influence from a user expressing an opinion?" he asks. One fix that could work is for social media platforms to spread the influence around. Twitter and

# YOO HOO

Hey LGBTQ+ alumni, have we got events and programs for you.

Learn more about your Queer and vibrant U of T community at: [uoft.me/lgbtqalumni](http://uoft.me/lgbtqalumni)



UNIVERSITY OF  
**TORONTO**



other sites tend to be dominated by relatively few users who get the majority of shares, likes and retweets. Sometimes this is because of their positions as politicians or celebrities. But it's often simply a network effect. A user gets a small initial advantage for some reason, more people follow him or her, and the increased popularity leads to even more popularity in a case of "the rich get richer."

For authoritarian regimes trying to influence social media, these influencers can become targets – people who can be persuaded or intimidated into following the government line. Social platforms could instead help level the playing field algorithmically, making sure that tweets from lower-profile users are more likely to be seen, so that conversations aren't automatically dominated by already influential users.

For his part, Dvorkin says that we need to work out new ways to help users cope with the transformed information landscape. "I don't want to imply that we should go back to the way it was before 1990. Because we can't uninvent the technology. But we have to develop some mechanisms – whether they are legal or cultural or whether it's civic-mindedness – that allow us to reject certain forms of information because they are damaging to our culture.



Facebook CEO Mark Zuckerberg says the company employs 35,000 people to "review online content and implement security measures."

He says Facebook also suspends more than one million fake accounts every day, usually "within minutes of signing up."

How do we manage that? How do we help the public do some information triage?" Dvorkin thinks there is probably a role for government, in partnership with legitimate media organizations, to play a role in vetting information.

And what of social media companies themselves? They have argued that they are not ultimately responsible for the speech that happens on their platforms. But Vincent Wong, the William C. Graham Research Associate at U of T's International Human Rights Program in the Faculty of Law, says there is a growing consensus that social media platforms should be held accountable for misinformation on their platforms – even if how to do so isn't clear. The platforms have so many users, and carry so many messages, that the logistics of monitoring everything is daunting. Combine that with worries about how to judge what content should be allowed and what content should be censored, and it is a difficult problem that will take time to work out, he says.

In the meantime, Prof. Peter Loewen thinks we should all take a moment of pause before we click "share" on a story that may confirm our political views but is of questionable credibility. "I think, generally, that people should try to be less and not more political," he says. ■



## HOW DO WE PROTECT THE WORLD'S MOST VALUABLE KNOWLEDGE?

**Knowledge is as fragile as it is valuable.** Archives can be lost, destroyed, or buried in an avalanche of data. University of Toronto Libraries (UTL) is a world-class organization, not only for how it preserves its vast holdings, but also for its nimble response to massive digital change. From collecting and digitizing rare works to organizing an exponential growth in information, UTL both safeguards the world's knowledge and puts it in the hands of those who seek it, when and where they need it.

To support the Library, please contact Michael Cassabon at 416-978-7644 or visit [donate.utoronto.ca/libraries](https://donate.utoronto.ca/libraries)







SAVED  
MY LIFE

THE TRUTH  
SAVED  
MY LIFE

A picture that circulated in the aftermath of a terrorist attack led to my wrongful imprisonment. My friends and family - and U of T - helped free me

THE TRUTH  
SAVED  
MY LIFE

By Tahmid Khan,  
as told to  
Rahul Kalvapalle



THE TRUTH  
SAVED  
MY LIFE

Photograph by Geneviève Caron

THE TRUTH

# IN JULY 2016, TAHMID KHAN WAS VISITING BANGLADESH WHEN A HORRIFYING SERIES OF EVENTS LED TO HIS ARREST AND IMPRISONMENT FOR A CRIME HE DID NOT COMMIT. HERE, HE WRITES ABOUT HIS ORDEAL.

A photo nearly destroyed my life. Google my name and it's one of the first images you'll see. It shows me standing on the roof of the Holey Artisan Bakery in Dhaka the morning of one of the worst terrorist attacks ever to occur in Bangladesh. I'm the guy in the black tee, holding a gun. I'm talking to two men, including a terrorist. There appears to be a smile on my face.

It's not a good look. But there's so much more to that photo than meets the eye.

Unfortunately, though, people tend to arrive at conclusions based on limited knowledge. Worse, they cling to their beliefs despite plenty of evidence to the contrary. What happened to looking beyond first impressions and digging deeper to discover the truth?

A lack of concern for the truth has serious consequences. For me, they were personal – and harrowing.



The picture seen around the world: Attackers gave Tahmid Khan an unloaded gun and forced him to stand on the roof of the Holey Artisan Bakery. "I believe the terrorists were using me to see if security forces would open fire," he says

I WAS IN MY THIRD YEAR AT U OF T, studying global health, when I landed a four-month internship with UNICEF in Nepal. I was very excited.

The internship was to begin shortly after the Islamic festival Eid. At my parents' suggestion, I decided to spend Eid with the family in Dhaka before heading to Nepal. On the evening of the day I landed, I went out to meet two of my friends. We gathered at Holey Artisan Bakery and ordered ice cream; we didn't plan to stay long.

Suddenly, we heard what sounded like fireworks. I turned and saw a group of men storm the dining area. They were firing machine-guns. It was louder than you can imagine. The sound haunts me to this day.

The terrorists killed several people – foreigners and others they identified as non-Muslim – and held the rest of us hostage overnight. Early the next morning, they ordered me and another hostage, a Briton of Bangladeshi heritage, up onto the roof. They sent out the other hostage first. Then they forced me to hold an unloaded gun and sent me out after him.

I believe the terrorists were using me to see if security forces

would open fire at the sight of a potential attacker. That's why they gave the gun to me – the bearded, brown guy in his 20s. After several minutes, one of the terrorists stepped onto the roof. We stood there, exchanging words, when a tourist in a nearby building snapped *that* photo.

The three of us returned to the dining area. A whole night of pleading and negotiating with the attackers seemed to work when a few hours later they let some of us go. Security forces then stormed the restaurant, killed the terrorists and rescued the other surviving hostages.

By this point, the police had seen the photos. For me, this was a case of "out of the frying pan, into the fire." I survived the hostage situation only to find myself taken into police custody as a suspect in the attack. In the days that followed, the photos were all over the news. On social media, people called me a terrorist. Some TV commentators lied, saying they had damning information about me.

Why did people say these unfounded things? It's impossible to know for certain, but I have a theory. I'm fortunate to come from a well-off family. The majority of the terrorists were from



affluent backgrounds, too. For many observers, this superficial similarity provided enough of a reason to label me a terrorist as well. They portrayed me as a rich kid who had lost his way and fallen in with extremists.

Others questioned my body language that morning on the roof. Why would I be talking to the terrorist rather than cowering in fear? Why wasn't I too petrified to move? The answer is I did what I needed to do to survive. This meant trying to talk my way out of trouble. I tried to convince the terrorist that his crew didn't need to hold us hostage. I told him they wouldn't win a shootout with security forces and that their best course of action was to let us go.

As he and I talked, he randomly asked me if I played video games – specifically, first-person shooter games. It was such a bizarre question in that moment that I cracked the faintest of half-smiles. Not because I was relaxed, but because I felt bemused, confused, nervous and tired.

I found out later that for most of the time I was up on the roof, a police sniper's laser sight had been trained on the back of my head.

I WAS SUPPOSED TO SPEND PART of my summer enjoying a life-changing experience in Nepal. Instead, I spent those months languishing in police custody, remand and prison.

Outside, a battle of narratives was underway. I have to thank my friends and family for using social media to debunk the falsehoods about me, particularly via the #Free-Tahmid campaign. I found out about that during an interrogation session, when I glanced over at the investigator's phone as he combed Facebook for posts about me. It gave me strength and courage during that dark and lonely period.

I had a lot of time to reflect on my life to that point. I had struggled as a U of T student. Even though I was passionate about public health and climate change, and was determined to use my education to make a difference, the academic demands were overwhelming. I felt faceless in the sea of students, and, as a commuter student, I felt isolated from campus life.

I didn't think the university would notice my absence. But I was wrong.

U of T president Meric Gertler wrote a letter to then-Minister of Foreign Affairs Stéphane Dion assuring that I was a student "in good standing," and stating that U of T was prepared to assist in efforts to secure my access to a lawyer and consular services, and to advocate for my rights.

The letter was read out in court. I had to suppress a smile because I never thought I'd see the day when I'd be described as a student "in good standing." Only later did I learn that "good standing" means you haven't been suspended, you're not on probation and you have a cumulative grade point average of at least 1.5!

