



CONGRATULATIONS
MICHAEL HOUGHTON
2020 NOBEL LAUREATE
IN PHYSIOLOGY OR MEDICINE

HEP-C SARS-CoV-1 COVID-19 NOBEL PRIZE



MICHAEL HOUGHTON, Director, Li Ka Shing Applied Virology Institute at the University of Alberta, has been at the forefront of the treatment of viruses since he and his team discovered the hepatitis C virus — a breakthrough that was acknowledged with a 2020 Nobel Prize in Physiology or Medicine. This discovery has led to new treatments that have saved and improved the lives of millions of people worldwide. The best news of all? Dr. Houghton and his team are now working on a vaccine for COVID-19.



Looking to Tomorrow

I LOVE SEEING GRADS FIRED UP about their work.

This year, I had the honour to call four alumni to let them know they had been selected to receive Distinguished Alumni Awards, and I was struck by the sense of pride in their voices. Not pride in being recognized for their own efforts, but pride in being a part of something important, in finding fulfilment in what they do.

That's pretty powerful.

At the U of A, we take pride in helping students develop their talents and passions so they can contribute to their fields and their communities in meaningful ways. This concept came full circle when Distinguished Alumni Award recipient Karen Barnes, '93 MEd, '03 EdD, helped transform Yukon College into the territory's first university. You can meet her and the three other recipients starting on page 31 and at the virtual awards ceremony in February.

Right now, the U of A is embarking on a period of considerable transformation so future grads can continue to make the same kind of impact.

Like many post-secondary institutions in Canada, the U of A faces urgent financial challenges. As President Bill Flanagan laid out in an alumni town hall on Oct. 20,

the university is responding to these challenges with the U of A for Tomorrow initiative. The plan aims to reduce operating costs by reorganizing the university's faculties and administrative services. With a more efficient structure, it can then focus more resources on its three main priorities: teaching and students' university experience, research, and community connection. You can read more on page 8.

It's a big change and an ambitious plan. And it won't be easy. Trish Reay, '76 Dip(Nu), '81 BA, '91 MBA, '00 PhD, is an expert in institutional change from the Alberta School of Business. Her research testifies to how hard change is, even when there are good reasons (page 15).

But change is not new to the U of A. It has been adapting to challenges since it was founded in 1908. I'm confident it will continue to prepare students—our future alumni—for interesting lives and meaningful careers so, as with this year's alumni award recipients, they will be able to look back on their accomplishments with pride.





OFFICE OF ALUMNI RELATIONS

Sean Price, '95 BCom

Associate Vice-President

Tracy Salmon, '91 BA(Hons), '96 MSc Director, Alumni Programs

Coleen Graham, '88 BSc(HEc), '93 MEd Senior Manager, Strategic Initiatives

ALUMNI COUNCIL EXECUTIVE

Alumni Association President Heather Raymond, '82 BEd, '86 Dip(Ed). '95 MEd. '02 PhD

President-Flect

Tyler Hanson, '00 BSc(MechEng)

Committee Chair: Alumni Awards Denise Prefontaine, '86 BA(RecAdmin), '95 MBA

Committee Chair: Career Services Matthew Hebert, '05 BA

Committee Chair: Mapping and Faculty Engagement Maxine Clarke, '03 BCom

Committee Chair: Priority Programs Ruth Spetter, '94 BCom

Committee Chair: Student Transitions Jessica Vandenberghe, '00 BSc(ChemEng),

Board of Governors Representatives Ryan Thompson, '03 BSc(Hons), '13 MA Ayaz Bhanji, '91 BSc(Pharm)

Senate Representatives Kate Young, '07 BScN, '15 MBA Rick Dowell, '03 BSc(MechEng), '09 MBA

FACILITY REPRESENTATIVES Agricultural Life & Environmental Sciences Chris Kallal, '14 BSc(Forest)

Rachel Persad '15 BA(Criminology)

Augustana

Matthew Hehert '05 BA

Business

Denise Prefontaine, '86 BA(RecAdmin), '95 MBA

Campus Saint-Jean

Thomas Pomerleau, '18 BCom. '18 Cert(Leadership)

Dentistry

Hafiz Damani, '93 BSc(Dent), '95 DDS

Education

Dean Wood, '72 MEd, '91 PhD

Engineering Gail Powley, '84 BSc(ChemEng)

Extension

Graduate Studies

Olena (Alyona) Shynkaruk, '16 PhD

Kinesiology, Sport, and Recreation

Alexander Yiu, '03 BA, '06 LLB

Beverly Wilson, '83 BMedSc, '85 MD

Native Studies

Chancy Black Water, Awakas'ikitstakiaki (Deer Offering Woman), '10 BA(NativeStu), '10 Cert(AborGov/Ptnshp)

Nursing

Christine Westerlund, '95 BScN, '01 MSc

Pharmacy

Ali Damani, '02 BSc(Pharm)

Public Health

Chris Ashdown, '78 BSc, '82 MHSA

Rehabilitation Medicine

Michele Moon, '92 BSc(OT), '05 MSc

Science

Keri Reid, '05 BSc

MEMBERS AT LARGE

Ali Assi, '15 MPH Maxine Clarke, '03 BCom Ken Coburn, '79 BSc(MechEng) Marnie Colborne, '17 BScN(Hons) Simone Demers-Collins, '71 BSc(HEc) Joel Johnston, '16 BA(RecSpoTourism), '16 Cert(AboriginalSpo/Rec), '16 Cert(CommEngage/ServLearn) Diana Ly, '99 BSc, '10 MBA Deb Manz, '95 MBA Jesse Moore, '09 BA, '09 BA(CertTrans) Ruth Spetter, '94 BCom Jessica Vandenberghe, '00 BSc(ChemEng), '03 MSc Michael Wong, '01 BCom Charlotte Wray, '16 BA

EX OFFICIO Honorary President

Bill Flanagan

Interim Vice-President (Advancement) Kelly Spencer, '97 BA, '19 MA

Associate Vice-President (Alumni Relations) Sean Price, '95 BCom

Dean of Students André Costopoulos

Dean of Students Designate Mandy Ouon, '06 BA

Graduate Students' Association Anas Fassih

Students' Union Rowan Lev



MIX Paper from onsible sources FSC® C011825

Heather Raymond, '82 BEd, '86 Dip(Ed), '95 MEd, '02 PhD

PRESIDENT, ALUMN ASSOCIATION









We would like to hear your comments about the magazine. Send us your letters by post or email to the addresses on page 4. Letters may be edited for length or clarity.

@caffeinecamera: This hit me in the feels. @UAlberta and @CanadianForces have a very intertwined history that goes back a century. Today, @UofARehabMed has @HiMARC, which continues that connection to military, veterans and their families. Great artwork and article in New Trail.

Chelsea Jones,



That Familiar Feeling

As we were reading the article "Seeking Hope" in the Spring 2020 edition of New Trail, I began to feel a pattern developing in my mind, which I have felt many times before without consciously realizing it.

My wife, Elaine, and I started working with refugees and displaced people in 1992. On many of our trips, we felt that our work with people was enabling them to develop a positive feeling about their future. Was this hope? We didn't realize it at the time.

In 2018, we helped equip a remote village in Myanmar with medical supplies and solar light kits for every house. We trained two local men to install them and to teach the homeowners how to operate and care for them. At the end of three days, all homes had solar lights. Afterward, a leader in the village said to me through the interpreter, "Because of your visits, paying attention to us and helping us, the people say they have hope for their future." Our experiences, plus reading "Seeking Hope," confirmed that hope is real and positive.

-Myron Semkuley, '60 BSc, '64 MD, and Elaine Semkuley, '62 BSc(Pharm), Calgary

MORE ONLINE

Find these stories and more at ualberta.ca/newtrail.



Bottoms Up

Wind down the year with a selection of seasonal craft beers by alumni-owned breweries.



Rethink Your Next Job Interview

U of A career experts share their tips to help you make a great first impression with no sales pitch required.

An Alternative Solution

This letter is in response to 'Upgrading Oilsands Technology Would Boost Profit and Cut Greenhouse Gases, Study Finds' from the Autumn 2020 issue.

Although it may have been unclear when the research was initiated, I believe it is now extremely clear that oilsands are one of the worst polluters and one of the most expensive oil and gas producers for any fixed unit of final oil and gas products. It is also evident that the world's oil and gas production must be significantly reduced to meet the 2050 carbon-neutral targets for climate change. Although the title suggests positive effects, a better direction for addressing climate change would be to progressively phase out heavy oil productions as rapidly as practical. Considering that conditions have changed, I do not fault the completion and publication of the research, but when produced in the current world conditions. it should include the associated concerns.

-William Stollery, '69 BSc(CivEng), Penticton, B.C.

Flocking Good Fun

"So much fun and so many memories came from this posting. Talking about this also allowed Stewart and me to reconnect—we had been out of touch since the bird incident ..."

-Kelly Palmer, '81 BA(RecAdmin), '84 MBA, '85 LLB, Edmonton Editor's note: When pressed about the bird incident, Palmer responded: "Let us speak of that no more."

Stewart Devine, '82 BA, '84 MBA, and Kelly Palmer, '81 BA(RecAdmin), '84 MBA, '85 LLB, who now reside in Britain, report that they are putting the "entrepreneurial skills we learned at university to use" as the owners and managers of an adult entertainment centre in Soho in London's West End. (Summer 1989)



Print not your style?

That's OK — there's a *New Trail* magazine for everyone.

- Go totally digital. We love your inbox.
- Prefer snail mail? Print it is!
- Or, take both. Why play favourites?

Your New Trail. Your way.

Update your subscription at **uab.ca/NTsub**.



Supervising Editor

Robert Moyles, '86 BCom

Editor-in-Chief Lisa Cook

Managing Editor

Karen Sherlock

Associate Editor

Mifi Purvis, '93 BA

Creative Direction & Design

Marcey Andrews

Staff Writer

Lisa Szabo, '16 BA

Consulting Editor Stephanie Bailey, '10 BA(Hons)

Editorial Intern

Amei-Lee Laboucan

Researcher

Hersharon Sandhu, '15 BA, '19 BA(Hons)

Senior Photographer

John Ulan

Melissa Fabrizio, '16 BA; Ryan Whitefield, '10 BA

Copy Editors/Fact Checkers

Barb Wilkinson, Therese Kehler

Proofreader

Philip Mail

Advisory Board

Anne Bailey, '84 BA; Rhonda Kronyk, '04 BA, '07 MA; Robert Moyles, '86 BCom; Sean Price, '95 BCom; Karen Unland, '94 BA

CONTACT US

Email (Comments/Letters/Class Notes): newtrail@ualberta.ca

Call: 780-492-3224; 1-800-661-2593

Mail: Office of Advancement, University of Alberta, Third Floor, Enterprise Square, 10230 Jasper Ave., Edmonton, AB T5J 4P6

Instagram & Twitter: @UAlbertaAlumni

Facebook: UAlberta Alumni

Address Updates: 780-492-3471; 1-866-492-7516

or alumrec@ualberta.ca

TO ADVERTISE

Email: newtrail@ualberta.ca

Call: 780-248-5726

This University of Alberta Alumni Association magazine is published three times a year. It is mailed to more than 130,000 $\,$ alumni and friends. The views and opinions expressed in the magazine do not necessarily represent the views of the University of Alberta or the U of A Alumni Association. All material copyright ©. New Trail cannot be held responsible for unsolicited manuscripts or photographs.

ISSN: 0824-8125 Copyright 2020 Publications Mail Agreement

No. 40112326

If undeliverable in Canada, return to: Office of Advancement. University of Alberta, Third Floor, Enterprise Square, 10230 Jasper Ave Edmonton, AB T5J 4P6





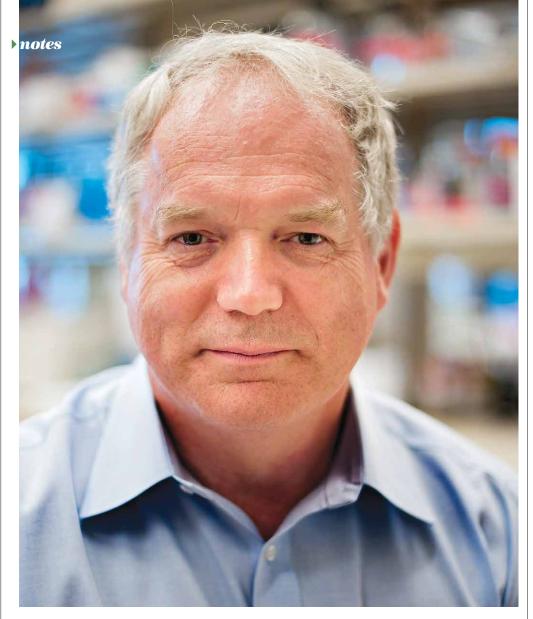
The University of Alberta respectfully acknowledges that we are situated on Treaty 6 territory, traditional lands of First Nations and Métis people.



Butterfly Effect

Monitoring butterflies could help scientists understand rapidly changing alpine environments

THE RAPID LIFE CYCLES OF ALPINE BUTTERFLIES and their surprising adaptability to harsh environmental conditions could help scientists better understand the impact climate change is having on mountain ecosystems, say U of A researchers. "Alpine butterflies are the ultimate sentinel because they're easy to find, the populations respond quickly to change and they can proxy environmental change at a very fine scale," says U of A PhD student Zac MacDonald, '15 BSc(EnvSci), who co-authored an essay with professor Felix Sperling, '79 BSc(Hons), '86 MSc, and forester William Sperling, '14 BSc(Forest), that encourages more citizen-scientist monitoring. "We're trying to get alpine enthusiasts and the outdoor community motivated to start submitting their sightings so we know what's going on," says MacDonald.-MICHAEL BROWN



VIROLOGY

Concern for Patients Drives Nobel Prize Winner's Research

Michael Houghton is honoured for hepatitis C discovery that has saved millions of lives

HELPING PATIENTS HAS BEEN AT THE HEART of U of A virologist Michael Houghton's research from the beginning—research that earned him a 2020 Nobel Prize for his part in the discovery of hepatitis C.

"Obviously, it's hugely prestigious [but] as nice as it is, what counts for me even more is that we've been able to prevent millions of infections that otherwise would have occurred around the world through the blood supply," Houghton said after the Oct. 5 announcement.

Now, more than 30 years after his initial discovery, Houghton's work to eradicate hepatitis C continues: his research team at the U of A is at work on a vaccine.

Houghton shares the Nobel Prize in Physiology or Medicine with Americans Harvey J. Alter and Charles M. Rice for their roles in helping to identify, understand and ultimately

treat the deadly disease. "The Nobel laureates" discovery of hepatitis C virus is a landmark achievement in the ongoing battle against viral diseases," the Nobel committee noted.

In light of the current worldwide search for solutions to COVID-19, in which Houghton is also involved, he says the decades-long quest to cure and prevent hepatitis C has important lessons to offer.

"We need more investment in virology and infectious disease and immunology at the basic research level. But also, we need to invest in translating it fast. ... You need to be able to translate it into making vaccines, blood tests,

The number of people in the world with chronic hepatitis C. which can lead to liver disease, cancer and death.

therapeutics for Canadians," he told CBC's As It Happens. "I think we became a bit blasé over the last several decades that we know how to stop viral infections. ... And I think obviously we've learned we cannot."

Houghton, director of the Li Ka Shing Applied Virology Institute at the U of A and a professor in the Department of Medical Microbiology and Immunology, was a young researcher at an American pharmaceutical company nearly 40 years ago, in 1982, when he began searching for a mysterious virus that made people very sick. Back then it was known only that it was not hepatitis A or B.

He and co-discoverers Qui-Lim Choo and George Kuo finally unlocked the genetic code of the hep C virus (HCV) in 1989. Their discovery led to new screening tests for blood donations, which virtually eliminated the virus from the Canadian blood supply by 1992. It also allowed researchers to begin the hunt for antiviral therapies. Today, many patients can take a pill once a day for two or three months to be cured.

Blood screening and antiviral drugs have saved millions of lives worldwide.

"There's no way these drugs could have been developed without understanding the whole viral genome ... and that's all based on Michael's work," says Stephen Shafran, medical lead for the Hepatitis Support Program at the University of Alberta.

HIGH HONOUR

IT'S NOT THE U OF A'S FIRST **BRUSH WITH THE NOBEL PRIZE**

With Michael Houghton's recent win, the University of Alberta can boast about not one, not two, but three Nobel Prize connections. Here are the other two.

Richard Taylor, '50 BSc, '52 MSc, '91 DSc (Honorary), received the 1990 Nobel Prize in Physics for pioneering investigations that contributed to the quark model in particle physics. Twenty years earlier, he and his colleagues used an accelerator to smash neutrons and protons—then believed to be the smallest units of matter—and found that they could be broken down into subatomic particles called quarks. Their findings led the Nobel committee to declare the beginning of "a new epoch in the history of physics."

James Collip, '24 PhD, '26 MD, '46 LLD (Honorary), is one of four researchers credited with discovering and purifying insulin as a treatment for diabetes. Though John Macleod and Frederick Banting received the 1923 Nobel Prize in Physiology or Medicine for the team's work, Collip is credited with producing the first insulin suitable for use on human beings and shared in one-quarter of the prize money. (See page 27 for more.)