But I was deeply moved that U of T was willing to speak up for my rights when my innocence had not yet been proven. I had been involved in a major international terrorist attack, and U of T came to my defence. I realized that the university wasn't only about academic achievement and competition. It was willing to take a stand for what was just.

I believe President Gertler's letter contributed to my acquittal. When U of T speaks up for you, it means something.

AFTER MY RELEASE, ALL I WANTED was to enjoy a quiet, normal life. I was fortunate that, for my first semester back, St. Michael's College gave me the chance to live on campus. The Centre for International Experience offered me a job. I received a lot of support from Student Life, the Office of the Vice-Provost for Students, the Registrar's Office and my department: human biology. I was feeling better about my life at U of T. But for a long time, I didn't speak publicly about everything that had happened to me.

Then, in February 2019 – more than two years after I regained my freedom – I decided to tell my story in a TEDx Talk at U of T Scarborough. Many news outlets in Bangladesh as well as North America covered my presentation. However, the ones that had spread despicable lies about me in the wake of the attack conveniently neglected to give it any attention.

I guess some people have a hard time accepting they are wrong. Others continue to spread lies to this day, especially behind the veil of online anonymity. On YouTube, for example, in the comments on my TEDx Talk, they still call me a terrorist – despite my acquittal and all the evidence to the contrary.

Thankfully, social media can also help propagate the truth and counter false narratives. This doesn't repair all the damage, though. Those who spread dangerous falsehoods are rarely punished, while people on the right side of the truth suffer. (I can't speak comfortably about everyone involved in my ordeal because my family still lives in Dhaka. They've been through enough.)

What I've taken away from this traumatic experience is that the truth is always worth fighting for – even if there's no guarantee of a fair outcome. The pursuit of truth is as important as the outcome, because it gives you direction. In seeking truth, you're forced to dig deeper, consider different possibilities and understand the fuller context.

I feel like everyone should know this, but I am not sure everyone does. It's worth repeating. The truth is important. It can be a matter of life or death. My story proves that. ■

*Last June, Tahmid Khan earned a BSc in human biology, with a specialization in global health, from U of T. He is planning to launch a speaker series about public health, combining his academic interests with an appreciation for civic dialogue. He plans to attend graduate school at Columbia University in New York.*

# WHOSE STORIES DO WE TELL?

*The Dictionary of Canadian Biography  
aims to record noteworthy lives from  
“all points of view.” Six decades into its mission,  
what that means is still up for debate*

---

**By Brent Ledger**

*Illustrations by Nazario Graziano/Colagene.com*



**MACDONALD, Sir JOHN ALEXANDER**, lawyer, businessman, and politician; b. 10 Jan. 1815 (the registered date) or 11 Jan. (the date he and his family celebrated) in Glasgow, Scotland, son of Hugh Macdonald and Helen Shaw; m. first 1 Sept. 1843 Isabella Clark (d. 1857) in Kingston, Upper Canada, and they had two sons; m. secondly 16 Feb. 1867 Susan Agnes Bernard\* in London, England, and they had a daughter; d. 6 June 1891 in Ottawa

John Alexander Macdonald was brought to Kingston at the age of five by his parents, in-law Sir Alexander Gordon\* a retired army officer who was a resident in Kingston. His father, who had been an assistant in Glasgow, operated a series of mills in Upper Canada: merchant ships in the Lake Ontario basin, and a sawmill at Glenora in Ontario. He was never a man of wealth, and did not have sufficient local property to qualify for the Midland G

DICTIONARY  
OF  
CANADIAN  
BIOGRAPHY

XII

1891 TO 1905

DCB

# IN

an age when George Orwell's worst fears seem to be realized, and facts are routinely reworked to fit the politics of the moment, the *Dictionary of Canadian Biography* stands as a bulwark of truth. Having documented the lives of nearly 9,000 prominent, influential and just plain colourful characters from Canadian history, the 61-year-old, bilingual reference work is, in a sense, the anti-fake-news factory. It pursues the facts with dogged diligence, although always with a keen feel for the twists and turns of historical "truth."

The *DCB* – a collaboration between the University of Toronto and Laval University in Quebec – follows a strict process to ensure what it publishes is accurate. It starts with articles based largely (and sometimes entirely) on primary sources – the diaries, letters and other documents on which all good historical analysis is built – and continues at *DCB* headquarters on the 14<sup>th</sup> floor of Robarts Library, where the articles are subjected to rigorous fact-checking. Working with footnotes and documents supplied by the contributor, a manuscript editor tries to track every fact and quotation back to its source.

Sometimes it's just not possible to get everything tidied away. In the case of a man known as Canada's unofficial national executioner, the editors had to check his claim to having done hundreds of executions. The late executioner didn't make any kind of research easy. He worked under a pseudonym, was vague about his life details and didn't even tell his wife his true occupation. (He claimed to be a travelling salesman.) In the end, the editors couldn't say more about his deadly abilities than that he "may have performed as many as 550 to 600 executions" over the course of his decades-long career.

Editors spend little time on details of questionable importance, such as the name of a subject's high school, but they'll go to great lengths to locate vital statistics such as a birthdate. If Ancestry.ca doesn't deliver, they might request documents from abroad or, in rare instances, pay a visit to an archive. "We pride ourselves on being authoritative," says Chris Pennington, one of two manuscript editors at the dictionary's Toronto office. "That's probably the defining characteristic of the *DCB*."

The irony of all this attention to accuracy is that the *DCB* is always chasing its own tail. Many people think of history as a series of immutable facts, memorized, recorded and ordered, then venerated forever after as immutable truth. Whereas, in fact, it is occasionally closer to fiction than we'd like to admit – a creature of interpretation, conditioned by the assumptions of the writer and the time and place in which it was written. Nowhere is this more the case than with events from the distant past, where more times than not the documentation is missing or shaky and interpretation reigns supreme. As a result, the *DCB*'s mission is as much about shedding new light on history as preserving it: adding biographies, adjusting tone, righting historiographical injustices.

Sometimes it's a matter of filling in the blanks, as in the case of the legendary explorer Sir John Franklin, where so much new material has been uncovered since his biography was first published in 1988 that an entirely new biography had to be commissioned.

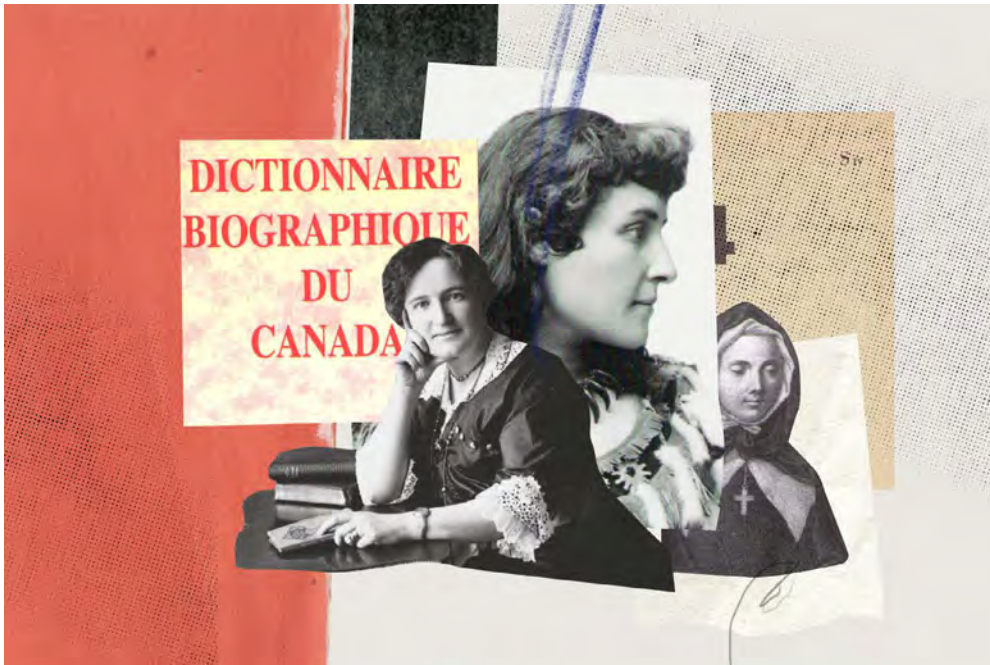
Sometimes it's a matter of redressing a historiographical imbalance, as in the case of a 19<sup>th</sup>-century writer named James McCarroll. An Irishman, he came to Canada in 1831 and became a popular writer and journalist, not to mention a key figure in the Fenian movement. He didn't make the first cut of the *DCB* because for decades there didn't seem to be enough material to support an article. About a year ago, however, a retired Trent University professor published a biographical book about McCarroll and now the *DCB* has commissioned an article. "We have to be careful," says David A. Wilson, the *DCB*'s general editor. "We can't do it with everybody but there are some people who are just too important to omit."

Who's important is of course the key question, and it's here, in its role as gatekeeper, that the *DCB* probably has the greatest effect on the nation's history. Like many reference works, the *DCB* favours the powerful and the famous. Indeed, one of the few surefire ways to get a coveted "category one" biography, worth 8,000 words or more, is to be prime minister. Influential intellectuals fare almost as well; Donald Creighton (BA 1925 Victoria) and Northrop Frye (BA 1933 Victoria) weigh in at more than 7,500 words each.

At the same time, and from its inception in 1959, the *DCB* has always tried to capture as broad a cross-section of Canadian society as possible. James Nicholson, the businessman whose bequest launched the dictionary, specified that the biographies should be of "those whose lives are noteworthy from all points of view." So we have a Hamilton, Ontario, schoolgirl who was one of the first Canadian victims of the Second World War, a Newfoundland hunter who was caught in a sealing disaster and an Indigenous boy who died running away from a residential school in the 1930s. Not only are these lives interesting in themselves, they illuminate larger issues in history by focusing on the texture of everyday life. "We have the power structures," says Wilson, "but we try to get beneath the power structures as well."

Women were excluded from power for decades and are still under-represented in the *DCB*, accounting for only about six per cent of the total lives. But Wilson says they're trying to redress the imbalance, which is especially acute in the earlier volumes. (It slightly diminishes with time so that in volume 15,





Women are under-represented in the *DCB*. “We’re always on the lookout for women whose careers illustrate something about Canada or have made a major mark in a field,” says editor David Wilson

which covers people who died in the 1920s, articles about women account for 15 per cent of the total.) “We’re always on the lookout for women who have left good primary sources and whose careers illustrate something about Canada or have made a major mark in a field,” says Wilson.

Historical interests and interpretations constantly shift. An interesting case is Sir John A. Macdonald. At 19,000-plus words, the original Macdonald biography is probably the longest and most in-depth of any in the *DCB*. But it was commissioned some 30 years ago, and, although very full in the context of its time, it says nothing about Macdonald’s contentious beliefs or policies on such topics as the treatment of Indigenous Peoples or Chinese immigration. “This is unacceptable,” says Wilson. So they’ve decided to amend the biography, adding supplementary sections, written by different scholars, on those topics.

Trickier to address is the problem of outdated language and assumptions. In its early years, says Wilson, the *DCB* had a reputation as being on the cutting edge of Indigenous historiography. It profiled dozens of Indigenous people from the 16<sup>th</sup> century and beyond and, what was more unusual for the time (the 1960s and 1970s), it used their Indigenous names as well as their English or Anglicized ones. (Today, there are more than 250 Indigenous biographies in the *DCB*.) But at the same time, some of these biographies carried colonialist assumptions and offensive language: words such as “savage” and “squaw,” for example.

What to do? Reinterpreting the past is always difficult and especially so in the case of the *DCB*, where the biographies

themselves are part of the historiography of the country. As problematic as the terms are, changing them might mislead future readers as to the widely held values of the time in which they were used. The *DCB*’s solution was to remove or replace the offending words – unless they were part of a direct, historical quotation – and to add a note acknowledging the change and supplying a link to the original document, so that anyone wishing to observe the state of historiography or social attitudes in earlier decades can do so. Simply obliterating a biography that contains objectionable words would be Orwellian, says Wilson, whereas highlighting the change shows how a biography can or will evolve over time.

It could be years before we see how *much* the biographies evolve. The editors are proceeding chronologically, decade by decade, tackling subjects by the year of their death, and after 60-plus years of work they’ve only now just reached the end of the 1930s. Wilson would like to double the rate of production to about 100 new biographies a year, and perhaps finish the 1940s in eight years, but even so, it will be several decades before they reach today’s “present” and by then, of course, there will be new perspectives and attitudes to consider.

Of one thing you can be sure: the past will still be there, rigorously proofed and buttressed by evidence – though it may look a little different. A biography is the story of someone’s life, their personality and their relationship to broader currents in Canadian history, says Wilson. “Of course, there will be interpretation, and there’ll be arguments that must be supported by the evidence. But nothing is definitive and never will be. History is not written in stone; it will constantly change.” ■

# EXPLORE THE AQUARIUM AND OTHER BENEFITS OF BEING A U OF T ALUM.

All U of T alumni enjoy discounts on attractions and access to a wide selection of exclusive perks and benefits. From lectures that spark debate to career resources that open doors, your connection to U of T comes with life-long opportunities.

Start making the most of your benefits at  
[uoft.me/alumnibenefits](https://uoft.me/alumnibenefits)

---

*The selection of alumni benefits  
may vary based on availability.*



UNIVERSITY OF  
TORONTO

**BOUNDLESS**



# Who Cares for the Caregivers?

There is a steep personal cost to caregiving, from chronic stress to physical injury. U of T experts are working to help those who minister to family and friends



**J**anet Daghish quietly led a double life for years before it became obvious to her colleagues. “I started answering work emails at 3 a.m. and was constantly stepping out to respond to family emergencies,” she says. Finally, she gave up trying to hide the increasing demands of looking after her father – who had cancer, chronic heart problems and diabetes before his death in 2015 – and her mother, who has dementia.

Fortunately, the health-care organization where she works offered flex-time so she could juggle her responsibilities as an employee and caregiver, as well as a parent of three sons. Still, it was gruelling. Daghish (BA 1984 Victoria) and her brother, Richard Payne (BSc 1983 Trinity), struggled with the relentless, wide-ranging tasks, from administering medications and giving baths to co-ordinating with doctors and pharmacists. “I underestimated the stress we were under at the height of it,” she says. “It started to affect our health.”

Daghish and Payne are among the more than eight million Canadians who provide unpaid care for sick, injured or aging family or friends. As the population gets older, the number

of caregivers will increase – and so will their importance in society. They already provide 80 per cent of all senior care in Canada.

This contribution can come at a steep personal cost. Though some people find caregiving rewarding, the sheer 24-7 nature of it causes many to develop a range of physical and mental health problems. Then there's the financial loss: close to 30 per cent of workers with parents over 65 sacrifice about 450 working hours each year on top of out-of-pocket expenses averaging \$3,300 per year.

By documenting these adverse effects and exploring ways to mitigate them, University of Toronto researchers such as Dr. Nathan Stall and Prof. Jill Cameron are encouraging policy-makers and health-care professionals to better support those who minister to friends and family members. Because when caregivers wear out or need care themselves, the repercussions are enormous and expensive. (They already save Canada's health-care system an estimated \$24 billion to \$31 billion annually.)

"We often consider what caregivers do to be a natural extension of their family roles," says Stall, a PhD student at U of T's Institute of Health Policy, Management and Evaluation. He decided to study caregiving after seeing the heavy toll looking after his grandfather with dementia took on his grandmother. "With some older adults, and particularly often with spouses, there's a certain stoicism and resistance to accepting outside help."

The expectation that family members will step up is especially common for women, who provide most caregiving in Canada, notes Stall, who is also a geriatrician at Mount Sinai Hospital in Toronto. In his research, he found wives and daughters provide two-thirds of dementia care. Now he's investigating how a caregiver's gender affects the person with dementia, and if there are ways to give more

men the skills and confidence to take on that role.

"As clinicians, we're generally not taught to ask if people are willing or able to be caregivers in the first place – or if they become burnt out later on," says Stall. He and Cameron both believe that all health professionals' training should include education on caregivers' challenges and guidance on how to help them.

For Clayo Laanemets (BKin 2014, MPH 2017), the strain of caregiving came at an earlier life stage than for Daghli. Ten years ago, she was a first-year student living in residence when she learned that a loved one was behaving strangely. Later, she discovered her loved one had been diagnosed with a serious mental illness and was having a psychotic episode. "My world turned upside down," says Laanemets, who has requested that the person remain anonymous. "I moved back out of residence and became the primary caregiver. I also got a full-time job to pay the bills – all while still attending classes. I felt so isolated, and I started having my own mental health problems."



## LONGTIME CARE

**89%** of caregivers provide care for one year or longer.

**50%** of those provide care for four years or more.

Tending to someone with dementia can be similar to a chronic stress experience, says Stall. It has severe and long-term health consequences and can even lead to increased mortality. "To make matters worse, caregiving in general has become more complex. We're asking people to manage more complicated medical and psychological care and navigate an increasingly fragmented system – all with little to no training." When caregivers do get education and assistance, they fare better, says Cameron, who is an associate professor in occupational science and occupational therapy.