Houghton was recruited to the U of A in 2010 by **Lorne** Tyrrell, '64 BSc, '68 MD, founding director of the Li Ka Shing Institute of Virology, thanks in part to federal funding for the Canada Excellence Research Chair in Virology. The institute was created through a gift of \$25 million from the Li Ka Shing (Canada) Foundation, as well as a \$52.5-million commitment from the Government of Alberta.

In 2013, Tyrrell asked Houghton to run the Applied Virology Institute, tasked with taking scientific

discoveries to market.

"When we set up the institute, Mr. Li felt it was very important not only to make discoveries, but to bring them to patients," Tyrrell says. "Michael continues to focus on that—how can we work together to improve the lives of patients?"

Houghton and Tyrrell are now at work on the ultimate conclusion to the 1989 discovery of the virus. Their research team has developed a vaccine they hope to take to human trials late next year that can save even more lives.

Despite advances, an estimated 71 million people around the world live with chronic hep C infection and almost 400,000 a year die from liver diseases caused by the blood-borne virus.

"In Canada, we have up to 12,000 new infections of hep C every year, and because of the drug epidemic, fentanyl and so forth, that number may well be growing," Houghton says.

While existing

antiviral drugs save many lives, they are expensive and aren't available evervwhere. And since patients can be infected for many years

without knowing it, many still suffer from severe liver damage and death.

"We believe that a hepatitis C vaccine is possible and that we have a real chance of eradicating this infection from the planet over the next 20 or 30 years," he says. "The quicker we do it the better, because it's a very nasty disease."

-GILLIAN RUTHERFORD WITH FILES FROM MICHAEL BROWN AND GEOFF MCMASTER COVID-19

New Paradigm for Developing

When COVID-19 started to change the world, virologist Michael Houghton immediately mobilized his hepatitis C lab to ioin the hunt for a vaccine.

His lab was a perfect fit for the task, having created a successful vaccine for the SARS virus in 2004 that was never needed because that outbreak was contained.

Houghton says what has struck him about the colossal hunt for COVID-19 tests, therapies and a vaccine has been how the scientific community and government have banded together.

"I think COVID—as terrible as it is and as tragic as it is—it's actually created a new paradigm for developing vaccines. It's showing us how fast we can develop them when the will is there."

He credits governments around the world, including the Canadian and Albertan governments, for sponsoring companies to produce vaccines on a large scale, even before they know whether they work.

You cannot stop an epidemic as large as hep C, or COVID-19, with only a good therapy. You absolutely have to have a vaccine to really curb the transmission around the world," he says.

Treating the 12,000 Canadians a year who contract hepatitis C will cost Canadians more than \$1 billion, he says.

"If our vaccine works, we think we can make enough hep C vaccine at the U of A, in [the] Alberta Cell Therapy Manufacturing facility, to provide the vaccine required for all the high-risk people in Canada for around \$50 million at most," Houghton says.

"That's a huge cost savings at a time when we're going to need cost savings given COVID-19 and its effect on the economy."-MICHAEL BROWN

"When we set up the institute, Mr. Li felt it was very important not only to make discoveries, but to bring them to patients. Michael continues to focus on that — how can we work together to improve the lives of patients?"

Lorne Tyrrell, founding director of the Li Ka Shing Institute of Virology

U OF A FOR TOMORROW

Students Remain at the Core of the **University's Mission**

U of A president answers alumni questions about restructuring process

ALUMNI WILL NOTICE changes at the University of Alberta in the coming months, as university leadership moves forward with U of A for Tomorrow—a plan to restructure faculties and administrative units.

This initiative is a response to funding cuts—\$127 million in the 2020-21 fiscal year—and further anticipated cutbacks to the U of A's Government of Alberta grant over the following two years. The proposed changes continue to move quickly through the consultation and approval stages with recommendations possibly coming forward before the end of the year. Check ualberta.ca/uofa-tomorrow for details and the most up-to-date information.

But the ultimate goal of UAT goes beyond creating savings, says Bill Flanagan, U of A president.

"We think this is an opportunity to take the financial challenge that we're facing now and turn it

into an opportunity for strategic transformation," he says. "[We can] really think very creatively and in an entrepreneurial way about what the university of tomorrow will look like. And in that regard, we are leading the sector in Canada."

In October, grads attended a virtual town hall where Flanagan addressed questions submitted by alumni. Here are a few of those questions and answers provided by the president.

How will these plans affect student success? Will there be changes to **tuition?** We're enormously proud of the student experience we're able to offer at the University of Alberta. A key point of U of A for Tomorrow is to maintain a very high level of service for our students—and do it in a way that is financially sustainable. Tuition will be going up an average of seven per cent each year for 2020-21 and the next two years. This is in part due to changes in government tuition legislation, which allows for increases to help offset funding reductions to post-secondaries. ... But the U of A must remain accessible to all qualified students. The university has committed to setting aside a sizable portion of the increased tuition revenue to support students in financial need.

How will U of A for Tomorrow affect individual programs such as music or art? We're not proposing any changes to programs—the focus is on reviewing **QUOTED**

"[We can] really think very creatively and in an entrepreneurial way about what the university of tomorrow will look like. And in that regard, we are leading the sector in Canada.'

Bill Flanagan, U of A president

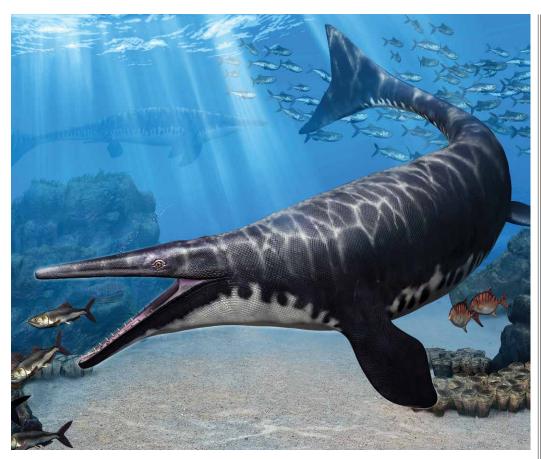
who delivers the programs, rather than the programs themselves. There will be no break in continuity for current students. However, in the long term, we do expect that by bringing faculties together in different configurations we will see programming become more interdisciplinary.

There must be some things that keep vou awake at night. What major pitfalls must be avoided for this initiative to **be successful?** There is no doubt that we have to make major decisions at an unprecedented speed and it's not easy. So supporting staff through this is incredibly important; consultation and communication are critical. We need to be thoughtful and considered, and yet act quickly. If we do that, we can manage our financial challenges and the resulting job losses as strategically as possible.

What role should alumni play? The support of alumni is key to what we can achieve. I think it's important for alumni to understand the scale of the challenge and, perhaps, share in the sense of urgency. Likewise, I hope you also share my sense of optimism—the U of A can play an important role in driving economic growth, creativity and innovation. Now, more than ever. share the stories of research excellence and student achievement, volunteer to mentor students and new graduates, and support students who may not be able to otherwise afford the cost of higher education. - ANNA HOLTBY

Questions and answers have been edited for length and clarity.





NEW SPECIES DISCOVERED A new species of mosasaur, an ancient marine reptile, has been identified by an international research team led by a U of A master's student. Gavialimimus almaghribensis, with its long, narrow snout and interlocking teeth, was catalogued and named by Catie Strong, '19 BSc(Hons), who hypothesizes the adaptations helped it catch rapidly moving prey. Prey-specific adaptations are suspected in the dozen-plus types of mosasaur that ruled the marine environment near what is now Morocco at the end of the Cretaceous period, between 72 and 66 million years ago.-MICHAEL BROWN

COVID-19

HOW TO SAFELY REUSE YOUR DISPOSABLE MASK

Masks have become part of daily life during the pandemic. But throwing out your mask after every coffee run or quick errand can create a lot of waste. "In the hospital, we'll use medical masks for hours at a time. So, if they're used for just a few minutes and you handle them carefully, it does seem reasonable to use them again," says U of A infectious diseases specialist Lynora Saxinger. It's important to do so carefully, though. She offers tips to help you use and reuse your masks safely. (See page 54 for what she's learned from the pandemic.)-STEPHANIE BAILEY, '10 BA(HONS)

TUCK IT AWAY

After a quick outing, Saxinger recommends placing your disposable mask in an envelope or paper bag to draw out the moisture and avoid contaminating nearby items. You can reuse lightly worn masks again after three days.

DON'T HANG IT

Avoid dangling your mask from your ear when not in use. If the virus is present on the mask, you could accidentally get it on your face.

GRABIT BY THE LOOPS

Touching the front of your mask could spread the virus to your hands and then to your face or to high-touch surfaces. Handle the ear loops only, and wash or sanitize vour hands immediately before and after putting on your mask.

RESEARCH

BIOMARKERS COULD BE USED IN COVID-19 SCREENING TOOL

Measuring metabolites in the blood could be the foundation for a quick. inexpensive blood test that detects the presence of COVID-19, as well as which patients are at greatest risk of dying, according to a recent study.

The pan-Canadian project, which included U of A researchers, found that COVID-19 decreases the concentration levels of three metabolites—which are molecules broken down through the process of metabolism-and increases levels in another.

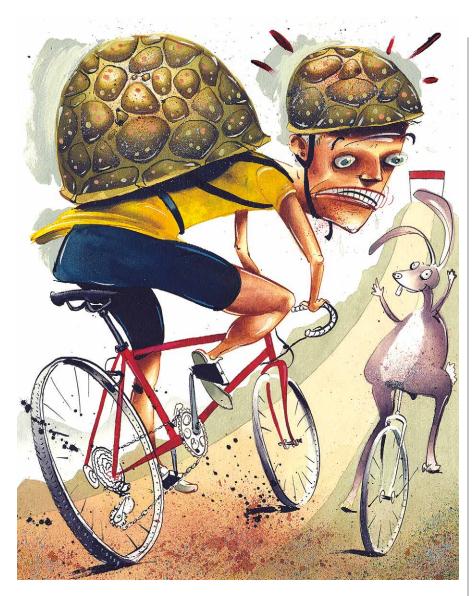
By studying the concentrations of kynurenine and arginine, researchers found they could distinguish COVID-19 patients from healthy participants and other critically ill patients with 98 per cent accuracy.

Researchers also discovered that concentrations of creatinine and arginine metabolites could help predict which critically ill COVID-19 patients were most at risk of dying. When measured on a patient's first and third day in intensive care, these metabolites predicted COVID-19-associated death with 100 per cent accuracy.

The team suspects that those metabolites depleted by the virus could be delivered to patients as dietary supplements, acting as a secondary therapy that could improve disease outcomes.-MICHAEL BROWN

> continuing education

Learning doesn't end when you accept your degree. We are all lifelong learners, whether we pursue lessons in a class or a lecture hall—or these lessons pursue us. **Curtis Gillespie**, '85 BA(Spec), reflects on the continuing opportunities for education that life throws our way, sometimes when we least expect them.



The Daily Grind

MAYBE 'CONTINUING EDUCATION' IS ALL ABOUT FIGHTING THAT URGE TO QUIT AND OPTING TO ENJOY THE PROCESS

ometimes a life philosophy is clear and logical. When it works, you feel it, you live it, you can describe it and, just as importantly as you get older, you remember it. But sometimes that philosophy is a hairball you pull from the shower drain in your kids' bathroom. There's no point trying to untangle it because, even if you could, the only thing you'd get out of it is a different kind of mess.

So rather than trying to unravel a hairball for you, I'm going to share some recent observations and hope they add up to a column. Hey, this is continuing education,

not applied math. Nobody said the edges have to line up. Although now that we're on this line of inquiry, I do wonder why it's called continuing education? That term implies there's a customary point at which we discontinue learning. What has always struck me about the phrase is that not only can we potentially learn new things in life—a skill, a talent, a love — but we continue to uncover new insights into things we thought we already knew. This might explain why I feel as if I'm still an apprentice, while friends in other careers are thinking about retiring. I feel like I'm just starting to figure this gig out! Does that mean I'm open to new experience and insight or a bit slow on the uptake? Or both?

But let me tell you about something I've been doing for five decades, and that I continue to rediscover: cycling. Is there anything more wonderful? Our COVID-19 days, awful as they've been, have nevertheless sparked a cycling renaissance. My friend Cliff, who owns and operates a bicycle sales and service shop in Edmonton, tells me that 2020 has possibly been the busiest summer in the store's two-plus decades. Why? Simple. Because there is nothing more perfect than cycling, and being forced outside is helping people remember that. You get to explore your landscape under your own power. And look at the machine. A design so elegant, so suited to its purpose, that the bicycle's essential structure has not changed since its invention roughly two centuries ago. At times cycling can be hard, exhilarating or relaxing. For me, cycling is at its most poetic when I lightly freewheel down a very slight decline, maybe a one per cent grade, and the effort feels effortless.

I was pondering both of these things—the beauty of cycling and the question of whether I'd continued learning through my life experiences—while I was mid-climb up the steepest section of Apex Mountain near Penticton in the summer. I was there on holidays with my family. Our friends Rich and Charlotte joined us, and I set out with them one day to ride Apex,



by Curtis Gillespie

a climb of almost 30 kilometres, most of the last 10 of which are at a 10 per cent or better grade. It is a genuinely punishing ride. *Canadian Cycling* magazine once deemed it worthy of the Tour de France.

We were a third of the way up the hardest section, about seven kilometres from the summit, when I had a sudden urge to quit—though it wasn't truly sudden, in that it built the same way you feel pain increase in a muscle before it tears. My psyche had been under strain for an hour or so prior to that moment. A climb like this is a massive physical effort, a brawl between weight, fitness and gravity with your brain as the referee. And if you weigh a bit too much (ahem), it's often not a fair fight. I could see Rich and Charlotte trundling away ahead when I started to think things like: You've already been climbing for a couple of hours, surely that's enough of a workout. I'm on holidays, not at boot camp. If pain is weakness leaving the body then I'm happy being weak. Did I just see Pierre Elliott Trudeau in the woods, or am I hallucinating?

But then I did something that I have since attributed to an aspect of character.

I put my head down. I started grinding. I started telling myself different things, hopefully not too loudly. Just turn the pedals, the top is coming. At one point, I was so zoned in that I cycled past Rich and Charlotte, who had stopped to get some water and wait for me, though the word "past" implies a speed that was non-existent.

This is not a standard tortoise-and-hare fable, so the metaphor isn't quite as obvious as you might think. Anyway, if tortoise-and-hare lessons were that obvious, we'd all apply them, but we don't. This is why the crash diet to lose 10 pounds in two weeks is more popular than trying to lose 10 pounds over two years. It's why get-rich-quick schemes proliferate and Ponzi schemes always find another sucker. It's why we fetishize love at first sight instead of attributing true value to building a relationship over time.

The insight I gained from the metaphor wasn't that I'd managed to

overcome my doubts and climb Apex by just grinding it out, putting my head down and pedalling, even if the pedals were turning so slowly at times I nearly toppled over from the lack of forward momentum. No, the insight came later, after a couple of craft ales and a nice meal. It hit me that what I did that day on Apex was more or less how I've got through life. I put my head down and don't stop until I get somewhere, even if it takes forever and doesn't look at all impressive while I'm in the middle of it.

Just about every good thing in my life has been the result of application over talent, including most of my relationships. When I write, it's slow, tedious and painful. And rewarding. When I work out and play sports, it's usually slow, tedious and unexciting. When I cook, I like to let things simmer for hours. Even when making a cocktail, fussing over detail and belabouring the process somehow always seems the right way to do it. I recently fixed my mum's old Pfaff sewing machine. I had to take the whole thing apart to figure out that the motor pulley needed replacing. I had to order the part from Germany. It took many hours and I loved every single minute of it. I've been working on a new book for years and it's basically done, but I don't want to let go of it because I like working on it. I guess I might as well just admit it—I'm a plodder, a grinder, a tortoise.

There is a school of thought that society's great ideas and achievements have emanated from a creator's intense burst of energy and focus. It's a theory that partly explains our love of the young genius, the phenom. The younger and more talented, the more our awe and amazement. But is it really the greater achievement? It makes me think about the connection between talent and perseverance.

When I was in university, a friend of mine was the star of stars. There wasn't anything he wasn't good at. He got brilliant marks and played on a couple of varsity athletic teams. He was an excellent amateur musician. He could

write and cook. He was handsome and witty. You'd think I'd have avoided him for fear of developing an inferiority complex, but he was also fun and generous.

But here's the thing: he never became prime minister or a rock star or a famous athlete or a brain surgeon, all of which might have been foretold by the early promise of his embarrassment of riches.

I have often wondered why, always reaching the conclusion that he was simply so gifted he never had to work that hard to win a race. Maybe he was just so good at everything he preferred not to focus on one thing. Musician, academic, athlete: it was like he didn't want to choose between them, so he never had to put his head down and grind for a result.