One of Cameron's major findings is that caregivers of patients in intensive care units have a high risk of developing depression up to a year after the patients' discharge. The study, co-led by Professor Margaret Herridge of the department of medicine, also found that sicker patients didn't necessarily have more depressed caregivers. "Instead, caregivers became depressed when they lacked certain protective factors, including a sense of control, an ability to carry on with their everyday lives and social support," says Cameron.

Laanemets says her partner got her through the toughest times during her own experience as a caregiver. "Even if you have just one person to lean on, it can make a world of a difference." For caregivers who don't have built-in networks, Cameron has found that education programs – which teach people how to find community resources, build relationships and use positive coping skills – improve well-being.

The end-game, according to Cameron and Stall, is using research to standardize caregiver support in the health-care system. But first we need to demonstrate that healthier caregivers produce healthier patients at lower costs, says Cameron, who's working on generating that evidence – as is



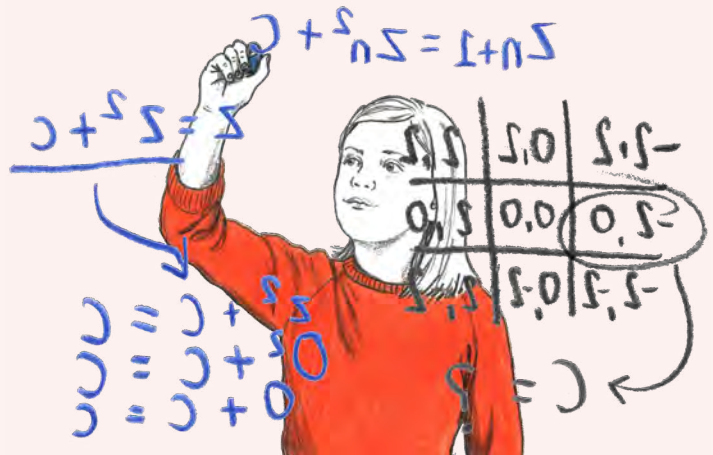
Stall, who's already shown that people with dementia who have distressed caregivers are more likely to be institutionalized. One of Stall's current studies is going further: he's aiming to calculate the total health system impact of having a distressed caregiver.

In a 2019 editorial in the *Canadian Medical Association Journal*, Stall stated that the ability to support caregivers is one of Canada's most pressing health-care and societal issues. He called for more publicly funded home and respite care, access to caregiver-specific education and counselling, flexible workplace policies and needs-based tax relief.

These things can't come fast enough for those on the front-lines. Nearly half of those tending to friends and family with dementia and mental illness report distress, according to a recent Ontario Caregivers Organization survey, and almost 60 per cent of all caregivers say it's hard to find help. "Part of my job focuses on home care, yet even I struggled to access the right services for my parents," says Daglish.

Laanemets spent three frustrating, lonely years seeking assistance for her loved one. "I was reaching out for help, but wasn't receiving any," she says. Now she's using her expertise in public health to make it easier for other caregivers by creating ConnectingMINDS, Canada's first online hub for families affected by psychosis. Funded in part by the University of Toronto's Healthy Generation Fund, it will allow caregivers to connect and share practical information. Eventually, she hopes the platform will expand to include other mental illnesses and be fully integrated in the mental-health-care system. Says Laanemets: "I've found my purpose and passion – to make change so that others never have to go through what I did."

—Megan Easton



## Learning math does more than boost your numeracy

In his new book, *All Things Being Equal: Why Math is the Key to a Better World*, John Mighton argues that if the general public had a better grasp of math, we'd have a more equitable society. Mighton (BA Victoria 1978, MSc 1994, PhD 2000) is the founder of JUMP Math, a non-profit that helps children fulfil their potential in math. He says the math learning gap is a root cause of many social problems, but there's hope if we re-examine our beliefs about math competence. —Megan Easton

### Forget the idea that only some people are good at math

The notion of inborn math talent creates a vicious cycle where children struggle, decide they don't have it and stop trying. This "myth of ability," as Mighton calls it, creates damaging intellectual hierarchies that people internalize, often for life. He believes almost everyone can learn math – with the right instruction.

### Use evidence-based teaching methods

Mighton cites research in cognitive science on accessible ways to learn math and offers proven step-by-step teaching methods. Educational systems should incorporate these approaches not only because they work, but because they instil confidence – a vital prerequisite to success in math and life, he says.

### Recognize math as a tool for a just society

Ideally, all children would master essential math skills in school, but Mighton believes any adult can gain this foundational knowledge in a few weeks. Armed with this powerful mental tool, he says, we could all think more logically, make more rational decisions, and be better equipped to recognize fake news and demagoguery. While the book doesn't claim numeracy is a panacea, it does insist that we can no longer afford to accept intellectual inequality as the norm.

## The Power of Touch

When U of T Mississauga prof Rhonda McEwen learned that her daughter was on the autism spectrum, she began to think about communications technology in new ways

A casual conversation led to Prof. Rhonda McEwen's home life and work life colliding just over 10 years ago. That's when her daughter's kindergarten teacher – who worked exclusively with special needs children – mentioned how much the students loved using an iPod touch. When McEwen went home that night, it hit her: "I'm studying social communication. I'm studying these devices. Why wouldn't I study this population?"

McEwen, who is now the director of the Institute of Communication, Culture, Information and Technology at U of T Mississauga, was finishing her PhD on whether cellphones helped first-year university students build new friendships. While she had long been interested in how mobile technology was transforming communication among many groups – students, the elderly – she hadn't yet thought to study how emerging

technologies could enable communication for those without the ability to speak.

When McEwen first learned her daughter was on the autism spectrum and would likely be nonverbal for life, it pushed her to think differently about communication – especially challenging the enduring bias that those who don't speak must be of a lesser intellect. While McEwen was already critical of that assumption, observing her daughter prompted a desire to find new ways for her daughter to reach out.

"As a mother, I looked in those eyes and I saw intelligence, I saw desire, I saw motivation," says McEwen. "I also saw difficulty in trying to break through."

While it was clear the iPod touch warranted further study, there were obvious challenges: the ethics approval required to



PHOTOGRAPH BY JENNIFER ROBERTS





Rhonda McEwen  
explores tech's  
possibilities



work with children with special needs, and the logistical challenge of collecting data from kids who weren't likely to respond well to researchers in the classroom. But that only got McEwen more excited about the work.

"I love a problem," says McEwen, who is also an associate professor at the Faculty of Information. She trained teachers to collect data and then, after following the progress of students in grades 7 through 12 over five months, completed a study of touch-screen use by special needs students. McEwen and her collaborators found that although there were limitations in the software, using the device had positive effects on attention and motivation – it boosted confidence and also encouraged children to help each other learn.

Although it was a small study – following 25 students – the implications were massive. "This was the first time these kids were starting to demonstrate a bit of what was inside that seemed locked away," says McEwen. "For decades, autism was seen as socially exclusive. I would read that these kids *want* to be in their own world. That language has fallen away since we started giving them ways to communicate with and through the device."

McEwen is infinitely curious about the role technology can play in our lives. But there's a driving principle that distinguishes her from tech evangelists and critics alike: she's interested in exploring both the possibilities *and* the limits of how technology can be used for communication.

For instance, McEwen emphasizes that there's no one-size-fits-all solution – more tech in the

McEwen's work shows that tech can be a barrier or a bridge →



classroom isn't always better. In researching *Understanding Tablets from Early Childhood to Adulthood*, a book she co-wrote with Adam Dubé, an assistant professor at McGill University, they found technology could be incredibly distracting for students with attention deficit disorder.

While McEwen started her academic career interested in the social consequences of device use, in the last decade she has become interested in the cognitive consequences. How do devices contribute to or hamper the way that we understand the world? How do they support or limit expression and social connectivity? How can they help or harm people who struggle to communicate?

To answer these questions, McEwen reaches across disciplines. Her research spans science, technology, psychology and even human physiology. She's currently working with Michelle Lui, a post-doctoral fellow examining learning in virtual reality. (Lui has collaborated with McEwen on such research as the use of eye-gaze technology for students with complex needs.) This drive to pursue truly original ideas is part of what Lui thinks helps McEwen stand out as a researcher. "The way Rhonda thinks about the work is very cutting edge," says Lui. "She's not afraid to go into an area if there's not an established way of doing things."

McEwen began her academic career at the University of the West Indies in her homeland of Trinidad, and also worked at the Telecommunications Service of Trinidad and Tobago. After earning an MBA and MSc abroad, McEwen went into consulting before moving to Toronto with her

partner in 2003. But she was getting restless as a consultant – she wasn't able to dig deep into the problems *she* found interesting.

McEwen's drive to follow her own curiosity led her to pursue a PhD at the University of Toronto, studying how cellphones helped first-year U of T and Ryerson students build new friendships and maintain old ones during a major life transition. What McEwen found surprised her: the use of cellphones made it *less* likely commuter students would develop support networks at university. They were more likely to rely on

## HOW DO DEVICES CONTRIBUTE TO OR HAMPER THE WAY WE UNDERSTAND THE WORLD? HOW CAN THEY HELP OR HARM PEOPLE WHO STRUGGLE TO COMMUNICATE?

their established relationships: when they felt lonely, it was easier to pull out a phone and text an old friend rather than to turn to a stranger in English Literature 101 and try to make a new one.

This showed her two sides of device use: while cellphones could be used to build intimacy, they could also be used to avoid it. "You create this kind of barrier around yourself, using the device as a gatekeeper of your social life and also as a presentation of self to your networks," says McEwen.

McEwen's work with children with complex needs has shown a different impact of technology: instead of acting as a barrier, it can be a bridge. Her latest published research focuses on how children aged four to 12 with "profound physical disabilities" – including Rett Syndrome, cerebral palsy and seizure disorder – use "eye-gaze" technology for tasks such as vocabulary-building. The software picks up where a user

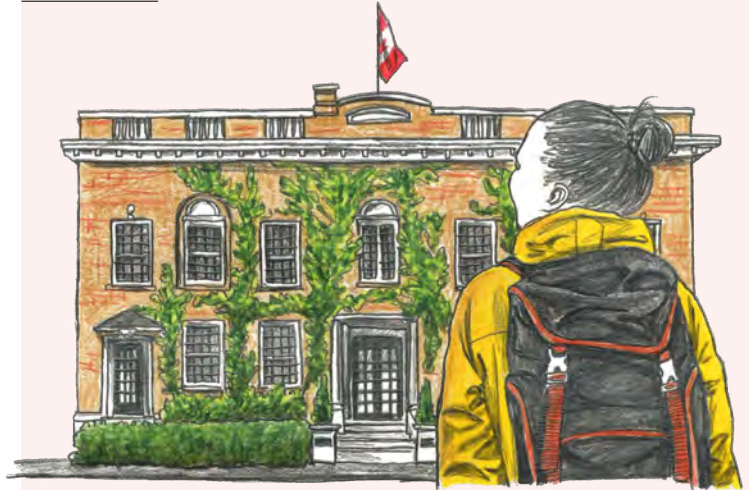


is looking, so a child can look at a desired icon on a screen to communicate – for instance, looking at an image of a dog will prompt the device to say “dog.”

McEwen and her collaborators not only found that eye-gaze technology was a way for most of the students to communicate with their teachers, but also that there was an interaction happening with the device. They see the device not just as a tool but as a partner in communication. This means that as students became more comfortable with the device, they relied less on teachers. McEwen uses the example of bringing out an iPad for her daughter when the family goes out to dinner. McEwen won't have it out the whole time, but even knowing it's there provides her daughter with comfort and a way for her to “be in the world.”

Relatedly, the time students spent with the device wasn't significantly affected by whether or not the teacher who was directing the exercise was familiar to them. This could mean more independence for a child with complex needs, and less reliance on familiar faces. (Researchers, including McEwen, have typically assumed that the children will perform best when activities are directed by trusted adults.) This, in turn, could ease the workload of parents and teachers who are often intensely involved with these students.

McEwen has also looked into how these kinds of technologies can be incorporated into a school's curriculum, how they can be used to assess students and how a child's progress can be tracked. She credits her daughter, who is now 16, for revealing these research possibilities: “She really was the one who drew my attention to a community that is more deserving in many ways of what these technologies potentially can offer.”—**Sadiya Ansari**



## How Women Gained Entry to This U of T Haven

If it weren't for Prof. Barker Fairley and his wife, Margaret, the U of T Faculty Club might have opened its doors in July 1960 without two things: a notable art collection and female members.

“The Fairleys offered the new club several Group of Seven paintings on the condition that it welcome women,” says Leanne Pepper, the club's general manager. Barker Fairley, a German scholar and painter, taught at University College. Before his successful offer, male and female faculty met separately at U of T: men at Hart House and women at the University Women's Club on St. George Street.

Today, women outnumber men among the Faculty Club's 3,000 members and the Group of Seven works are available for public viewing in the Georgian Revival building at 41 Willcocks St. Dating back to the 1880s, it was a grand family home until 1919 when a private Jewish men's club bought it. And like many venerable old

buildings, tales of the supernatural are weaved into its history:

The Faculty Club's current chef, Harold Ramos, has reported seeing ghosts — most often a woman in white. “The last sighting of her was two years ago,” says Pepper.

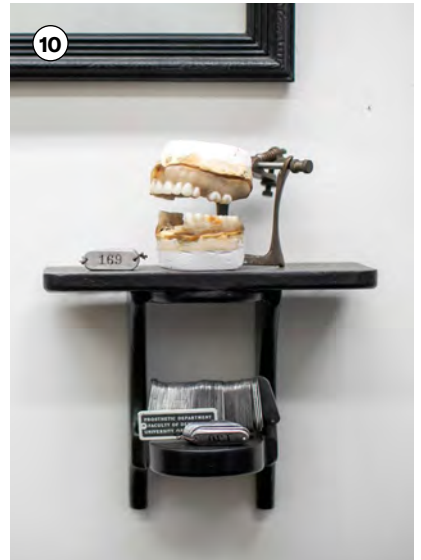
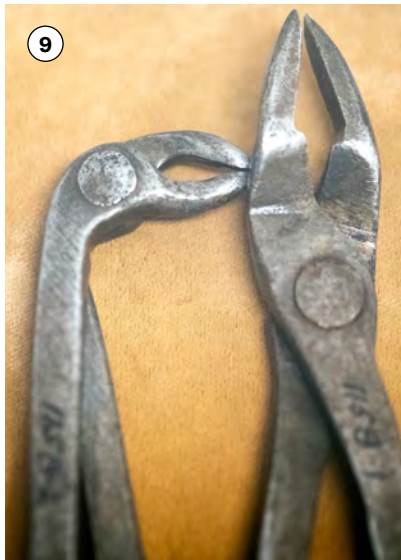
In its early years, the club admitted only faculty members. The annual fees ranged from \$12 to \$18 and the amenities included a (long gone) steam bath. Now the club is also open to staff, grad students, alumni and other U of T community members. “It's become a haven in the city for so many people,” says Pepper. A certified etiquette coach, she's helped hundreds of members master the finer points of decorum in her workshops.

Looking to the club's future, Pepper dreams of having overnight accommodation for out-of-town members. In the meantime, there are plans for 60<sup>th</sup> anniversary events this summer with a 1960s theme.

—**Megan Easton**

# These 12 objects say a lot about the history of dentistry in Canada

The Faculty of Dentistry Museum on the second floor of the Edward Street building overflows with artifacts. Vintage portraits, old dental instruments, war medals and more fill every inch of wall, surface and floor space. Dr. Anne Dale (DDS 1958), the museum's longtime curator, has devoted countless hours to this ever-growing collection, which tells the history of dentistry in North America. On a monthly basis, she changes the display in the window that faces the second-floor hallway. Although she retired as a professor in the Faculty of Dentistry nearly two decades ago, she still comes in frequently and also works at home, writing descriptions of items in the collection. "I've spent my life doing this, and I'd do it again because I love dentistry," says Dale. Since it was founded in 1869, the museum has moved homes within the faculty and had various curators until responsibility for it fell to Dale's husband, Jack Dale (DDS 1958), in 1964. A decade later, when Jack began to travel extensively, Anne took over much of the work. She kept taking care of the museum, even after Jack's death in 2016, and has no plans to stop. "It's our memory as a profession," she says. —Diane Peters



PHOTOGRAPHS BY NICK IWANYSHYN





3



4

**1.** A wood carving of Saint Apollonia, by Quebec sculptor Robert Roy, pays tribute to a virgin martyr in third-century Egypt who was tortured during a local uprising against Christians. Because she had her teeth violently pulled, she is considered the patron saint of dentistry.

to reduce patients' pain during tooth extractions. The museum holds one of three copies of a mask of his likeness.

**2.** Students spent many hours in dental school learning to make dentures.

**7.** Before toothpaste, tooth powders came in small bottles. You'd add a little water to the powder to create your own paste.

The museum has hundreds of examples, including this spring-loaded pair of "dancing dentures" that could easily pop out of the mouth by mistake.