I, on the other hand, knew all about grinding. It was all I had. When I left high school, I was short, round, spotty, unathletic, had barely scraped into university, couldn't play an instrument, thought cuisine meant ketchup with my Kraft Dinner and believed Hogan's Heroes to be high art (actually, I kind of still do). I was, to put it kindly, late developing into my career. I'm not suggesting that what I do is more or less valuable than other occupations, but I know for certain that wherever I am in life and career, it has been the result of grinding it out. It has taken an Apex climb nearly every day to put my head down and hope something good happens.

But, as I said, this isn't a true tortoise-and-hare story. Because I eventually got to the top of Apex, turned the bike around and, man, did I fly! The bliss of downhill freewheeling kicked in and I loved it all the more because it was the grinding that got me up there. I knew I'd get to the bottom soon enough and have to start grinding all over again, but for a while I just pointed the bike downhill and let gravity be my friend for a change.

Curtis Gillespie has written five books and earned seven National Magazine Awards. His New Trail article "A Hard Walk" won gold for best article of 2018 from CASE, an international post-secondary association.

Patricia Makokis, 79 BEd, has devoted her life to building bridges between Indigenous and non-Indigenous cultures. She guides us as we walk through some difficult spaces together and learn what it means to say we're all treaty people.



by Patricia Makokis

Understanding Treaties Is Essential to Understanding

INDIGENOUS PEOPLES AGREED TO SHARE THE LAND—WITH CONDITIONS. IT'S IMPORTANT THAT WE LEARN AND TALK ABOUT WHAT THAT MEANS

oth my husband and I grew up in families that hunted wild game, mainly moose, for our primary meat source. So, it is no surprise that our children grew up hunting and eating wild game. Now our six-year-old grandson is learning the importance of our interconnectedness to our four-legged relative, the moose, and to the land.

This fall, my husband was out hunting by himself. I worried from the moment he left until the time he returned. Why? I thought about Jacob Sansom and his uncle Maurice Cardinal, Métis-Cree hunters who were found shot to death beside their vehicle while out hunting in March near Glendon, Alta. Two men from the area have each been charged with two counts of second-degree murder. Sansom and Cardinal, like my husband, were exercising their constitutionally recognized right to hunt for food.

So when my husband, Eugene, left that afternoon, I worried. When he returned, he told me that while he was hunting, a farmer approached and asked him what he was doing there, that his cows were grazing on that land. My husband replied that it was Crown land, his ancestors' traditional territory, where they have hunted for generations. "I am not here hunting your cows. I am here hunting moose, and I have a treaty right to hunt."

I should not fear for my husband's safety when he hunts for food. I don't want to worry about the racism my grandson will endure if we fail to pave a better path.

I get frustrated sometimes that too many Canadians still don't understand First Nations' treaty rights. At contact, our ancestors welcomed our white relatives and agreed to share the land—with conditions. Those conditions, negotiated with the Crown, include the constitutionally recognized right to access the land for food, as well as many other entitlements such as a right to education and health care. These rights have been reaffirmed many times by the courts. In other words, we *all*—Indigenous and non-Indigenous—have a responsibility for treaty relationships.

In the Indigenous world view, we do not own the land. We are stewards of the land, our Mother Earth. How can we own our Mother? Rather, we respect and protect our Mother. That same respect is offered to our four-legged relative, the moose. If we kill a moose for food, we offer tobacco to its spirit because we believe it gave up its life so we have life, in the cycle of life. My husband and I are teaching our grandson about this spiritual connection and responsibility so he will have the same respect for the land, the animals, the fish, the insects and the waters, just as our ancestors taught us to respect the land and our other relatives.

Many years ago, I started to participate in our annual summertime fasting ceremonies. Led by Elders, we go out on the land without food and water for four days and four nights to sit quietly, by ourselves, away from the hustle and the bustle of life. It is a time of introspection and appreciation for what is really important: our collective need for land and water, and how we must respect and protect them for our children, who are the future.

Which brings me to another story. (Having learned from Elders, I know story is a powerful means of sharing life experiences and lessons.) A few years ago, I facilitated a talking circle about truth and reconciliation with a group of retired U of A professors.

I spoke about the importance of the land and our collective relationship to the land. As we moved into a round of conversation, one man said: "I need to go back and talk to my grandson. I told him we left the land to move to urban centres. But I was wrong." The discussion had helped him see we are all "of the land" and need to rekindle that individual connection toward our collective relationship to the land.

That Indigenous world view—our interconnectedness to each other as human beings and our collective connectedness to the land—is often misunderstood or not recognized. This contributes to ongoing racism, marginalization and oppression.

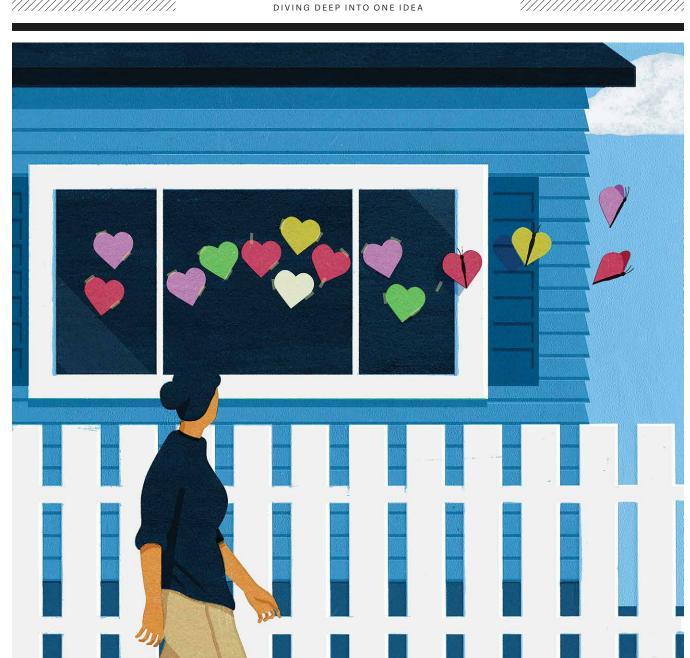
This fall, Treaty 8 Grand Chief Arthur Noskey, whose treaty area includes parts of Alberta, B.C., Saskatchewan and N.W.T., told *The Star* that a lot of resentment toward First Nations could be eased if Canadians understood history beyond a European perspective, including what the treaties mean. He was speaking in light of the fisheries dispute in Nova Scotia and leaked recommendations suggesting lessons about residential schools be removed from Alberta's kindergarten-to-Grade 4 curriculum.

It is important that non-Indigenous Canadians learn about Indigenous Peoples' history and rights, and counter continued attempts to erase them. I encourage you—your organizations, your church groups, your chambers of commerce—to become educated. Read books, take online courses, watch TED Talks, build personal and professional relationships with Indigenous communities and organizations. Ask yourselves how you can implement the 94 calls to action outlined by the Truth and Reconciliation Commission (trc.ca).

We all have a responsibility to educate ourselves for this relationship to be balanced, to the benefit of all of us. ■

Patricia Makokis has a doctorate in education. As an educator and consultant, she considers herself a servant leader, working for the people. She is co-producer of two educational documentaries: Treaty Talk: Sharing the River of Life and Treaty Walk: A Journey for Common Ground. She lives on the Saddle Lake Cree Nation.

ILLUSTRATION BY PETE RYAN



Constant Change

Sometimes a lifetime is too short to notice it. Other times, it happens in a blink. But in change, there is certainty PICTURES FROM A LIFE LURCH FROM EVENT TO EVENT: birthday, graduation, that day at the beach two years ago, that time you broke your ankle playing ultimate. But truthfully, we don't snap from one moment to the next. Change spools out continuously, our hair grows and our cells live and die, and the very planet beneath us sighs and shifts. It's how we prepare for and cope with change that matters. ■



Change Happens

We cause it, embrace it and suffer it, by turns. But we can't avoid it, so we best get ready

CHANGE CAN TAKE PLACE

slowly, nearly imperceptibly, or it can come all at once. If living through a pandemic has taught us anything, it's that the pace of change and how we cope with it matter.

The Pacific Northwest, from Mendocino, Calif., through Vancouver Island, is a green and lovely landscape. There, in our millions, we settled and built over the course of generations, thinking the area was exempt from the worst of the seismic upheaval that characterized the rest of the Pacific Ring of Fire. But it turns out that violent change is a fundamental feature of the landscape.

In the 1980s, scientists discovered that the whole of written history in the Pacific Northwest has happened in a quiescent period *between* major quakes, along a line called the Cascadia

subduction zone. There were signs. Oral history from Indigenous communities records a generations-ago earthquake, followed by a great wave that drowned whole communities. Written history in Japan documents an unexplained tsunami, unheralded by any Asian quake. And natural history reveals coastal "ghost forests" once thriving but suddenly swamped and drowned, the trees' death practically timestamped in the growth rings of the stumps that remain.

This research, pieced together in the 1980s, finally identified a 9-plus magnitude quake that hit the Pacific Northwest coast on Jan. 26, 1700, says Claire Currie, professor of geophysics in the Faculty of Science. That quake was followed by a tsunami that swept away villages in the area and hours later reached Japan.

People struggle with change, but the pace of it is the real challenge. It's either too slow or too fast. Like fruit flies, we are born, live and die knowing nothing aside from this season. How do we solve a problem we can't see coming? Well, research, for one.

Currie explains that study into sediments in the Pacific Northwest provides evidence that violent seismic changes have happened there over and over, and we're due for another. "Based on the history, the entire margin ruptures about once every 500 years, but there's variability," Currie says. "It has happened as little as 200 years and as many as about 800 years apart."

Now that we know it's coming, people have begun building and retrofitting public structures like schools, hospitals and bridges with more stringent earthquake protocols. Research has created new seismic detection techniques, Currie says, that reveal new features of the tectonic plate boundaries and the effects of local geology on ground shaking.

Every such discovery aids in a better understanding and hopefully better mitigation.

And we create change as well as predict and endure it. With our sheer numbers and our technology, we've altered habitat with farming and settlement. and released toxins into the air and water, accelerating the pace of climate change. Our developments create incursions into wild habitats, increasing our exposure to zoonotic disease. When we lived in small groups and travelled slowly, a disease suffered by one was unlikely to affect others further afield. But now we're chockablock and a virus can make it from anywhere to your town at the speed of air travel.

The good news is that we are problem-solvers, adapting to cope. We deploy teams of researchers to find answers where we don't even fully understand the questions, as in the case of hepatitis C. The 1989 discovery of this killer virus has led to treatments and eased the burden of disease, saving millions of lives. This is the reward of basic research. The discovery of the virus by the U of A's Michael Houghton and his colleagues won a Nobel Prize this year (see page 6) and his imminent vaccine holds further promise.

Of course, hepatitis C is not the virus we've been hearing about lately, and Houghton's lab, which also developed a vaccine for SARS before that 2003 epidemic died out, is working on COVID-19 now, too.

Vaccines and treatments will ameliorate the jarring societal changes we're experiencing due to the coronavirus. And research might even arrest the next pandemic.

"But why does this pandemic even exist?" asks **Don Tapscott**, '78 MEd, '01 LLD (Honorary), a business strategist and executive chairman of the Blockchain Research Institute. He says we have the technology right now that could have given us early warning.

Imagine if there were a global public health system that alerted authorities that residents in a couple of neighbourhoods in Wuhan, China, were coughing and spiking fevers, or that their oxygen saturation was lower than normal? "If we had the data, we could've stopped it, but there were no early warning systems and our health-care data is all tied up in silos," Tapscott says. It's possible to gather real-time health data with

"Based on the history, the entire margin ruptures about once every 500 years, but there's variability. It has happened as little as 200 and as many as about 800 years apart."

Claire Currie Professor of Geophysics in the Faculty of Science, on the certainty of a major earthquake in the Pacific Northwest

wearable technology and to safeguard personal privacy in a blockchain, he says (see page 16), to broadly and deeply monitor public health.

Tapscott describes our personal data as our most important property and, right now, the only ones benefiting from it are giant corporations. Privacy and information once ran counter to each other, he says, but using blockchain, the technology that underlies many digital currencies, we can provide enough anonymized information to protect the interests of public safety.

"Imagine if all that data were available, in an anonymized way, to epidemiologists, clinicians, government planners," Tapscott muses. "You could stop a pandemic in its tracks."

Maybe we'll manage this in time for the next pandemic, because as surely as the Cascadia subduction zone will rupture, another bug will come along. And while our individual capacity to effect positive change or deal with the negative consequences of change is impressive, our collective ability to solve problems is staggering.-MIFI PURVIS, '93 BA



THE FUTURE IS FAMILIAR

The pandemic has altered the way we work—for now

THE WORK WORLD CHANGES, responding to innovation and crisis. The introduction of the assembly line, the Second World War and the advent of the Internet have each bitten into the way we work and spat out something new. And the pandemic seems hungry to leave a mark.

While COVID-19 has drastically altered the way a lot of us work, Trish Reay, '76 Dip(Nu), '81 BA, '91 MBA, '00 PhD, says most of those changes won't stick.

There are a lot of reasons why we should predict that our future looks more like our past," Reay says. Associate dean of research at the Alberta School of Business, she's an expert in organizational change. "My research shows how difficult it is to

make changes over time, even with good reasons."

Take meetings. Many workplaces now conduct them remotely with only a few technical glitches. And, while it's going pretty well, the more we Zoom, the more we realize this kind of meeting doesn't always work. "We're losing some richness in conversations," she says.

She suspects we'll return to in-person meetings for occasions where innovation and solving problems are the goals, while meetings aimed at sharing information with a lot of people could continue online.

Although day-to-day work activities will likely be rooted in the past, entrepreneurial thinking will continue, Reay says. "The change of conditions has ruined a number of startups around in-person activities," she says. Think tour businesses, beauty services—anything requiring patrons to be less than two metres apart. "At the same time, it's opening windows for others." Entrepreneurs are asking "What do people need now? And how do we deliver that?"

Though we'll rely largely on conventional ways of work, the pandemic may leave a few teeth marks behind.-LISA SZABO, '16 BA



Better With Blockchain

Could this 12-year-old technology put the ownership of our personal data back where it belongs?

LIKE THE PRINTING PRESS, digital technology enables information to be easily copied and shared. But that characteristic has drawbacks. As any musician could tell you, it has the effect of devaluing digital assets.

But there is a 12-year-old technology that turns digital assets into something impossible to replicate and that belongs to a single assigned owner, just like a physical asset. It's called blockchain, and it might wind up changing the way you move money and safeguard your information.

Its promise lies in making your information and digital valuables more like physical riches—portable and trustworthy, like a \$5 bill. Blockchain enables individuals and companies to interact with each other directly. It has the potential to spread the benefits of the digital economy more evenly than before, according to **Don Tapscott**, '78 MEd, '01 LLD (Honorary), a business strategist and executive chairman of the Blockchain Research Institute.

"It removes the need for intermediaries, like banks and credit card companies," Tapscott says. "Instead

"Our data is being captured by these digital conglomerates and governments. They're getting rich from our data."

Don Tapscott Executive Chairman, Blockchain Research Institute

of a bank account, you can hold your money in a thumb drive or a digital wallet in the cloud." That lowers barriers to participation in the economy (having no bank account, or holding tenuous title to one's land) and returns control of personal data to individuals. Instead of Amazon and Facebook monetizing your personal data, you could hold it yourself and dole it out stingily.

How It Works

At its heart, blockchain is a "distributed ledger" technology. It resides on many computers interacting peer to peer, with no one in charge. The technology was built to support a cryptocurrency called bitcoin.

Imagine you want to buy a widget from a vendor. You don't send your money to a bank, which sends it to the vendor; you deal directly with the vendor. You post your transaction. It is validated and grouped with other transactions that have been posted and validated during a 10-minute span surrounding the posting. The group is recorded in a block (just a bundle of data) and is assigned a unique code called a hash. The block also contains the hash of the previous block, which contains the hash of the previous block, kind of like links in a chain. This is what makes a chain of blocks so secure and immutable; tampering with the data in the block that records your widget purchase would require altering every block, on millions of computers—all but impossible!

Users called miners support the system by solving problems to validate each block, every 10 minutes, earning them digital currency for each one they validate. But you don't have to be a miner, or a widget buyer, to use blockchain technology.

Other Uses

▶ Other digital assets Some musicians, such as Pitbull, are experimenting with

blockchain to sell their music. It means the proceeds go to them, rather than the streaming service and record label. Any digitized intellectual property can theoretically be shared in limited quantities by the creator, on their own terms, using blockchain: music, images, books, inventions, scientific discoveries.

- ▶ Smart contracts Blockchain has already been used as a way to record transactions involving tangible items such as food (to trace potential contamination), diamonds (to ensure conflict-free provenance) and real estate.
- ▶ Personal data Blockchain could let individuals keep their own data (e.g., medical records and personal data) and only give out as much as is required for the transaction at hand. "If we don't control our data—which we create from our bodies, our behaviour, our transactions—then our data is being captured by these digital conglomerates and governments," Tapscott says. "They're getting rich from our data."
- ▶ One-time uses Using blockchain, an organization or government could give people an entitlement that can be used only once, such as a vote in an election.