**8.** In 1874, the seven students whom J.B. Willmott tutored at his own Ontario Dental College gave him this swagger cane with a gold crown, engraved with each of their names.

**3.** Artist William Lytle painted this mural depicting the history of dental science and service in Canada when the faculty moved to its current location on Edward Street in 1959.

**9.** Jacobus Marius van Baarsal, a dentistry student who served during the Second World War, was taken prisoner and sent to Sumatra. To help the men there suffering from dental pain, he melted down nickels for fillings and made his own instruments from telegraph wires, railway spikes and cookie tins - "any old scrap metal he could find," says Dale.

**4.** This skull was used for research by Ashley Lindsay (DDS 1907), who set up the first dental clinic in Chengdu, China, and helped found that country's first dental school. His legacy in China, where he stayed for 43 years, is similar to esteemed Canadian doctor Norman Bethune's.

**10.** How a student lab on dentures would have been set up, circa 1930s.

**5.** Dr. J.B. Willmott was the first dean of the School of Dentistry, which affiliated with U of T in 1888. His desk (almost obscured) contains a secret drawer where he hid gold that he'd hammer flat and roll into sheets for fillings.

**11.** In the 1800s, the dentist came to you. This top-of-the-line case, containing some 120 instruments, was designed mostly to impress well-to-do patients. "Not all instruments were even used," says Dale.

**6.** Horace Wells was an American dentist who pioneered the use of laughing gas

**12.** Dale calls Horace Wells' discovery of anesthetics "dentistry's greatest contribution to humanity." This carving by sculptor Jean-Julien Bourgault vividly recalls how painful it once was to have a tooth removed.



7



8



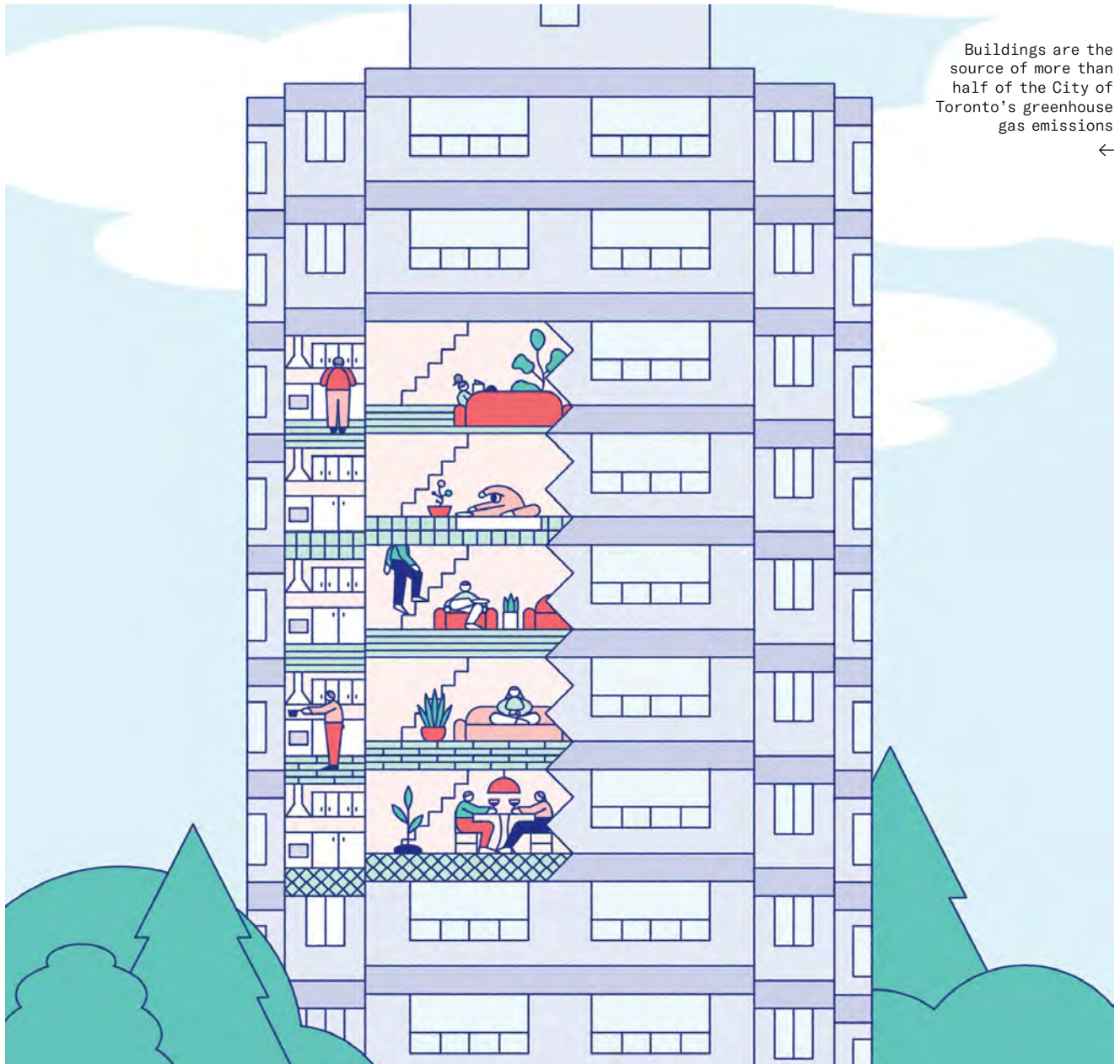
11



12

# Sensing Our Way to Better Buildings

Smart thermostats and other building sensors could help reduce energy use by 10 per cent, a U of T study finds. Full retrofits could go much further

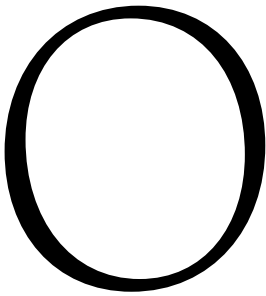


Buildings are the source of more than half of the City of Toronto's greenhouse gas emissions



ILLUSTRATIONS BY MEAGHAN WAY; SPOT ILLUSTRATION BY DAVID SPARSHOT; CHART SOURCE: CITY OF TORONTO, 2017





ne of the many difficult truths about climate change facing Torontonians is that the energy used to heat and cool buildings, such as apartments and condo towers – as well as schools and shopping malls – account for more than half of the city’s greenhouse gas emissions (according to its Zero Emissions Buildings Framework, published in 2017). As all cities try to reduce their carbon footprint, they will need to draw on the latest innovations from fields such as architecture, engineering and materials science.

A piece of the solution may be taking shape in Hamilton, Ontario, where Toronto’s ERA Architects has embarked on a full-scale retrofit of an apartment building known as Ken Soble Tower. As part of the overhaul, the 50-year-old building will receive new, high-efficiency windows, additional insulation, and state-of-the-art ventilation and humidity controls.

A critical element of the project is a system of sensors that are monitored in the lab of Marianne Touchie, an assistant professor in U of T’s department of civil and mineral engineering. Touchie oversees a team of graduate students that has been experimenting with sensors as a means of tracking a building’s energy performance and thermal levels, and the impact these two elements have on residents’ health and comfort.

Big buildings are complex organisms, and occupants can unknowingly undermine conservation efforts by leaving windows open or by overriding automated thermostats. “We need to think about the building as a system,” says Touchie, noting that real-time

performance data can drive adjustments that further reduce energy use and improve residents’ comfort. The Ken Soble Tower’s design is expected to slash the building’s greenhouse gas emissions by as much as 94 per cent. “It’s a benchmark project for pushing things as far as they can go,” says Graeme Stewart (BA 2004 St. Mike’s, MArch 2007), a partner at ERA.

The data from the sensors to be deployed at Ken Soble Tower have the potential to improve the energy efficiency and comfort of newer buildings as well. Over the past few decades, more than 1,000 new condo towers have sprung up in Toronto. A surprising number of them are energy hogs, due to a steel-and-glass design that makes them difficult to heat and cool properly. “They weren’t built with the environment foremost in mind, that’s for sure,” says Touchie.

Helen Stopps, a PhD candidate in mechanical and industrial engineering who works with Touchie, is investigating the use of smart thermostats (manufactured by Toronto-based Ecobee) as a low-cost way of improving energy efficiency in these newer structures. Smart thermostats use an algorithm to set the indoor temperature, based on sensors that detect the presence of people in the suite and exterior temperature. Using



### WHERE DO TORONTO'S GHGs COME FROM?



52% Buildings



38% Transportation (80 per cent of this portion is personal vehicles)



10% Waste

data gathered from 57 apartments in a pair of condo buildings constructed within the past decade, Stopps found that the smart devices reduced energy consumption by an average of 10 per cent.