Risks and Limitations

- ▶ **Scalability** Blockchains on the bitcoin network currently require computers to record and rule on every transaction. That's a hugely redundant use of computing power and limits the speed at which transactions close. One potential solution is "sharding," whereby the work of recording each transaction is partitioned out to a smaller subset of computers.
- ► **Hacks** Blockchain's greatest advantage may be relative security, but no digital network is unhackable, as some cryptocurrency holders have discovered. The software apps used on top of blockchain architecture are even more vulnerable. You also have to wonder how a network designed in 2008 will hold up years hence.-MICHAEL MCCULLOUGH

The Business of **Social Change**

We're in the midst of major social upheaval, and leaders at our trusted institutions and businesses are trying to keep up, coping with change in uncharted territory. It's hard to know what to do next if there isn't a "grizzled elder" on staff who has led an organization through pandemic, polarization and protest. Marvin Washington gets institutional change. He's associate dean of the Department of Strategy, Entrepreneurship and Management in the Alberta School of Business. But even with the business management strategies he has acquired, Washington views change management in conventional adjectives. "Change is difficult, change is messy, change is emotional," he says. He has some advice on how to lead through it.

EMBRACE THE MESSINESS

Social change brings new data, which can be used to test what leaders truly value. "We have assumptions about how the world works, until new data comes in," he says. "This is what the murder of George Floyd did, brought new data into the conversation." That data—the facts, circumstances and brutality of Floyd's murder—brought a public reckoning and challenged assumptions.

BE PATIENT

Washington has simple advice for leaders: it's OK to make mistakes. Though our leaders may be willing to address racism in their organizations, their understanding of the world is based on these same institutions. "Well-meaning people are going to trip up."

KNOW WHO'S DOING THE HEAVY LIFTING

Patience doesn't minimize all the work carried out by racialized communities. Washington says the hardest change takes time. He cites the 1955-56 Montgomery, Ala., bus boycott, which went on for a year and resulted in the end of segregation on the city's transit.

LEAD BY LISTENING

Institutions can listen to the people who are most affected. If Black Lives Matter showed anything, Washington says, "it was to say 'hopefully you will listen when we tell you we have different outcomes' and if you honour that, listening may lead to walking alongside."-KHADRA AHMED

ON BEING AFRAID

How existential threats change our behaviour

DEATH IS THE WORM AT THE CORE OF EXISTENCE. Situations that remind us of our vulnerability, such as this pandemic, can take a toll on our well-being and change the way we behave. In the time of COVID-19, I see behaviours through the lens of an area of social psychology called terror management theory, which looks at how we manage the unpredictability of death weighed against self-preservation. Anxieties about death influence human behaviour in different ways. Changes in behaviour can be helpful or harmful. Which of the following categories have you fallen into?

▶ WE SEEK TO EXTEND OUR LIVES

Some reactions are logical—we act to improve our health and safety. We wash our hands, eat healthy food, wear a mask, exercise and try to get a decent night's sleep. But, using these strategies requires financial access to them as well as the belief that they will be effective, and some of us fall prey to pseudoscience.

► WE LIVE FREE OR DIE

We go about our business and pretend everything is fine: "COVID-19 isn't a big deal." This may help us cope with our own anxieties, but it can put others at risk. For example, we may refuse to wear a mask. In this category we may even change our behaviour to become more reckless, as if death doesn't apply to us—we put ourselves in harm's way. In a pandemic, though, we're also putting others at risk. Some people call this group "covidiots," but it's more accurate to call them terrified: too scared to see that their bodies are mortal.

► WE MAGNIFY INTOLERANCE

We hunker down with our world views because they give us a sense of security in an insecure world. Different world views can seem threatening. As we become less tolerant of them, even our reading comprehension of an opposing view deteriorates, affecting how we engage with media coverage. We might also try to convert others to our way of seeing things.

▶ WE FOCUS ON EACH OTHER

We can practise behaviours that encourage good interpersonal relationships. Healthy group identifications are a positive way to respond to the worm at the core of existence. Coming together in our communities, even virtually, grounds us. Being part of something larger gives us a sense of what came before us and what might endure after. Social bonds and caring for others give us a stable sense of self-worth.

► THE GOOD NEWS

We can shift categories! We can find ways to feel connected to our communities. We can monitor our own emotional responses and help others with theirs. We can become more aware of what we're feeling and why: "The news scares me." By naming a problem and giving it context, we avoid destructive tendencies. This is an opportunity to remind ourselves that we fear death because we love life.—CATHRYN VAN KESSEL, '16 PHD

Hot Take

Menopause symptoms get the research treatment

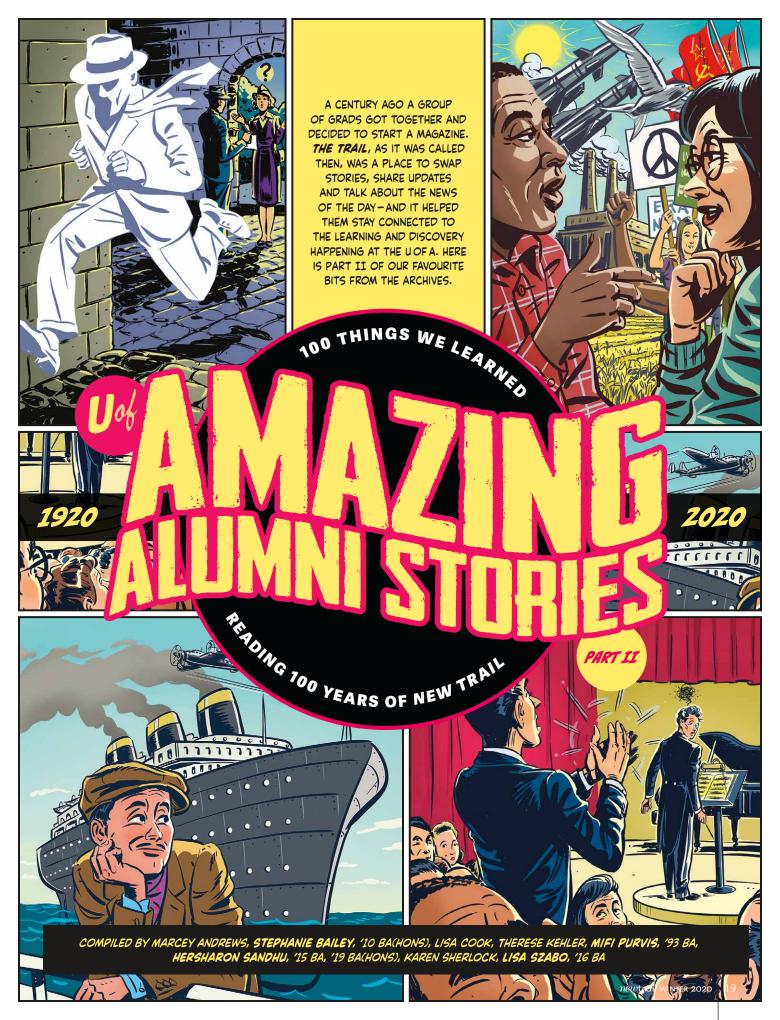
THE WOMEN SEEKING TREATMENT at the Mature Women's Health Clinic in the Lois Hole Hospital for Women have a few things in common: debilitating menopause symptoms such as mood disorders, interrupted sleep, hot flashes severe enough to require carrying a change of clothes, and night sweats that soak the sheets in the dead of winter with the windows open.

Such symptoms interfere with women's lives at home and at work, says **Tami Shandro**, '80 BMedSc, '82 MD, a family doctor and member of an interdisciplinary care team that includes two research scientists. "As a team, we're trying to figure out how to improve quality of life for women in that transition," she says.

One of the projects that researchers Sue Ross and Beate Sydora have worked on with Shandro is a questionnaire for patients to identify the frequency and severity of symptoms. Shandro uses the questionnaire to better understand each woman's situation and tailor treatment to relieve symptoms and improve quality of life. For example, estrogen therapy might help hot flashes, but not all symptoms of menopause require estrogen therapy.

The tailored approach might determine a patient with mood disorder, for example, is better served with antidepressants or talk therapy. And research is behind the approach. The most important thing, Shandro says, "is that her life is changed for the better."

The team has published its results to share the benefits with other practitioners treating women whose symptoms affect their quality of life. And it's working, says Ross, who holds the Cavarzan Chair in Mature Women's Health Research at the Lois Hole Hospital for Women. "We've built a relationship where Tami has the clinician know-how and we have the research and publication know-how." In the end, it's the patients who benefit.—DEBBY WALDMAN



WE'RE 100! ... AND COUNTING

BY LISA COOK



elcome to Part II of our centenary celebration.

The first issue of New Trail made its way to alumni back in 1920 and we're celebrating our 100th year the best way we know how: by reading issues of New Trail!

Over the past year, we dived into our archives and surfaced with a slew of fascinating and fun bits from the past century. We packaged these little gems into a list of 100 Things We Learned Reading 100 Years of New Trail and now, in Part II, we share 50 more examples of how grads stayed connected—with each other and with the university.

One major standout as we sorted through 100 years of magazines: the space that *New Trail* has always devoted to university research and discoveries. From the beginning, grads were eager to hear about U of A research, which often had a direct effect on their lives and on the early fortunes of this province. Research that made their roads better, their wheat hardier and their cattle healthier (page 26).

And, of course, New Trail celebrated the U of A's first Nobel connection: **James Collip**, '24 PhD, '26 MD, '46 LLD (Honorary), who played a role in developing synthesized insulin, a discovery that was honoured with the 1923 Nobel Prize in Physiology or Medicine (No. 76).

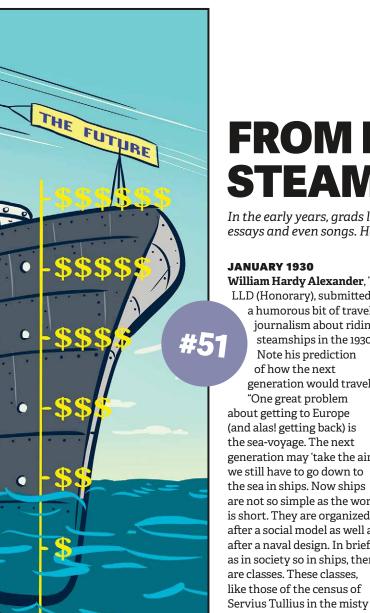
We love the synchronicity of resharing Collip's work at the same time as we celebrate our latest Nobel connection (page 6). Another reminder that while the discoveries might change, the heart of the U of A stays the same.

What a way to kick off the second century of New Trail.■



EARLY INTERNET?

An intercampus teletype link was established in summer 1957. It allowed researchers at the U of A to punch in any numerical problem and transmit it to a supercomputer at the U of T campus, which would do the calculation and teletype the answer back. It saved human mathematicians from labouring over the same calculations. (Summer 1957)



FROM PIGS TO **STEAMSHIPS**

In the early years, grads loved to share poetry, fiction, essays and even songs. Here are few of our favourites.

JANUARY 1930

William Hardy Alexander, '33 LLD (Honorary), submitted a humorous bit of travel journalism about riding steamships in the 1930s. Note his prediction of how the next generation would travel! "One great problem about getting to Europe (and alas! getting back) is the sea-voyage. The next generation may 'take the air'; we still have to go down to the sea in ships. Now ships are not so simple as the word is short. They are organized after a social model as well as after a naval design. In brief, as in society so in ships, there

based not on birth, nor on brains, but on cash. The results are, I think, just about as satisfactory as you could expect with such a basis."

MARCH 1930 52 MARCH 1930 Laurance Yeomans

Cairns, '12 BA, '55 LLD (Honorary), who eventually became a judge and served as chancellor of the U of A from 1958 to 1964, took a crack at rewriting the revised statutes of Alberta in epic poem form. Here is an excerpt from his take on the Exemptions Ordinance. "The things the Sheriff cannot seize / To satisfy a debt are these: / The necessary clothes one wears / Five hundred dollars' worth of chairs / Or pigs, or chickens, or their ilk / Or dairy tools for doping

milk / A six-month stock of things to eat, including dead or living meat." Cairns also managed to poeticize the Fatal Accidents Act but, alas, had to indefinitely postpone the Land Titles Act because his practice became too busy.

MAY 1936 5 The Students' Union had a song. "Green and Gold! Quaecumque Vera! / Guide us through each coming era / Guide us on through battle gory / For the right and greater glory."

JANUARY 1944

The magazine once ran a five-page ode to pigs by Libby Lloyd Elsey, '12 BA—and it was a surprisingly good read! "No matter how tired one may be after a long day's battle with the elements or how weary with pondering man's inhumanity to man, to look in at the pigs, as your good stockman does on a cold winter's night the last thing before retiring, and have

them all look up at you with

interest, is as good a tonic as

was ever discovered. It is as

potent as penicillin."



Quad Almost Looked Very Different

Athabasca Hall—the university's first permanent home, opened in 1911—was to have been torn down by the end of the 1969-70 academic year, followed by Assiniboia and Pembina halls. The plan was deferred. The New Trail guoted W.D. Neal. vice-president of planning and development, "because finances are not available." Athabasca was to be used for academic offices instead of a male graduate student residence. (Summer 1970)



"So this is what the University of Alberta campus looks like—in the year 2025," I remarked to Whiskeyjack. A dense, rank, skunk-cabbage-like undergrowth surrounded us on all sides. Some of the thick, succulent, strong-smelling leaves rose so high that they flopped over on my head.

"And if this is the campus — where's the university?" "Hey you," a voice called out in a tone of outraged warning. "Watch out for those rabbits."

I turned to see an outlandish figure. He had a rifle in the crook of his arm; he was dressed in an ill-fitting suit of brown, coarse felt; he had on a hat of faded felt; and he walked clumsily in felt boots. He was writing in a notebook.

"Where is the university?" I asked him, feeling some embarrassment at the thought of my being a citizen of 1954 and of his being a—well, belonging to 2025.

"It must have been a large one," said the man in felt boots. "The buildings are still standing—they're over in that direction." He pointed with his pencil. He looked me up and down without showing curiosity. "I suppose," he said, "you're the new research people from the south? Well, we're all camped in the main building—we'll be seeing you.

By the way, there's a town here, name of Edmonton—according to the map. But we've not reconnoitred it properly—them beasts have been too thick for us."

"Oh," was all I said.

"I've got a lot of work to do—sorry I can't stop to show you about—the camp's straight ahead. And watch out for the rabbits." He walked off into the undergrowth, his felt boots flopping clumsily.

"Rabbits," I said, "rabbits?"
"Look, look," pointed Whiskeyjack.

I thought at first—when I looked in the direction indicated by Whiskeyjack—that they were prehistoric monsters. But they bounded like rabbits, they were clad in a pelt with some resemblance to rabbit fur, and

they nibbled with cleft palate faces at the giant cabbage. Undoubtedly, they were rabbits—but, rabbits of monstrous size. The larger adults stood at least eight-foot high.

"What are they?" asked Whiskeyjack.

I counted a dozen of them. "They look like rabbits," I hesitated.

"They are rabbits," he said. "And—what do you think of them? Eh?"

I admit I was more than a little nervous—especially when they came bounding towards us with great sickening thuds at the end of each leap. Imagine a herd of cows leaping six or eight feet in the air.

"Not much, at first sight," I told Whiskeyjack.

MAGAZINE IN THE 1940S AND 1950S.

AS WE PORED OVER PAST ISSUES,

THIS SECTION QUICKLY BECAME

A FAVOURITE AND THIS PIECE IN

AUTHOR (IDENTIFIED ONLY AS

PARTICULAR IS A STANDOUT. THE

G.P.) TRAVELS FORWARD TO THE

YEAR 2025 WITH A BIRD NAMED

WHISKEYJACK, WHO SHOWS HIM

WHAT THE FUTURE HAS IN STORE.

IS THIS WHAT PROGRESS LOOKS

LIKE, WONDERS THE AUTHOR?

GIVEN HOW CLOSE G.P. CAME IN

THE PREDICTIONS ABOUT STUDENTS

WATCHING LECTURES ON LAPTOPS

(SEE PART I IN THE AUTUMN 2020

ISSUE), WE WONDER WHETHER WE

FOR "PRAIRIE BACON."

SHOULD START THINKING UP RECIPES

"Do you know this place?" Whiskeyjack asked me. "I believe it's the University of Alberta campus," I said.

He smiled. "It was—in the year 1954; and it still was, in the year 2000. "But," he said, pausing, "what is it now—in the year 2025?"

"Where is the university?" I asked.

"There isn't one," Whiskeyjack told me. "There is no Edmonton, either. And no Calgary, no Saskatoon, no Winnipeg. There is no Canadian prairie. And no American prairie, either. The whole interior of the continent has been evacuated. It is merely a rabbit-infested wilderness of rabbit-grass. And the rabbits are eight-foot high."

"Well," I said—it was all I could say.

22 | ualberta.ca/newtrail

"It's not very well."

"Are they dangerous?" I asked.

"They are not carnivorous," Whiskeyjack said. I thought, however, of our acquaintance in felt boots—he was carrying a rifle.

"At least," I said, "these eight-foot rabbits must have enormous economic significance."

Whiskeyjack whistled lightly. "You think they're an economic blessing then," he said mockingly. "Fur?—Meat?—Fertilizer? Eh?"

"Well, aren't they?"