“It’s a low-cost way of making a dent in the energy consumption of those towers without changing the building envelope or ventilation system,” says Touchie. After all, newer condo towers are probably decades away from requiring a major refurbishment. And condo boards in newer structures will not have built up sufficient reserve funds to address building-wide shortcomings such as drafty windows or overheating in south- and west-facing units.

Touchie points to another finding from a study by Jamie Fine, a post-doctoral researcher, which proposes a different sort of interim move to cut heating costs in buildings that don’t have in-suite thermostats. In large apartment buildings, retrofitting every unit with smart thermostats may not be cost-effective. But Fine’s study found that grouping apartments into zones and installing fewer sensors within those zones also led to energy savings. The proposal would optimize temperatures within each group of suites, rather than within individual units. The study, using data from one Toronto building, projects that such changes could reduce energy consumption by 14 per cent within a 10-year payback period for the associated capital costs.

These projects highlight the significance, from both a sustainability and a quality-of-life perspective, of knowing how large structures actually function. Touchie suggests that the next generation of highrises could be equipped with both sensor systems that continually feed performance measures into a dashboard, as well as trained managers who know how to interpret the data.

—John Lorinc



# How Kids Learn to Think Critically It turns out “talking back” has benefits



ILLUSTRATION BY SAM ISLAND; SPOT ILLUSTRATION BY DAVID SPARSHOTT



biggest one, because if things look the same and are made out of the same materials you would of course think that.”

In half the cases, children are told they are wrong; the researchers then leave the room. Before doing so, however, they sometimes “implicitly prompt” the children by pushing the dolls toward them. They then watch through a hidden camera to see if the kids will test the claim.

His findings are clear: before age six, children will simply believe what adults tell them and not test it – even though they instinctively know the largest object is the heaviest. Indeed, work by other scientists has shown that even infants can understand basic physics; they show surprise, for example, when a toy car appears to go through a wall instead of crashing into it.

As children get older, skepticism kicks in. Once they reach the age of about seven they’ll test the dolls by picking them up. Ronfard says this is true of children in every country where he has performed the test, and is as true of boys as it is of girls. In doing so, children invariably find out that they are right.

Even then, they still won’t verbally contradict the adult researcher. “After a while, we come back and tell them, Oh, we were just talking about the dolls,” Ronfard says. The adults wait for 10 seconds, to allow for the child to reveal their new finding. Surprisingly, they hardly ever do. “A couple, out of hundreds of kids,” he says. “It’s really rare.”

One reason for this reluctance to speak up? “It may be adaptive for kids not to question everything they’ve been told and to accept statements at face value, because it may speed up their learning,” says Ronfard. He adds that a child’s decision to question an adult is based on two factors: epistemic (“Do I believe this based on what I know?”) and social (“Is it safe for me to question this person?”).

However, Ronfard has found that when children who have tested evidence are explicitly pushed to



## BAH, HUMBUG

When, and how, did people realize Santa was a myth? The Santa Survey from the University of Exeter found the following:

The average age that children stopped believing in Santa: **8**

Percentage that said their trust in adults had been affected by the discovery: **30**

Percentage of those who played along with the Santa myth, as children, after they stopped believing: **65**

One of the main reasons children stopped believing in Santa? Mistakes by blundering parents. One caught their parents eating the food left out for Santa. Another was woken by a tipsy dad dropping the gifts.

speak the truth, they will finally do it. And outside the lab, it’s certainly common to see children contradicting adults when their tales seem just a bit too tall. One example? That of Santa Claus.

Around the age of seven, children start to ask themselves how one elderly resident of the North Pole can possibly circumnavigate the globe in a single night, abseiling down millions of chimneys to bestow requested gifts on all the world’s children (with exemptions for the naughty, of course).

“They know there’s no causal mechanism that explains all this,” says Ronfard. “And what’s interesting is that parents will sometimes create new explanations, like Santa has a supercomputer or something.” Still, it’s developmentally common for children to skeptically explore such information – by rushing downstairs to see if the cookies they’ve so suspiciously laid out have been eaten, for example.

Still, getting children to explore questions for themselves is one thing; getting them to express their views in public is quite another. Finding out how to do that is Ronfard’s Holy Grail. “When you’re testing what you’ve been told there’s the aspect of truth, but also the aspect of going against an authority,” he says. “Maybe the kids are comfortable testing things when they’re left alone, but if their parents enter the room they won’t be as comfortable.”

Right now, he is paying particular attention to how variations in parenting across different cultures affect children’s willingness to speak up; whether, if a child grows up in an environment where disagreement is welcomed and encouraged, he or she may have a completely different attitude about how knowledge is constructed. “When you get that attitude at home, you could take it with you into other relationships and interactions with people,” says Ronfard.

—Cynthia Macdonald

It’s often said that conflict is the basis of any good story. For Prof. Samuel Ronfard, conflict is also essential to learning.

“One of the most powerful things about having someone contradict you is that you can then have a conversation about your respective beliefs and arrive at a new one,” says the assistant professor of psychology at U of T Mississauga.

So when Ronfard – who heads UTM’s Childhood Learning and Development Lab – taught middle school in New York City several years ago, he would often invite students to challenge him. And yet he always found it a struggle to get kids to engage in conversation. “I would ask, What do you guys think? And usually the answer was, I think what you think.”

This kind of passivity may seem natural, but it could also present a major obstacle in children’s ability to learn. Ronfard believes that it behooves us as a society to encourage children to question and contradict adults when appropriate, and to think for themselves.

Consequently, Ronfard has spent the past half-decade drawing a global picture of how children test claims that go against their intuition. (His research has taken place in Canada, the U.S., Turkey, China and Belarus.) He and his team do this by getting some 600 kids from the ages of three to eight in a room with a series of differently sized Russian dolls. “We ask them, Which one is the heaviest? Correctly, they’ll usually say the



Audience motions create sounds for a performance



## The Technologies That Are Transforming Theatre

A new BMO-supported lab at U of T will investigate the creative potential for AI in the arts

**A** new U of T lab, supported by a \$5-million gift from BMO Financial Group, will bring together the disparate worlds of artificial intelligence and theatre to generate new ways of thinking about and experiencing both.

David Rokeby, the director of the BMO Lab for Creative Research in the Arts, Performance, Emerging Technologies and AI, says the facility will give students and researchers the chance to explore the differences – and connections – between human and machine intelligence. “One of my concerns is that in our amazement and fear of AI, we lose sight of the nature of our own intelligence,” says Rokeby.

“Machine learning systems should be respectful of what we care about as human beings.”

At the BMO Lab’s opening last fall, a demo project featured an actor performing lines from Shakespeare’s *The Tempest*, using gestures and a hidden sensor on his wrist to conjure thunder from the public address system and lightning from the stage lights.

Rokeby explains that the BMO Lab aims to investigate the creative potential for artificial intelligence and other emerging technologies in three novel ways.

### Advancing the artist’s craft

The first will explore technology’s role in advancing the theatre arts themselves. Game-playing AI



**Open since**  
October 2019

**Recent guests**  
Kyle McDonald, an L.A. artist who works with code; Montreal animator Dale Hayward

**Tech partner**  
OpenAI, co-founded by U of T grad Ilya Sutskever, created the lab’s AI writing tool

algorithms, such as Google’s AlphaZero, are transforming how grandmasters play chess. Similarly, Rokeby anticipates that advanced technologies could conjure extraordinary performances out of actors and other artists. “We can deploy technology to advance an artist’s craft,” he says.

### The script that writes itself

Second, the BMO Lab aims to work with scientists and engineers in the early stages of developing a new technology for the arts. This will enable BMO Lab participants to help shape the technology based on their experience using it, while inventors and engineers gain unique feedback that’s typically not available to them. Already, the lab is experimenting with software that uses AI to assist with scriptwriting, for example. “I’m interested in the possibilities of a play that’s continually writing itself during the performance – in response to things members of the audience say, or to what the actors are doing on stage,” Rokeby says.

### Inviting the public in

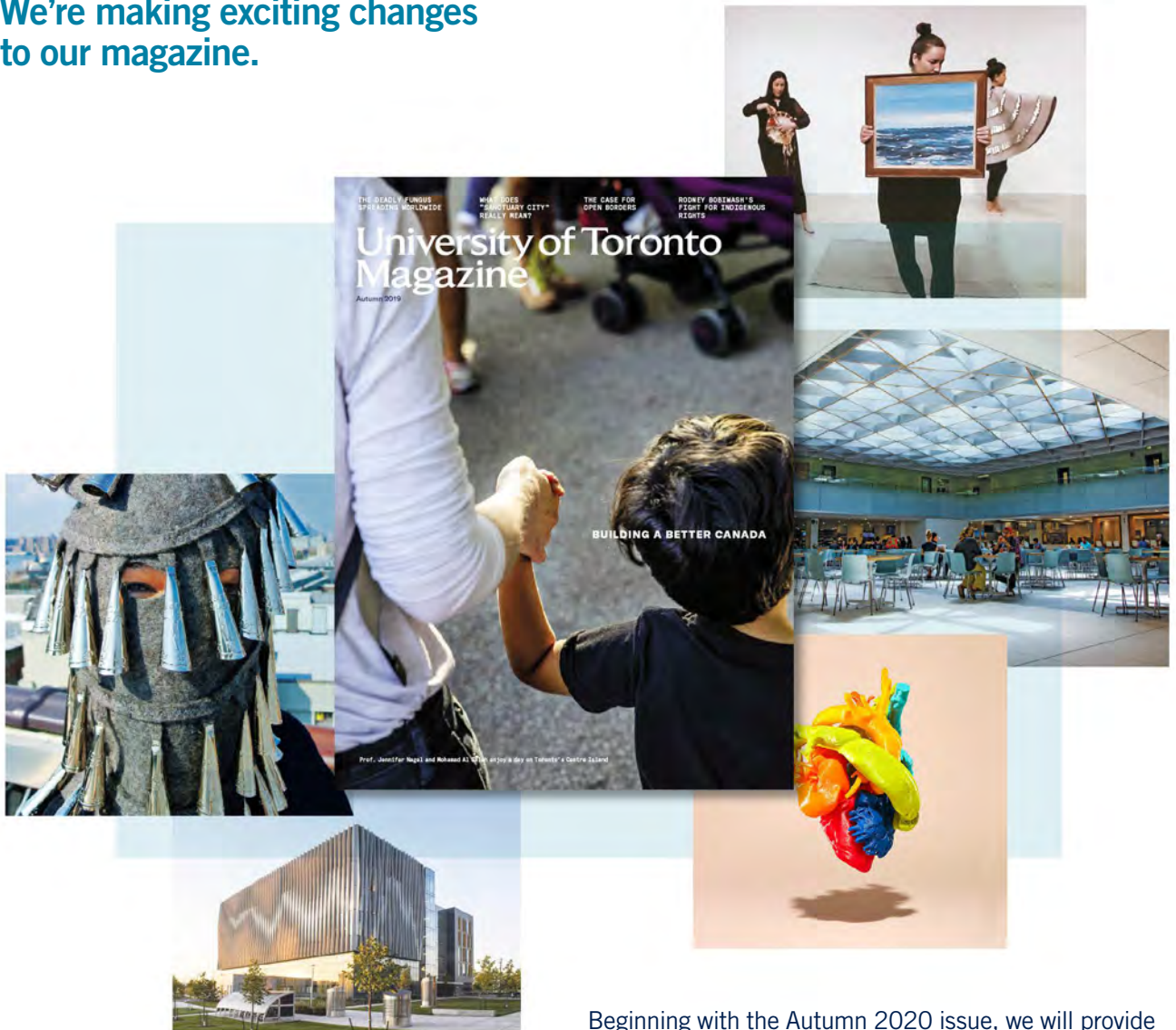
Third, Rokeby hopes to attract Canadian and international artists to the BMO Lab to create theatrical works that will bring the public face to face with emerging technologies, such as AI, augmented reality and the Internet of Things.

A crucial aspect of the lab is that all students will be equally involved in the creative process, regardless of their field of study. For now, the lab will offer one course, and several summer research internships, which are open to students from a variety of disciplines. —Kevin Temple and Scott Anderson



# UNIVERSITY OF TORONTO MAGAZINE IS GROWING.

We're making exciting changes  
to our magazine.



Beginning with the Autumn 2020 issue, we will provide more coverage of the University of Toronto Scarborough and University of Toronto Mississauga campuses.

*University of Toronto Magazine's* goal is to bring you more of the rich stories that illustrate the excellent ideas coming from the students, faculty and alumni of all three campuses. By expanding the magazine's coverage, we hope you will find more in each issue that speaks directly to you.

Thank you for your ongoing support. We welcome your feedback at [uoft.magazine@utoronto.ca](mailto:uoft.magazine@utoronto.ca)



UNIVERSITY OF  
**TORONTO**



←

**Comedic inspiration**  
Jon Stewart,  
George Carlin

**While at U of T**  
Wrote for *ToiKe Oike* and *Skule Night*

**Undergraduate thesis** “The Phenomenology of Funny”

**Recommended reading**  
*The Attention Merchants*,  
by Tim Wu

## Satire vs. Fake News

One plays with its audience, the other preys on it, says writer Aaron Hagey-Mackay

Aaron Hagey-Mackay is a former writer and editor for The Beaverton, a satirical news website. He’s interested in how fake news and propaganda spread online. His new project, “The Gigawut,” is a YouTube channel that “uses fun and fact to keep the Earth alive.”

**Prior to the pandemic, the actual news sometimes seemed like satire. Does this make being a satirist more difficult?**

Yes! People like Donald Trump break all norms and expectations. How do you take something that’s absurd and make it more absurd? Before the total solar eclipse in 2017, we wrote a joke about Trump being so clueless he would stare right at the eclipse – and then he actually did it. To paraphrase comedian Norm MacDonald, Trump has made comedy very difficult for good comedians and very easy for bad comedians.

**What’s the difference between satire and fake news?**

The motive underlying them is different. Satire uses fiction or humour to point to a larger social or political truth. It only works if you know it’s made up. Fake news operates under the guise of credible journalism to convince you of a falsehood – usually for political or monetary gain. It only works when you don’t know it’s a lie. In short, satire plays with its audience; fake news preys on its audience.

**Has the role of satire changed in recent years with the rise of the alt-right and authoritarianism?**

I used to think satire was a cure for abuse of power and a friend to democracy – that the satirist uses humour to score rhetorical blows against tyrants. This is an old way of thinking. Recently, I discovered that members of QAnon, a right-wing conspiracy group, were sharing a Beaverton article I’d written. The headline was “Disney Executives Pleased to Announce Acquisition of Pornhub.” They were using the article as proof that “perverted elites run the world.” The lesson: Satire, just like fake news, can serve as a propaganda tool for good or bad.

**What do you see as the good?**

During periods of social stress, satire offers a “spoonful of sugar” to hard truths. It can be a source of insight and can convince you to pay attention to things you wouldn’t otherwise think about.

**Does this have any larger impact in the world?**

In a fractured, polarized media landscape, satire can cut through the noise. Still, it’s never going to change anything on a fundamental level. For that, we need larger political movements. True change won’t come out of your phone, no matter how many memes, tweets or satirical news articles you share.





**TD Insurance**  
Meloche Monnex

**Ready  
for you**



# University of Toronto alumni, feel confident with preferred rates from TD Insurance.

You could save with rates  
on car, home, condo and  
tenant's insurance.



**Get a quote and see how much you could save!**

**Go to [tdinsurance.com/utorontoalumni](https://tdinsurance.com/utorontoalumni)  
Or call 1-888-589-5656**



The TD Insurance Meloche Monnex program is underwritten by SECURITY NATIONAL PRIMMUM INSURANCE COMPANY. It is distributed by Meloche Monnex Insurance and Financial Services, Inc. in Quebec, by Meloche Monnex Financial Services Inc. in Ontario, and by TD Insurance Direct Agency Inc. in the rest of Canada. Our address: 50 Place Crémazie, 12th Floor, Montréal, Québec H2P 1B6. Due to provincial legislation, this car and recreational insurance program is not offered in British Columbia, Manitoba or Saskatchewan. All trade-marks are the property of their respective owners. ® The TD logo and other TD trade-marks are the property of The Toronto-Dominion Bank.

8015-0120

# WHEREVER YOU ARE IN YOUR CAREER, U OF T IS HERE TO HELP.

From career-development webinars to continuing studies to free LinkedIn Learning courses, U of T is your lifelong resource for upgrading credentials, making connections and sharing ideas.

To keep learning, visit [uoft.me/careerhelp](https://uoft.me/careerhelp).

University of Toronto graduates belong to a community of more than half a million U of T alumni worldwide. For more information about the benefits and services available to you, please visit [alumni.utoronto.ca](https://alumni.utoronto.ca). If you've moved or changed your email address, please update your contact information at [alumni.utoronto.ca/addressupdate](https://alumni.utoronto.ca/addressupdate).



UNIVERSITY OF  
TORONTO

**BOUNDLESS**