"Others thought so too, at first. But," he told me, "the fur is used for an inferior cloth which no one has a good word for. And the meat — the meat is edible, but not palatable. No one in this age regards them as anything but a curse. Rabbit meat is consumed everywhere. But no one admits to eating rabbit. It is served as Canada beef, or prairie bacon, or American lamb."

"Whiskeyjack—tell me about these rabbits," I said.

"They are progress," he said.

"How did they happen?"

"Technological progress backfired on us—a biological experiment got out of control," said Whiskeyjack. "Now they are gradually spreading over the face of the Earth—wherever rabbit grass will grow, there you will find rabbits. And rabbit grass will grow where anything will grow. Civilization is being squeezed back to the seacoasts."

"Can't measures be taken?" I asked.

"Experiments in genetic mutations produced the rabbits. Why, say some authorities, can't similar experiments conjure up some rabbit enemy. But," said Whiskeyjack, "other authorities are afraid that a plague of giant wolves could be worse or at least as bad as a plague of giant rabbits."

"Why don't they hunt them down?"

"Ah—but there's no ammunition. It is in such short supply that the bow and arrow is reviving. Moreover, the rabbits do provide cheap food and clothing. There are good political reasons for not getting rid of them completely. In any case, shells and rifles are hard to come by."

"Why aren't more shells and rifles produced?"

"Just think," said Whiskeyjack, "the manufacturing areas are limited to the seacoasts, Commissions are always being set up to study the problem. No doubt our friend in the felt boots belongs to some commission to study the rabbit problem. In the meantime, the rabbit multiplies."

I wanted to question Whiskeyjack further—but the day was growing on. We had to think of getting back to 1954.

"Going backward in time," Whiskeyjack warned me, "will be less pleasant than going forward."

We broke the time barrier in reverse. I did experience a greater degree of mental blackout than I had experienced the other way. But after some minutes my head cleared, and I found myself looking at the familiar campus of 1954. The sight of the familiar red-brick buildings filled me with a sense of pleasant relief.

"And there," I called out to Whiskeyjack, "is a lawn mower." After the dwarf grass of the year 2000, and the terrifying rabbit-grass of the year 2025, the familiar shape of a lawn mower and its put-put-putter filled me with joy. "Praise be," I said, "for the lawn mower of 1954."



Don't Miss Your Reunion

One of the first class reunions recorded in *The Trail* took place in 1922 for the class of 1912 at the Hotel Macdonald. It was an informal affair, where clippings from The Gateway were read aloud as entertainment. The group also discussed a classmate who was difficult to locate. They reportedly hired a detective to find him, with no success. Plan B? Put out adverts in major newspapers across the United States and Canada notifying Mr. White that "unless he reports to a member of the class within 15 days, a poem entitled 'Pinky White' will be written" and widely circulated. We are not entirely sure this was a joke. Our research leads us to believe that the fellow in question is Julius G. White, '12 BA, though we never did learn whether his classmates tracked him down. (July 1922)



ILLUSTRATION BY JONATHAN CARLSON newtrail winter 2020 | 23

PART OF THE CONVERSATIONS OF THE DAY

Today's answers were yesterday's conversations. Wherever there was a timely topic, grads were thinking about it! Jump into the middle of these era-defining conversations.

1940s

THE ADVENT OF THE ATOMIC AGE

The Editor belongs to that generation that was catapulted out of the horse-and-buggy age into the tragic century, world war, and embitterment. To men of this generation it is as natural to dread the future as it is for Russia to suspect the democracies—and with equal reason. Nevertheless, if the gates of a new and decent world have not at last been pried ajar, if we are doomed to further futility and waste and slaughter, oh, then, Heaven mocks itself. Hope is a form of prayer; and the universal hope of the common man is peace and order. Surely the God who loves the common man—He made so many of us!—cannot resist that universal appeal. He will raise up leaders to free us even from the bondage of our past."-F.M. Salter (April 1946)

1950s

THE POSTWAR STATUS OF WOMEN

"Is a university education of any value to a woman? A group of university women in Calgary voted that it is not, after hearing a debate by four members of the University Women's Club.

"Mrs. J. Lorne Baxter argued, 'the only value a woman can achieve from a university education is to free herself from the illusion that she missed something by not going.'

"Mrs. W.J. Koop disagreed. She argued that a university education equips a woman to do various jobs better. She contended that, while 78 per cent of marriages among non-university couples succeed, 91 per cent among graduates are successful." (November-December 1956)

1960s

RAPID SOCIAL CHANGE

"[T]oday's students have other reasons to be skeptical of their future. Not only have they grown up with the constant possibility of nuclear war hanging over their heads, but they also anticipate living in a world in which everyone will be forced to accommodate to a rate of social change that is unpredictable. Young people recognize that overpopulation, technological change and political instability will have major implications in their future life, but are far from certain what these implications will be."-Walter H. Worth, '49 BEd, '52 MEd, '91 LLD (Honorary) (November 1968)



1970s

CONCERNS ABOUT POLLUTION

"In 1968, when the [tern] eggs of the Chip Lake colony were first tested, they averaged 25 parts per million of DDE residue. The next year, probably because of decreased use of DDT in the United States where the terns winter, levels of DDE in the eggs dropped to 7.5 parts per million.

"Only 24 per cent of the eggs from the colony were hatched, however, and fledgling success was only five per cent.

"In 1970, the DDE level dropped again to only 4.5 parts per million, hatching success rose to 42 per cent, and fledgling success rose five-fold to 25 per cent." (May 1972)



FAMINE AND FOOD SCARCITY

"As far as the question of the world's long-term capacity to feed itself is concerned, experts ... are generally agreed that the resources and technology are either available or can be developed to meet foreseeable population needs. For example, it is estimated that, just with the use of existing technology, the Indo-Gangetic Plain alone could feed one billion people. ... Thus, as against a likely stabilized world population of 12 to 15 billion ... the world has the capacity to support at least 36 billion people."-John L. Dillon, at the Nathaniel H. Grace 75th Anniversary Lecture in Agriculture (Spring 1985)





Graphicacy Shapes Our World

This story educated grads on the thinking that goes into the designs that are all around us:

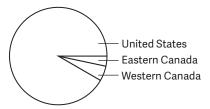
Who would want to read statistics in this form?

Federally inspected beef slaughter 1972, Western Canada 1,751,701. Eastern Canada 1,126,890. United States 32.251.000



But in this form, the figures make much more sense.

Federally inspected beef slaughter 1972



This other mode of communication, which gives immediate meaning to a jumbled set of figures, is called graphicacy. It is rapidly becoming a very important tool of communication. It includes traffic signs, symbols for events or institutions and companies, charts, graphs, plans and other task-oriented symbols as well as pictures and moving images.

The main characteristic of these means of communication is that they depend on a precise form in order to be clearly understood. They have their own grammar and syntax, based on visual perception and psychology, and, like reading and writing, they have to be learned. – Peter Bartl was assistant professor of art and design. He is now a professor emeritus. (October 1974)

PIONEERING WOMEN

Though the U of A admitted women from the start, many of them met challenges as grads because of their sex. The daughter of a 1944 MD grad, Thelma Beller (Miner), '42 BA, '44 MD,

wrote in to say that despite the attitudes toward women in medicine during her mother's studies, Beller went on to get a degree in public health and became the first woman to head the health department for the province of Saskatchewan and then the New York State Health Department. She later worked as a pediatrician in New York City until her death. "I tell you all this because I humbly believe my mother was a pioneer in her own way. ... I'm surprised she spoke well of her alma mater after all that happened to her, but she obviously learned well and used what she learned." (Spring 1983)

MASTHEAD QUIZ

We changed the masthead on our front cover many times over the years. See if you can match each masthead to the year that it appeared. (Answers below.)

• New Trail	
-------------	--

- □ A) 1931
- □ B) 1954
- □ C) 1974
- □ D) 1982



- □ A) 1936
- □ B) 1956
- □ C) 1969
- □ D) 1992



- □ A) 1928
- □ B) 1944 □ C) 1973
- □ D) 1985

#70



- □ A) 1920
- □ B) 1952
- □ C) 1971
- □ D) 2005



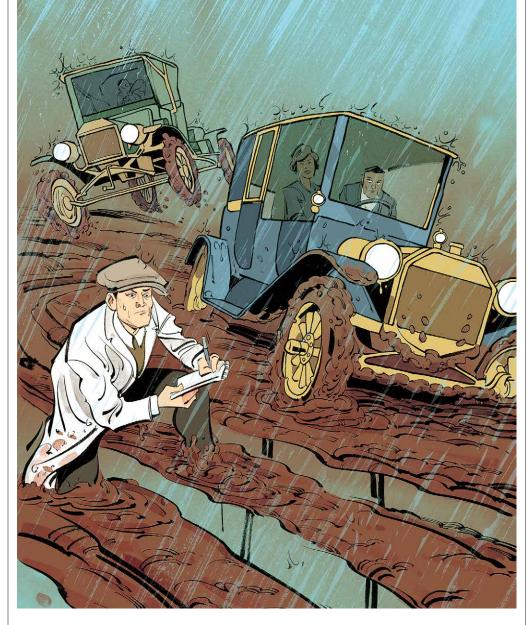
- □ A) 1928
- □ B) 1953 □ C) 1972
- □ D) 2015



- □ A) 1930 □ B) 1946
- □ C) 1969
- □ D) 1995



- □ A) 1936
- □ B) 1942 □ C) 1967
- □ D) 1983



COMPLAINING ABOUT ROADS IS NOTHING NEW

That's just one of the everyday problems researchers have been tackling since the university's earliest years

BY THERESE KEHLER

Road conditions have been

a source of angst for a long time, judging by some of the very first issues of the magazine. And so has the hunt for creative solutions.

In the second issue of *The Trail*, in November 1921, Karl Clark describes the highly unsatisfactory experience of building roads in Alberta (see No. 74) and

his high hopes for a tarry substance called bitumen. Clark—whose research later became instrumental in launching Alberta's oilsands industry—was lured to Alberta from Ontario by the U of A's first president, Henry Marshall Tory, '28 LLD (Honorary). Tory believed so strongly in the role of a university in finding practical

solutions to problems, and boosting economies in the process, that he established a research department at the university. In 1921, that department became Canada's first provincial research council: the Scientific and Industrial Research Council of Alberta (now Alberta Innovates, the province's largest research agency,

which continues to fund research at the university).

"[Tory] became tireless in his advocacy that universities, governments, industrial firms and societies should all realize the great importance of scientific discovery, of practical application of scientific devices, and of general guidance by the scientific method," wrote R.W. Boyle, a pioneer in sonar research and former U of A science dean, who-like many of the university's original researchers—was recruited by Tory himself.

Today, the U of A still attracts researchers at the forefront of their fields and is highly respected in areas such as virology, diabetes, artificial intelligence, agriculture and energy.

Here's a look back at the hot research topics during the magazine's first decade.



ROAD TO THE FUTURE

The Researcher

Karl Clark was a chemist and former head of the federal Road Materials Division. He's widely considered the "father of the oilsands industry."

The Research

In the decade before Clark's arrival in 1920, the number of cars in Alberta had jumped from 400 to 38,000. But roads were inadequate on a good day and downright disastrous when it rained. There were two key problems, Clark wrote in the second issue of The Trail: a shortage of local gravel and an oversupply of a "very interesting constituent known as 'bentonite'" that swelled when wet, transforming the "firm, stable, earth road surface into slippery, impassable mud." Clark looked into the sticky bituminous sands found in

the province's north, which the Cree people had used for centuries to build weapons and tools and to waterproof their canoes. Clark's goal was to create a water-resistant paving product by combining the oily sands with the wet, claylike soil. But it was a related side project that had the real impact. In the basement of the campus power plant, he set up a lab to separate the sand from the bitumen, creating a new heavy oil petroleum product that sparked the oilsands industry of today.



HALLMARKS OF HARDY WHEAT

The Researcher

Robert Newton, '50 LLD (Honorary), a Montreal-born First World War veteran and agricultural scientist, was U of A president from 1941 to 1950. He came to the U of A in 1919 as a professor of field husbandry and plant biochemistry and was named head of the field crops department in 1924.

The Research

Golden fields of wheat became gold, quite literally, in the pockets of Alberta farmers and the coffers of the Canadian economy. But time and again in the early 1900s, crops fell victim to drought, disease and pests. In 1924, a *Trail* article noted that Newton was granted \$2,000 from the National Research Council "to continue on his very important studies on the winter hardiness of wheat." He looked for

properties known to successfully get plants through the winter, with an eye to future plant breeding opportunities. He was able to determine a species' expected hardiness based on microscopic analysis of moisture content. His wheat research also looked at drought and rust resistance, as stem rust was a devastating epidemic



THE SCIENCE OF SAVING LIVES

The Researcher

sweeping the Prairies.

James Collip, '24 PhD, '26 MD, '46 LLD (Honorary), was hired in 1915 as a biochemistry professor. While on sabbatical in 1921-22, he joined J.J.R. Macleod, Frederick Banting and Charles Best on a project to develop synthesized insulin. Macleod and Banting won the Nobel Prize in Physiology or Medicine in 1923; Macleod shared his award with Collip.

The Research

Diabetes, caused by the unchecked rising of blood sugar, is one of the first human diseases on record. In the early 1900s, a diagnosis meant death in just a few years. The development of synthesized insulin, to which Collip's work was key, made it possible to treat diabetes by controlling the



ROBB'S FORMULA WAS SUCH A BREAKTHROUGH, THEY CABLED IT TO SIR ERNEST SHACKLETON WHILE THE EXPLORER WAS EN ROUTE TO THE ANTARCTIC.

> metabolism and led to an immediate and significant drop in the mortality rate. "Dr. Collip's work continues to bring recognition," The Trail enthused in February 1924, reporting a \$10,000 award from the Carnegie Trust and a gift of "\$5,000 in cash from Mr. John D. Rockefeller Jr." to provide insulin to patients in need and train doctors in the proper method of employing it. Collip's research at the U of A focused on endocrinology—identifying and isolating hormones of therapeutic value. He produced 77 research papers while at the U of A and isolated the parathyroid hormone, used to treat certain types of hypoparathyroidism.



FUEL FOR FRIGID FLIGHTS

The Researcher

Charles A. Robb of Amherst, N.S., came to the U of A in 1912 and later became the university's first professor of mechanical engineering.

The Research

The end of the First World War ushered in the era of Canada's bush pilot, with flying aces leading the way to the otherwise inaccessible North. However, the relentless cold could freeze an engine solid, rendering the plane immovable and the pilot stuck. In 1923 and '24, The Trail told of an "extensive programme of research" being conducted by Robb, a war veteran. He'd been tasked by the Canadian Air Board to find "ways of starting aeroplanes in cold weather" and to continue experiments

on "the effect of freezing various types of aero-engine radiators." He perfected an "ether preparation" that started a 400-horsepower Liberty-12 motor left outdoors overnight in -37 degree temperatures. It took just seven minutes to start — a huge improvement from the 90 minutes needed a year earlier to start an engine at -5.



FODDER FOR

The Researcher

Robert D. Sinclair, '18 BSc(Ag), was a member of the agriculture faculty's first graduating class and joined its animal husbandry staff in 1923. He was appointed dean in 1942.

The Research

The romantic notion of Alberta's free-range cattle industry died in the early 1900s, along with thousands of animals that starved to death each winter. The need for ranchers to rethink animal nutrition came alongside other industry changes, like a railway that offered year-round access to markets across the continent and new buyers that demanded quality. In a 1924 essay, Sinclair wrote about the university's collaboration with Alberta breeders. Students fed and handled donated steers, then took them to the big cattle shows elsewhere in Canada and the United States, showing the world that Alberta could "compete with any country in the production of meat-producing animals." And U of A researchers were a big part of putting them there. Researchers worked with industry to develop sciencebased nutrition plans to help breeders and feeders ensure top-quality beef and pork. ■

JAMES COLLIP WAS THE FIRST OF THREE PEOPLE CONNECTED TO THE U OF A TO BE INCLUDED IN NOBEL HONOURS (PAGE 7).

ILLUSTRATION BY MARIE BERGERON newtrail winter 2020 | 27

RANDOM QUESTIONS ¹ **ANSWERED**

If you have a question, you can almost always find an answer somewhere at the U of A. In one issue of New Trail, we found answers to questions we didn't even know we had. (Winter 1997)

HOW DOES A HEADACHE REMEDY WORK TO RELIEVE PAIN?

It sounds like an easy question, doesn't it? After all, we have known about Aspirin (ASA) since the beneficial effects of this class of compound were first noted about 250 years ago. But we had no clear idea how it worked, even in the late 1960s when I first taught this area to medical students. In 1971. Sir John Vane, who later received a Nobel Prize for his efforts, showed that ASA blocks the enzyme that generates a group of compounds called the prostaglandins. These compounds sensitize pain receptors. No prostaglandins and—voilà—no perceived pain!

David Cook was a professor of pharmacology. He died in 2009.

IS IT EASIER FOR AN ENGLISH-SPEAKING PERSON TO LEARN GERMAN, OR FOR A GERMAN-SPEAKING PERSON TO LEARN ENGLISH?

German has many more explicit rules, but once those have been mastered, it is relatively easy to develop one's proficiency. English has a less complex system of explicit rules and forms, but acquiring an idiomatic use of the language probably takes somewhat longer. The best way of acquiring either language is, of course, to spend some time in the country where the other language is spoken so that the use of forms and words becomes automatic, second nature, so to say.

Manfred Prokop specialized in applied German linguistics. He is now a professor emeritus.

WHEN IS IT APPROPRIATE TO CLAP DURING A SYMPHONY?

According to modern concert etiquette, it is not really considered appropriate to applaud until the entire symphony has been performed. We want to experience the work as a whole, even though it contains separate movements. When works were performed in the 19th century, individual movements could have been greeted with applause, and if an audience liked a movement enough they might have requested it to be encored or played again. I don't advise this approach at a modern symphony performance as you could easily disturb members of the audience or of the orchestra.

Michael Roeder was a professor of music. He is now a professor emeritus

> EARLIER THIS YEAR, ROEDER GAVE US THIS ADDITION: "WE KNOW THAT AUDIENCES IN PARIS EVEN APPLAUDED AND CHEERED DURING A PERFORMANCE OF MOZART'S NEW 'PARIS' SYMPHONY."

DO CLIMBING PLANTS MOVE UP POLES THE SAME WAY IN THE SOUTHERN HEMISPHERE?

If you go to greenhouses and observe how plants climb, you will discover that some climb to the right while some climb to the left. Obviously, uniform direction of climbing is not fixed by being in the northern hemisphere and it must be a genetic trait, part of the nature of each species.

John Hoddinott, '74 PhD, was professor of biological sciences. He is now professor emeritus.



Grads Pitch In Around the World A grad aided in the 2010 rescue of 33 Chilean miners trapped underground. "Apollo 13 is probably the closest comparison I can make," said **Kevin Neveu**, '82 BSc(MechEng), describing efforts to free the men. He was less than two metres away from the opening of the rescue tunnel when the miners emerged, one at a time, from a specially designed capsule. (Winter 2011)

NUMBERS

WE LOVE OUR NUMBERS. HERE ARE A FEW THAT CAUGHT OUR EYE.

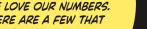
The percentage of a wood frog's tissues that can freeze while allowing the frog to live once it thaws out. (Winter 2018)



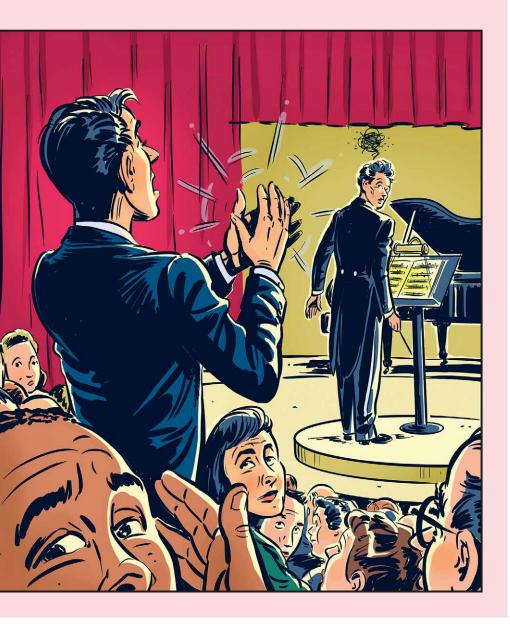
The number of students in the first session of the university. (1920)

700 lb.

The weight of the missing cornerstone, stolen in 1948 from the then-under-construction Rutherford Library. It was an epic prank that rivals the campus "crime" caper from 1926 (see Part I of our series in the Autumn 2020 issue for more on that prank). (Autumn 2008)







We Mark Beginnings and Endings

by co-ordinating the first kidney transplant from a living donor in Canada (and the British Commonwealth). In 1969, he came to the U of A for a newly established transplantation group. Dossetor died on April 6, 2020. Here's the note that appeared in *New Trail*, announcing his arrival at the university. (It seems that we also spelled his name incorrectly in that article, writing it as Dosseter. We are happy for

the chance to correct the error in sharing this excerpt from the original note.)

John Dossetor made history in 1958

This spring the Medical Research Council and the university formally approved the establishment of an MRC group for transplantation research in the Faculty of Medicine.

One and one-quarter million dollars will be made available over a five-year period to support research to be undertaken by a team of scientists under the direction of John B. Dossetor, professor of medicine, and Erwin Diener. ... Dr. Dossetor came to the University of Alberta last year from McGill University; he is Canada's leading authority on kidney transplantation."

85

The "new" Students' Union Building (which predates the iconic one built in the late 1960s) had a men's lounge, women's lounge and "mixed" lounge. (Autumn 1950)



29

16.1



The percentage of women on full-time academic staff based on December 1971 data. Law and Engineering reported no women on full-time academic staff in that period. (October 1973)

202

The number of panels in West and North, the mural on the north side of the Education Centre. (Autumn 1998)



The membership fee to receive New Trail during the Great Depression, lowered from \$2 in the 1920s. (February 1934)





The storey (or maybe it's the half storey?) in the Students' Union Building that once housed the office of the arts and crafts studio manager but is now used for mechanical access. (Spring/Summer 2010)

newtrail winter 2020 \mid

FROM TEACHERS

At the time of the first issue of The Trail, grads fell into the following categories:

- 62 engaged in the profession of teaching
- 33 in law
- 26 doing postgraduate work
- 13 (ladies) are housewives
- 10 in the ministerial profession
- 7 filling clerical posts
- 2 engaged in library work
- 2 in the civil services
- 1 engaged in newspaper work
- 1 practising medicine
- 1 doing YWCA work
- 2 deceased
- 158 no record

Rutherford Robins

One of the benefits of a campus on the river valley: the neighbours are wild! One letter to the editor read: "Dear

Sir. Incontrovertible evidence of the necessity of the Rutherford Library is provided by a pair of robins which have built their nest over the east corner of the main doorway. If housing accommodation is so scarce

that these poor birds are forced to move in before the building is completed. and to bring up a family in the midst of alarms and scaffolding, then we can hardly call the new Library a mere ornament or an idle luxury." (May 1949)



GRADS REALLY WANTED TO HEAR FROM EACH OTHER.

ONE GRAD CREATED THIS CROSSWORD, WHICH CONTAINS INSTRUCTIONS TO HIS FELLOW CLASSMATES. HE GAVE EVERYONE 90 SECONDS TO SOLVE IT. (WE TOOK A LITTLE LONGER.) SEE BELOW FOR THE ANSWER. (JUNE 1934)

Across:

- 1. 'Twas certain he could--- and cipher too.
- 5. Preposition.
- 7. I.
- 8. Answer to 1 down.

Down:

- 1. Timely interrogation.
- 2. Impersonal pronoun.
- 3. ——Thumb.



1		2	3	
	Х	5		Х
	Х	Х	7	
8			Х	Х



CALL US THE TRUE TRAIL

The U of A motto, "Whatsoever things are true," has a lasting resonance. This is one of many times we saw this sentiment in the magazine.

"Freedom to question and express dissent should be fostered, not repressed. This is in harmony with the basic purpose of a university—the search for truth. The only limitation should be the Justinian criterion. which limits the freedom of the individual at the point when that freedom begins to interfere with the freedom of other people."-Walter H. Worth, '49 BEd, '52 MEd, '91 LLD (Honorary) (November 1968)

Down		SS	JC10	1
uəym	Ţ.	ətirw	Ţ.	
Ji	.2	of	.6	
moT	3.	әш	.Γ	
		mou	.8	

		M	0	N
3	M			3
	0	1		Н
3	1	1	В	Μ

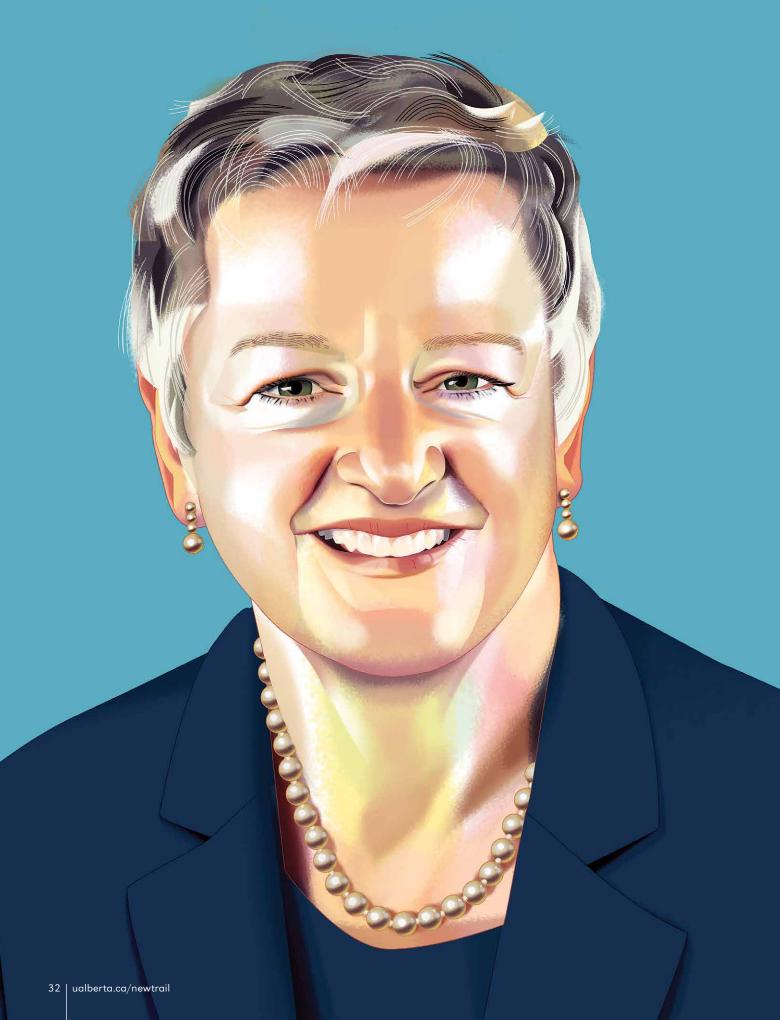
Now more than ever, it's clear. We all have a part to play to keep each other safe, to lift each other up. And this year's Distinguished Alumni Award recipients show us how it's done.

Read the stories of four extraordinary grads who have brought together ideas and people to make the world a more just, humane and intelligible place. For all of us. These grads remind us that we are better together.

By Therese Kehler Illustrations by Nigel Buchanan

From making education more accessible in the North to showing compassion for people living with HIV/AIDS, their achievements show us what's possible when we let a sense of empathy and community lead the way. After all, we're all in this together.

Inspired? Us too. Join us in future issues as we celebrate more incredible alumni award recipients. And watch the virtual awards ceremony in February: uabgrad.ca/Awards.



"She's contributing to a change in relationships with First Nations and a change in the world's perception and understanding of the North."

Geraldine Van Bibber, MLA, Porter Creek North



Karen Barnes, '93 MEd, '03 EdD Former president of Yukon University

FOR BOLSTERING EDUCATION IN THE NORTH

ONE OF THE FIRST LESSONS KAREN BARNES LEARNED when she took a job at Yukon College in 2008 was that the North didn't need assistance to become selfsufficient. It needed tools.

And, as vice-president of academics, she knew education was the key to that tool box.

Three years later, as the college's president, she set an ambitious agenda to create educational opportunities for Yukoners living in Whitehorse and those in remote Indigenous communities.

"If we can allow the North to develop on its own—to achieve its destiny, as some northerners like to say — then it's good for Canada."

HIGHER EDUCATION IN THE NORTH

The first thing on Barnes's to-do list as president turned out also to be her last before retirement in June: transforming the college into a degree-granting university. It was a long road, but Yukon University finally launched in May 2020. Yukon's First Nations leaders had been lobbying for a university for 50 years, and they had taught Barnes the value of northern education. "If you didn't provide education close to home ... much of the population's capacity would not be realized because so many people could not leave."

MINING FOR EDUCATIONAL OPPORTUNITIES

Mining has been Yukon's leading industry since the gold rush, but Barnes was struck by the college's lack of related training and the community's lack of access to industry jobs. "People were really missing out," she says. So, she helped open the university's Centre for Northern Innovation in Mining in 2016. It has a permanent facility in Whitehorse and a semi-trailer packed with mobile classrooms to reach remote communities.

FIRST NATIONS EDUCATION: THE PAST, THE FUTURE

Yukon is home to 11 of Canada's 25 First Nations self-government agreements, a statistic that guided two key curriculum initiatives: a First Nations 101 course and the university's first home-grown degree, a public policy program in Indigenous governance. The degree will train a new generation to guide policy decisions, while Yukon First Nations 101 is a mandatory one-day workshop for university staff and students, RCMP, teachers, social workers, judges and government officials living in the territory. "People walk away with a completely different understanding of something they thought they knew," she says. "It creates this whole new shared understanding that hadn't been there before."

Can't Quit Now

Barnes was set to retire in 2017 when her contract ended. But in 2016, having spent years working on the college-to-university transition and knowing the enormous amount of work that still lay ahead, she gladly extended her contract to see it completed.

Northern Lessons

The political history of Yukon's First Nations and its 11 self-governing agreements had a profound impact on Barnes and shaped the university's focus on self-determination. "It's truly groundbreaking," she says. "It's a story that needs to be shared."

Degrees of Expertise

YukonU's Indigenous governance degree in public policy is one of the institution's most popular offerings. This year, it welcomes students in-person and online from Yukon, N.W.T., Alberta and northern B.C.

Cutting Edge

Climate change was another obvious specialization for YukonU given the North's direct experience of global warming and its impact. "We're right in the front and centre of it."

Came for the Adventure

Moving to Whitehorse was a career opportunity but also a thrill, Barnes says. "Wow," she recalls thinking. "I get to go live in the North for a while." Now retired, she's officially a northerner for good.

"Stan was loved and adored by families during these hard times. ... He was always there with a warm hug, which was vital for people who often felt that no one would want to touch them."

> **Cheryl Arneson**, HIV research nurse co-ordinator, Hospital for Sick Children



Stanley Read, '65 MD Pediatric infectious diseases specialist

FOR STANDING UP FOR THOSE LIVING WITH HIV/AIDS

AS A DOCTOR ON THE FRONT LINES OF A TERRIFYING NEW VIRUS, Stanley Read relied on two things: his training as an infectious diseases specialist and his compassionate instincts.

It was the mid-1980s and the virus, HIV, was leading to countless deaths from AIDS. In scenes familiar to today, scientists raced to create diagnostic tests and treatments while doctors counselled patients on caring for themselves.

As both a research scientist and bedside doctor, Read understands that compassion in medicine is vital. "[Patients] need to trust you. They need to listen to you, to be willing to do what you ask them to do. And that's all part of trust and understanding and the feeling of caring."

His first meeting with a child with HIV—in 1987 at the Hospital for Sick Children in Toronto—inspired him to focus his research on children's health.

Within a year, he had set up the hospital's pediatric HIV clinic and its family-centred care program. In the beginning, before effective treatments were developed, he and his team spent a lot of time "helping children die. And helping families with their dying children," he says. But he also helped children live, implementing new treatment protocols for pregnant HIV-positive women so they could deliver virus-free babies.

Giving back has been a big part of Read's life, whether volunteering at sexually transmitted infection clinics in New York and Toronto or helping establish Canada's first HIV/AIDS hospice. His work with HIV/AIDS took him all over the world—Russia, Ukraine and the Caribbean. Wherever he went, he met his patients with open arms. Literally. He was known for his hugs, which became a powerful message against the stigma shown to people living with HIV/AIDS.

Read, now a senior scientist emeritus at SickKids, knows all too well that the fear and shame surrounding any new virus can be virulent. But a strong sense of community and compassion goes a long way in bringing people together. That's what he learned growing up in tiny Bashaw, Alta. "People talk about 'It takes a community to raise a child' and that's kind of the way I grew up," he says. "The caring and the nurturing of family and the village."

First-Generation University Grad

"I came from a hardworking family that had no education beyond grade school or high school."

Helping Hand

In the early 1980s, Read went to Thailand to work at a refugee camp for Cambodians who had fled civil war in their country. On his return to Canada, he sponsored his Cambodian translator and his wife and child. They lived with Read for 10 years.

Key AIDS Study

There wasn't an AIDS test in 1984 when Read and a colleague started a research project to study how the disease progressed, by tracking the sexual contacts of symptomatic gay men in Toronto. "We had freezers full of stuff that we could go back and look at and study as tests were evolving." It was one of the first natural history studies of HIV/ AIDS, published in 1990.

Song-and-Dance Man?

Read has worked with people all over the world, from Russia to the Bahamas. One collaboration was with a Jamaican youth troupe, the Ashe Company, that created musical performances with a safe-sex message. "I was there to make sure it was scientifically sound, based on evidence and facts," he says.

Beyond Bashaw

In the early 1970s, Read worked at one of the first methadone clinics in New York City. He remembers thinking, "what's a relatively naive person like me, from Bashaw, doing going to work with heroin users in Hell's Kitchen of New York?"





"Through Ron's efforts, vision and leadership, we now understand so much. ... The team he led elucidated four billion years of the continent's history as well as shining a light on the deep structure of Canada from coast to coast to coast."

Paul Smith. UBC professor emeritus



Ron M. Clowes, '64 BSc(Hons), '66 MSc, '69 PhD Earth scientist, former director of Lithoprobe

FOR UNCOVERING A FOUR-**BILLION-YEAR-OLD STORY**

"LITHOPROBE" SOUNDS LIKE SOMETHING you'd find in a Philip K. Dick sci-fi novel, not on a resumé. But then you might not be familiar with the work of Ron M. Clowes.

Lithoprobe was a Canadian Earth sciences megaproject that ran from 1984 to 2005. More than 1,000 scientists worked together to dig up secrets from the Earth's crust and outer mantle (a.k.a. the lithosphere) to better tell the story of how the land mass of northern North America took shape. As its director, Clowes says the aim of the project was simple: "To go backward in time and figure out what was happening to the Earth four billion years ago up until the present."

The project's bragging rights include the discovery of a 2.5-billion-year-old chunk of crust in central Saskatchewan and a new theory of how the Canadian Shield was formed. Many of the findings are now used to help locate resources and help predict and mitigate hazards like earthquakes. Here are some other legacies that still reverberate today.

UNEXPECTED TEAMMATES

Before Lithoprobe, geophysicists and geologists "didn't really talk to each other," says Clowes. Both study the Earth but in different ways. Geologists interpret what they see on the surface by studying the rock itself, while geophysicists use sound waves, magnetism and gravity to peek into the depths that make up the lithosphere. Lithoprobe thrived on the power of collaboration, says Clowes. "We realized that the sum of the individual parts was greater than those individual parts."

MAPPING CANADA'S UNDERGROUND

North of Yellowknife are four-billion-year-old rocks, the oldest on the planet. Rocks near the Juan de Fuca Plate off the coast of the Pacific Northwest are some of Earth's youngest. Over 22 years, researchers used methods like seismic reflection to analyze 10 study areas, from Juan de Fuca in the west to the continental shelf east of Newfoundland and Labrador. In each, a team of researchers explored its structure and how it evolved. The results were stitched together to create a unique cross-section of the continent. Says Clowes: "We have a map of the underground 6,000 kilometres long and 100 kilometres deep."

STILL USED TODAY

With more than 1,500 scientific papers to its name, Lithoprobe has a long list of discoveries that have made an impact today, such as new exploration techniques for mineral resources. Lithoprobe was a model for the Centres of Excellence program, a countrywide effort to bring together researchers from the academic, private and public sectors. The project's geophysical database is archived at the Geological Survey of Canada and is still used by industry. And the hundreds of post-doctoral fellows, post-grad and undergrad students who worked on the project have gone on to make an impact in government, industry and education, says Clowes. "If you were able to talk to many of them, they would tell you that the time they spent in Lithoprobe was one of the best times they ever had."

Adventures From 'Down Under'

In a book called Dancing Elephants and Floating Continents, Clowes helped the author turn Lithoprobe into an adventure story for children. He is also co-author on the adult book Ghost Mountains and Vanished Oceans.

Humble Opinion

The first of Clowes's 21 awards was for a paper in 1966; his most recent was the Queen's Diamond Jubilee Medal in 2012. In between, he has been awarded the prestigious Royal Society of Canada fellowship and the Order of Canada. "What were we doing here amongst all these people who have accomplished so much?" he said on attending the Order of Canada gala.

State of the Art

On his graduate studies: "Of course, we did some fancy data processing. I was using punch cards for the computer."

Hints of Greatness

As a grad student in 1968, his paper about a U of A team's groundbreaking work in seismic reflection was published by Geophysics and named the esteemed journal's best paper of the year. "I thought everything would be downhill from there on in." he later said.

We Had to Know

Clowes pauses for a beat after being asked whether he'd read all 1,500 Lithoprobe papers. "Actually," he says, "I have not."

"Dr. Leeson's contribution to Canadian unity cannot be overstated. At every turn, [he] demonstrated his commitment to Canada. His advice and hard work ... allowed Western Canada, and Saskatchewan in particular, to punch above its weight at the negotiating table."

Roy Romanow, former Saskatchewan premier and intergovernmental affairs minister



Howard Leeson, '72 MA, '83 PhD

Former deputy minister of intergovernmental affairs; professor emeritus

FOR SECURING OUR RIGHTS AND FREEDOMS

WHEN IT COMES TO CANADA'S CONSTITUTION, Howard Leeson hasn't just written books on the subject. He helped write the document itself.

"As a good civil servant, you're behind the scenes," he says. But there's a note of pride as he describes the night in November 1981 when nine premiers dispatched four deputy ministers to a sixth-floor meeting room at Ottawa's Chateau Laurier. As Saskatchewan's first deputy minister of intergovernmental affairs, reporting to then-premier Allan Blakeney, Leeson was among them.

Negotiations had reached an impasse, halted by fundamental disagreements between the prime minister and the premier of Quebec. But in about two hours, Leeson and his colleagues settled on what became the final agreement. With the passing of the landmark document in 1982, Canada was no longer under British rule, and Canadians had new legal protections under the Charter of Rights and Freedoms.

Leeson is still in awe of what was achieved in the face of an ongoing national unity crisis. "There was a huge chance that Canada might have broken up in that period," he says, "but instead it came together around this fundamental document."

Of course, it wasn't (and still isn't) perfect, he says. Quebec didn't sign on in 1982 and subsequent efforts—the Meech Lake and Charlottetown accords—also failed. The formula to amend the Constitution, to Leeson's great disappointment, is a bust. To him, negotiation is too often replaced by court rulings. And while the Constitution did include Indigenous rights, he says much still needs to be done on that front.

"The biggest disappointment? It was how Indigenous rights got sidelined after 1982. It's an unfinished process."

But even with its flaws the Constitution is a powerful protector for us all, Leeson believes. As the high school dropout-turned-University of Regina political science professor emeritus can attest, all Canadians should have the chance to pursue their dreams—and the Constitution makes it our right. "Regardless of your background, if you want to be a musician, if you want to be a politician, whatever you want to be ... there's a guarantee regardless—a Constitutional guarantee," he emphasizes, "that you have the right to try."

High School Dropout

"I took a wrong turn ... but I guess it turned out to be a right turn."

A Winding Road

Leeson joined the Canadian army, then took a job in an appliance repair factory in Nebraska. While working full time, he finished high school and got his first degree. "[It] never occurred to me—all of the worlds that would open up with a university education."

His Advice

"Never think that you are too old to begin the university career and never underestimate the value of a broad education embracing many disciplines."

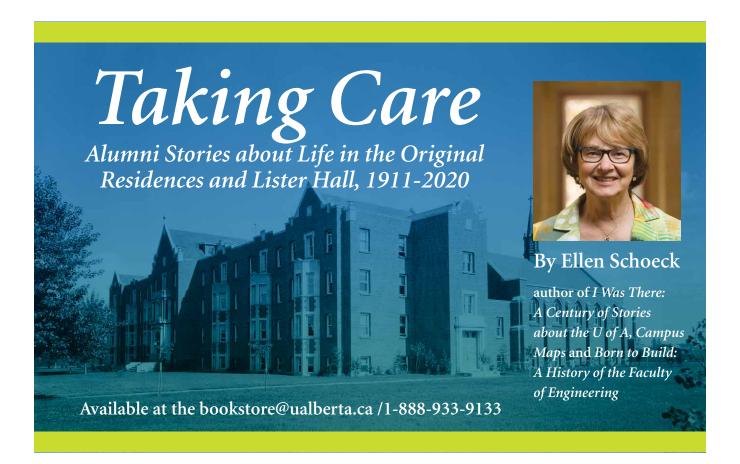
The Patriation Minutes: A Tell-All Tale

Leeson wrote this 2011 book from his notes of the Constitution meetings, including the premiers' private discussions. Former Alberta premier Peter Lougheed, '51 BA, '52 LLB, '86 LLD (Honorary), called it "the most important document made public in Canada."

Realistic but Proud

"To be in love with Canada is not to be blind about it. It's not, 'my country, right or wrong.' But rather, as they say, 'my country, if it's wrong, I'll set it right.'"







Advertise with us

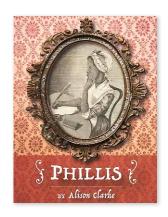
Send your message straight to the minds of U of A alumni around the world — in print and online.

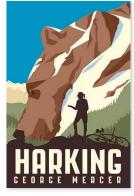


Find our media guide at *uab.ca/NTads*. Email newtrail@ualberta.ca or call 780-248-5726 to book today!



Books









From tales of doomed troll-hunters to tense family dramas, here are the latest books written by grads. Compiled by Kate Black, '16 BA

POETRY

Phillis

by Alison Clarke, '95 BA. University of Calgary Press

This collection celebrates the life of Phillis Wheatley and the impact of her work. Wheatley was the first African-American to publish a book of poetry.



by George Mercer, '94 BSc(Hons), self-published

A young woman's fight to save a family of grizzly bears accused of injuring a mountain biker teaches her hard lessons about love and coming of age.

BUSINESS

Hiring for Fit: A Kev **Leadership Skill**

by Janet Webb, '75 BEd, **Business Expert Press**

Webb's research on the personality traits and attributes of successful hires informs her comprehensive system for hiring the right fit for any role.

CHILDREN'S LITERATURE

If: Ball, Then: Catch by Katherine Schoepp. '13 BSc(MechEng), '16 MSc, illustrated by John R.

Evans, '79 BSc(MechEng), self-published

Young Dot learns the ins and outs of coding while training her new robotic dog.

FANTASY

The Gatewatch

by Joshua Gillingham, '14 BEd, Crowsnest Books

A trio of troll-hunters must escape the Troll King's underworld after being thrown off course by a group of dwarves.



FICTION

Humane

by Anna Marie Sewell, '91 BA(Spec), Stonehouse Publishing

A family in Amiskwaciy is at a loss when a daughter is murdered. Hazel Lesage becomes an unlicensed PI to get to the bottom of it.

The Lighthouse

by Elaine Kozak, '72 BA, self-published

A runaway daughter returns to the family ranch after a mysterious 10-year absence.



MEMOIR

Really, Granddad? by Wayne Sherrard, '77 BSc(ElecEng), self-published

Through 50 upbeat anecdotes from his own life Sherrard documents a mischievous

boyhood and the joy of family in mid-century Canada.

FICTION

The Company We Keep by Frances Itani, '74 BA,

HarperCollins Canada

Six strangers—all wading through their own personal tragedies—seek company in a weekly conversation group.



HISTORY On Cold Iron

by Dan Levert, '87 LLB, self-published

Levert recounts the missteps leading to the 1907 Quebec Bridge disaster, which left 76 workers dead.

FANTASY

The Fires of Eisheim

by Rhett A. Peterson, '05 BSc(Hons), self-published

In medieval times, a man finds himself embroiled in conflict between humans and elves.

HISTORY

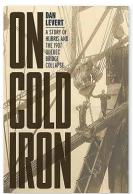
Hiroshima-75: Nuclear **Issues in Global Contexts**

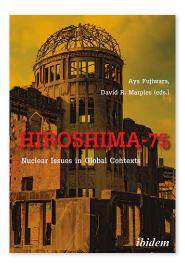
edited by Aya Fujiwara, '00 MA, '07 PhD, and David R. Marples, '80 MA, Ibidem Verlag

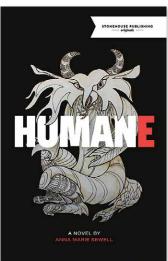
International scholars reflect on life after the atomic bombs with discussions on the Cold War and pop culture. The book commemorates the 75th anniversary of the nuclear bombing of Japanese cities by the United States.

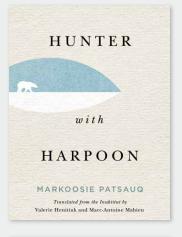
Tell us about your recent publication. Email a write-up with a high-resolution cover image to newtrail@ualberta.ca. Or mail your write-up and book to New Trail Books at the mailing address on page 4. We cannot guarantee all submitted write-ups will be included on this list. Inclusion does not denote endorsement by New Trail.

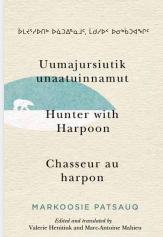












FICTION

Hunter with Harpoon

by Markoosie Patsauq, translated by **Valerie** Henitiuk, '85 BA, '88 MA, '00 MA, '05 PhD, and Marc-Antoine Mahieu, McGill-Queen's **University Press**

This new English translation revisits *Harpoon* of the Hunter, considered the first published Inuit novel.

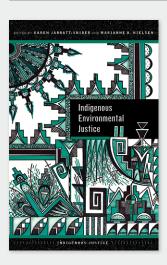


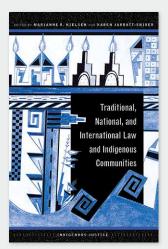
LITERATURE STUDIES

Uumajursiutik unaatuinnamut / Hunter with Harpoon / Chasseur au harpon

by Markoosie Patsauq, translated and edited by Valerie Henitiuk, '85 BA, '88 MA, '00 MA, '05 PhD, and Marc-Antoine Mahieu, McGill-Queen's University Press

This critical edition presents Patsaug's original Inuktitut text alongside Henitiuk's and Mahieu's English and French translations. The original work is put in context through critical framing and a foreword by the late Patsaug.





INDIGENOUS STUDIES

Indigenous Environmental Justice edited by Marianne O. Nielsen, '79 MA, '93 PhD, and Karen Jarratt-Snider, The University of Arizona Press

This essay collection demonstrates the importance of self-determination and sovereignty in environmental policy through the lens of contemporary events, such as the Dakota Access Pipeline dispute.

INDIGENOUS STUDIES

Traditional, National, and International **Law and Indigenous Communities**

edited by Marianne O. Nielsen, '79 MA, '93 PhD, and Karen Jarratt-Snider, The University of Arizona Press

This volume explores the effects of colonial law on Indigenous communities and offers examples of hopeful innovation found in the resurgence of traditional law and community organizing.

Compiled by Kate Black, '16 BA

Class Notes

1970_S

'78 Harry Anchan, BSc, writes that he is enjoying his work as a systems analyst for Alberta's Ministry of Justice and Solicitor General at the Calgary Courts Centre. "I should have retired three years ago but love it so much that I decided to give it a few more years! I especially love meeting judges who attended my old

alma mater and reminiscing about the good old days," he writes. Anchan would love to hear from his Henday Hall comrades—to reach him, email musicollector@ amail.com.

'78 Gerry Feehan, BSc, '82 LLB, retired in 2010 after practising law in Red Deer, Alta., for 27 years. He has since launched a second successful career as a travel writer and photographer. He has won two awards from the Travel Media Association of Canada, has been a regular contributor to publications such as Todayville and the Red Deer Advocate and has had his work syndicated through Troy Media, an

Harry Anchan



Jonathan Bayley



editorial content provider to more than 1,800 print and online media outlets in Canada.

1980s

'84 Karen Kebarle, BA(Hons), has completed her first year with the Canada Border Services Agency as a program designer and full-time teacher in the English as a second language program. Kebarle reports that she spent an enjoyable fall semester teaching first-year English courses at the U of A in 2018. She has two adult sons and lives in Ottawa with her partner, Georgette Sauve.

'86 **Jonathan Bayley**, MMus, '88 BEd, is a professor emeritus at the University of Windsor, where he has been the director of the



Karen Kebarle



DID YOU KNOW?

Of the 45 students who registered for the U of A in 1908, its founding year, seven were women. They formed the Seven Independent Spinsters, a precursor to the Wauneita Society (for female students), which continued until 1972.



university's school of music, acting director of the joint PhD program and associate dean of graduate studies. His most recent publication with United Music & Media Publishers involved arranging and editing nine English madrigals for three flutes. To access first editions of these Tudor vocal works. he spent a number of days in the British Library's music and rare book room. he tells us. "It reminded me of the research I did during my graduate days at the U of A—such joy."



Michael Halliwell

'90 Roger Wong, BMedSc, '92 MD, received the 2020 Duncan Graham Award for Outstanding Contribution to Medical Education from the Royal College of Physicians and Surgeons of Canada. He was recognized for his exceptional contributions as a visionary leader in medical education and an influential teacher, mentor and clinician within the university and medical community at large. Wong is a geriatrician and the vice-dean of education in the University of British Columbia's Faculty of Medicine.

'98 Michael Halliwell,

BSc(CivEng), '99 MEng, received the Association of Professional Engineers and Geoscientists of Alberta (APEGA) 2020 Summit Award for Community Service. Halliwell's community contributions include more than 6.000 volunteer hours with St. John Ambulance, 12 years of fundraising and volunteering with the Ride to Conquer Cancer and mentoring agriculture,

Susan Sanford Blades



forestry and engineering students through **Environmental Careers** Organization Canada.

'98 Scott Messenger,

BSc(Spec), wrote Tappina the West: How Alberta's Craft Beer Industry Bubbled Out of an Economy Gone Flat. which was named Canada's best recent book on beer by the Gourmand World Cookbook Awards. Having won in Canada, Tapping the West will compete in the Gourmand Best in World competition. Results will be announced in May 2021.

'99 **Susan Sanford Blades**,

BA, published her short story "The Rest of Him" in EVENT magazine and was longlisted for the 2020 Writers' Trust McClelland & Stewart Journey Prize. Her first novel, Fake It So Real,

was published in October by Nightwood Editions.



'04 Diane Cacciato (Gallagher-Hayashi), MEd, has retired from teaching after 33 years and is pursuing her lifelong dream of writing. She has published four books and is working on four young adult novels and a collection of pagan prayers. She bought an old stone house in a tiny Sicilian mountain village in 2012 and splits her time

between Vancouver Island

and Italy.

We're Well-Read

The University of Alberta Press took home the Mel Hurtig Publisher of the Year award at the 2020 Alberta Book Publishing Awards in September, where seven grads were also recognized for their achievements. From poetry to publishing, these grads are making their mark on the local book scene and beyond.

Darlene Auger, '02 BA, Learning, for *Little Women's Lodge Kit*

Alan Brownoff, '79 BFA, Book Design, for Knowings and Knots

Linda Sloan McCulloch, '03 BScN(Hons), and co-authors, Trade Non-Fiction, for Power Play: Professional Hockey and the Politics of Urban Development

Natalie Olsen, '08 BDes, Book Cover Design, for *Echolocation*

Jason Purcell, '15 BA, '18 MA, and Matthew Stepanic, '12 BA(Hons), Special Achievement in Publishing, for Glass Bookshop

Paul Zits, '17 BEd, Robert Kroetsch Award for Poetry, for *Exhibit*

op Bradley Johnston, PhD, published a series of six papers outlining new dietary recommendations on red and processed meat in Annals of Internal Medicine. His work focused on the potential causal relationship between red and processed meat consumption and health outcomes. Johnston continues to work with many U of A colleagues on diet and lifestyle-related projects,

including evaluating popular dietary patterns for diabetes reversal and reducing cardiovascular risk factors and updating Canadian pediatric obesity guideline recommendations. He lives in Austin, Texas, and is an associate professor at Texas A&M University.

'o9 Jessica Matten, BSc(HEcol), has been busy with filming, including starring roles in APTN's Tribal and Netflix's Frontier. In addition to acting, for the past 10 years Matten has run Lemon Cree, a fitness and wellness company for Indigenous adults and youth, with her family.

'o9 Michael Zouhri, BSc, built and launched Painworth, an app that uses case law data to help injury victims calculate their potential settlement. Since November 2019, Zouhri has been invited to speak at the American Bar Association's 2020 Dispute Resolution Tech Expo and he says Painworth has helped users calculate more than \$15 million in potential claims.



'10 Lana Cuthbertson, BA, launched ParityBOT, a Twitter bot that detects toxic tweets sent to women running for office and counters them with automatically generated

(continues on page 48)

Jessica Matten





Michael Zouhri



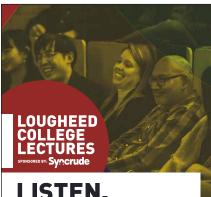
The Art of Leadership

This summer, Carolyn Campbell, '87 BFA, '94 BA(Hons), '04 MFA, took on the role of president and CEO of NorOuest College. and she is "absolutely captivated by the energy and sense of belonging" at the college. Prior to joining NorQuest, Campbell served as a deputy city manager with the City of Edmonton, a deputy minister with the Government of Alberta and an associate dean of the U of A's Alberta School of Business. A visual artist, she maintains a studio at Harcourt House Artist Run Centre.—BUSINESS IN EDMONTON

DID YOU KNOW?

When Lister Hall opened in 1963, students called for easing the strict rules in residences, which included the prohibition of jeans and T-shirts for men at mealtimes.





LISTEN. LEARN. LEAD.

Free via Livestream 7:00 - 8:30 pm

January 21, 2021

THE UNKNOWN **FUTURE OF WORK**

TYLER WAYE

February 18, 2021 IRSHAD MANJI

MORAL COURAGE FOR MESSY TIMES CO-HOSTED WITH THE

EDMONTON PUBLIC LIBRARY

March 18, 2021

UNIVERSITIES & COVID-19 PERSPECTIVES FROM THE

UNITED STATES AND AUSTRALIA

April 15, 2021

DR. DEENA HINSHAW

LEADERSHIP LESSONS FROM THE PANDEMIC

Visit our website for more leadership development opportunities:

uab.ca/LCL



trails class notes

Morgan Siemens



(continued from page 46)

positive tweets. Following the bot's success during the most recent Canadian federal and Alberta provincial elections in 2019, Cuthbertson and her collaborator, Kasey Machin, have founded Areto Labs—a social enterprise that uses the AI and automation technology that powers ParityBOT to help global non-profit organizations, HR companies and brands tackle harassment in digital communities.

13 **Morgan Siemens**, BA, '16 BEd, teaches Grade 7-12 band, food and English classes at Buck Mountain Central School in the Wetaskiwin Regional Public Schools division in Alberta. Siemens and her husband, whom she met while attending the U of A's Augustana Campus, recently bought their first home and welcomed a Chesapeake Bay Retriever puppy into their family. They are expecting their first child in January.

'14 **Sharif Bayzid**, MSc, and **Nusrat Dipa**, '14 MSc, built their Edmonton home from the ground up in 2019. The couple was involved in every part of the construction—from



Megan Tipler

Food), and Billy-Ray
Belcourt, '16 BA(Hons). She
posted the illustrations on
Instagram, accompanied by
a short biography of each
subject. The posters are
available for purchase at
teacherspayteachers.com.

'15 Nisha Patel, BCom,
'15 Cert(Leadership), has
launched 70percentcoverage,
a podcast illustrating the
challenges people with
disabilities and chronic
health conditions encounter

securing city permits to

and Dipa co-ordinating

They've documented

their experience at

wordpress.com.

construction—with Bayzid

acting as a project manager

the paperwork and trades.

buildyourownhome2020.

'14 **Megan Tipler**, BEd, spent

the summer celebrating

the accomplishments of

Indigenous role models

through art. A teacher at

School, Tipler illustrated

30 original posters, one

for each day of National

artists, writers, athletes

and leaders like James

Makokis, '04 BSc(Nutr/

Indigenous History Month,

with portraits of Indigenous

Edmonton's Louis St. Laurent

launched 70percentcoverage, a podcast illustrating the challenges people with disabilities and chronic health conditions encounter when they access care. Patel, who is Edmonton's poet laureate, launched the podcast after winning a scholarship and mentorship from Project Voice. She co-hosts the podcast with patient health advocate

Medgine Mathurin, '11 BSc.

Green Grads

Six U of A grads have been named fellows under the Alberta government's GreenSTEM program, which aims to reduce greenhouse gas emissions, support development of clean-tech companies and provide graduate students and post-docs with entrepreneurial development and support.

Matt Anderson-Baron, '13 BSc, '19 PhD, is developing costeffective cell-growth media for the agriculture industry through his company, Future Fields.

Bing Cao, '16 PhD, started Nanode Battery Technologies, which designs and produces free-standing and dropin electrodes, which have higher energy density than current lithium-ion batteries.

Matthew Nickel, '15 BSc(MatEng), '18 PhD, and Hillary Sweet, '18 PhD, founded SN Biomedical, which develops highefficiency medical diagnostic tools.

Amirreza Sohrabi, '12 MSc, '17 PhD, co-founded Roshan Water Solutions to provide rapid onsite bacteria testing technology, removing the delay of sending samples to central laboratories.

Zhongyi Quan, '19 PhD, aims to make renewable energy more affordable with a technology that makes power converters more compact and lightweight.



ADAPTING

One grad shares what crisis taught her about rolling with the punches

By Lewis Kelly

KARINA BIRCH, '99 BCom, reacted to the start of the COVID-19 pandemic in an unusual way. This time, she thought, we're ready. Co-owner and CEO of Rocky Mountain Soap Co., Birch had been caught flat-footed in 2013 when rivers across southern Alberta flooded, making access to the company's workshop and head office in Canmore impossible. With most of the company's important information housed in the building, she couldn't even contact all employees and customers to let them know about the disruption. The hard lessons Birch learned from this experience came in handy when the pandemic struck. Here's what steering her business through two crises has taught her about dealing with the unexpected.

THE CHOICES YOU MAKE **OUTSIDE OF A CRISIS MATTER**

Birch believes how we live before emergency strikes will inform what we do and how we feel in the eye of a storm.

"Resilience is a cushion you build," she says. "How are you leading your life? Are you building healthy relationships? Are you taking care of yourself?" During the pandemic, Birch has noticed that the people who prioritized quality relationships and their mental and physical health before the crisis were better situated to cope with the challenges than those who hadn't.

HAVE PLANS IN PLACE BEFORE DISASTER ARRIVES

Rocky Mountain Soap Co. uses standard processes for picking, packing and shipping orders. But as the team developed more efficient processes, the documents became outdated. This became a problem post-outbreak when online orders exploded and the

business needed to train new people to fill them. "The training documents weren't relevant," says Birch. "We had to train everybody verbally. It was chaotic; we were making mistakes."

FIND PEACE IN DISORDER

Even before the pandemic. Birch had reached her saturation point overseeing a business with more than 150 employees and raising three children. She tried keeping a strict schedule but when that didn't help, she turned to meditation. Meditation helps Birch accept and value both the fast pace of her life and the limits that she faces, whether during a pandemic or on a regular, blue-sky day. "I know that I can physically only do so much in a day. To try more than that is not realistic, and I have to be happy with that."

MAKE TIME WORK FOR YOU

"There are a million decisions I make every day, both as an entrepreneur and as a mom," says Birch. But with COVID-19, she says she's learned the value of taking five solid minutes to think through a decision before committing to it. That means asking questions like: If we do this, will it help us get where we're going? It also means sitting with the silence. "Often something comes up," she says. "Someone asks a question that takes us in a new direction."

TELL A DIFFERENT **STORY TO YOURSELF**

"What took away that sense of being overwhelmed was changing the narrative in my mind," she says. "With three kids, with my life, it's always going to be a fastmoving train. That's the life I've chosen and I love it." ■



IN THE NEWS

Under the U of A Umbrella

Fans will know all about the superhero siblings on Netflix's *The Umbrella Academy*, based on Gerard Way's comic book series. But they may not know that **Steve Blackman**, '97 LLB, brought it to the screen. Blackman is the creator, writer and executive producer of the show, considered the most popular Netflix original series since *The Witcher*. While Blackman's characters are full of otherworldly powers, he is still connected to home. "I loved growing up in Edmonton," he says. "I'm proud of my roots."—GLOBAL NEWS

DID YOU KNOW?

The U of A operated branch campuses in southern Alberta until the 1960s, when legislative changes allowed these locations to become autonomous universities. The universities of Calgary (1966) and Lethbridge (1967) were created from these branches.





WRITING A COVER LETTER

Supercharge your first impression with these useful tips

By Lisa Szabo, '16 BA

For a lot of people, the working world has been transformed in the past year. Kitchen tables have become home offices and jobs are harder to find. But one thing hasn't changed: the importance of a cover letter. Emily Marriott, '17 BA, '20 BEd, '20 Cert(CommEngage/ ServLearn), a student services adviser at the U of A's Career Centre, gives tips to turn this standard document into a standout first impression.—WITH FILES FROM MATT REA, '13 PHD

Start with the job posting

"The cover letter is an opportunity to explain how your experience, skills and accomplishments make you a good fit for an organization," says Marriott. To do that, you need to know what they're looking for. Familiarize yourself with the organization's mission statement and values, and read the job posting thoroughly. Identify the most important skills in the posting, then focus on the areas where your strengths meet their needs.

Show them you care

If you're applying for several jobs in a similar field, it might



be tempting to use the same cover letter. "We often see people make standardized cover letters that they use for every job, and that's no good," Marriott says. By tailoring your cover letter to the specific job, you show the employer that you care about the position enough to write what she calls "a sometimes painful" document.

Don't just summarize

"A cover letter is not a summation of your resumé," says Marriott. "It's a complementary document." Written in standard business letter format, the cover letter should match the tone of the organization and give more insight into your personality. Avoid reciting a laundry list of skills, and instead share stories about times that you put your relevant expertise into practice.

Use the Career Centre

As a U of A grad, you can book a one-on-one appointment with an adviser from the Career Centre to fine-tune your resumé and cover letter. An adviser will help identify your strengths and what you can improve, says Marriott. The Career Centre also provides a cover letter checklist and template, and a variety of other career-boosting resources. Find them online at ualberta.ca/career-centre.

This interview was originally featured on the alumni podcast What the Job? To listen to this episode and others, visit uabgrad.ca/WTJ.

The Alumni Association notes with sorrow the passing of the following graduates (based on information received between June 2020 and September 2020).

In Memoriam

1940s

'46 **Margaret Katherine Coutts**, BA, of Calgary, AB, in May 2020

'46 **Robert Glyn Lewis**, BSc(ChemEng), of Nelson, BC, in January 2020

'46 **John Joseph Lipinski**, BSc, '48 MD, of Edmonton, AB, in July 2020

'47 **Paul Eli Viney**, BSc, '64 BEd, of Calgary, AB, in June 2020

'48 **Edith Elzaida Cunningham**, BSc, of Westlock, AB, in August 2020

'48 **Metro Gushaty**, BSc, '49 BEd, '52 MEd, in July 2020

'49 **Lila Eleanor Engberg**, BSc(HEc), of Fergus, ON, in September 2020

'49 **W. Sterling Haynes**, BSc, '51 MSc, '58 MD, of Kelowna, BC, in May 2020

'49 **Dennis Donald Kuchinski**, BSc(CivEng), of Harlingen, TX, in June 2020

'49 **Gwendolyn Ellen Robinson**, BSc, '74 Dip(Ed), of Edmonton, AB, in June 2020

19509

'50 **William Edward Gillespie**, BSc(CivEng), of St. Albert, AB, in June 2020

'50 **Gordon Everett Hougestol**, BSc(CivEng),
of Camrose, AB,
in March 2020

'50 **Pauline Charlotte Kay (Sutermeister),**Dip(Ed), '51 BEd, of
Calgary, AB, in May 2020

'50 **Dorothy Phyllis Manning (Rea)**, Dip(Ed), in July 2020

'50 **Howard Barham Singleton**, BEd, '53 BA, of London, England, in March 2020

'50 **Emily Marie Williams (Spence)**,
BA(Hons), of Rimbey,
AB, in April 2020

'51 **Ernest Edward Block**, Dip(Ed), of Lethbridge, AB, in May 2020

'51 **R. Perry Glaister**, BSc, of Qualicum Beach, BC, in June 2020

'51 **Frank Stanley Gue**, BSc(ElecEng), of Burlington, ON, in August 2020

'51 **Viola Hudson (Oviatt)**, Dip(Nu), of Calgary, AB, in March 2020

'51 **Gwendolyn Mary Jones**, Dip(PHNu), of Victoria, BC, in September 2020

'51 **Allen F. Kostyk**, BSc, '63 BEd, '72 Dip(Ed), in June 2020

'51 **Anne Eugenia Lipinski**, BSc, in July 2020

'51 **Gordon Andrew McNaughton**, BSc(Pharm), in July 2020

'51 **L. Joyce Wallace**, BEd, of Toronto, ON. in June 2020

'52 **Robert Clayton Harris**, BEd, of Calgary, AB, in August 2020 '52 **Ronald Phillip Johnson**, BSc, of Penticton, BC, in September 2020

'52 **Melvin Joseph Miller**, BSc, '54 MD, of Edmonton, AB, in May 2020

'52 **Shirley Marie Stinson**, Dip(Nu), '53 BScN, '12 DSc (Honorary), of Edmonton, AB, in June 2020

'53 **Evelyn Isabelle Bird**, BEd, of Guelph, ON, in June 2020

'53 **Robert Murray Gratz**, BSc(Ag), in July 2020

'53 **Harlan Edwin Hughes**, BSc(PetEng),
of Calgary, AB, in
March 2020

'53 **Gloria Mavis Mawdsley**, Dip(Nu), '54 BScN, of Calgary, AB, in May 2020

'53 **Steve Joseph Misak**, BSc, '55 MD, of Bluefield, WV, in June 2020

'54 **Kathleen Anne Briner (Hauck),**Dip(Ed), '79 BEd, '82
Dip(Ed), of Edmonton
AB, in July 2020

'54 **Elmer Richard Christiansen**, BCom, of Edmonton, AB, in September 2020

'54 **Robert John H. Kennedy**, BCom, in August 2020

'54 **Lucy Elizabeth Lopushinsky (Melnyk)**, BEd, in June 2020

'54 Hazel Frances Sawyer (Jackson), Dip(Nu), '55 BScN, of Edmonton, AB, in August 2020 '54 **William Grant Stephen**, BCom, of Calgary, AB, in July 2020

'54 **Lorne Victor Ursel**, BSc(ElecEng), of Ottawa, ON, in July 2020

'55 **L. Mackenzie Forbes**, BSc(Ag), in August 2020

'55 **Anthony Joseph Kovach**, LLB, of Calgary, AB, in May 2020

'55 **G. Carolyn Krukowski**, BSc(HEc), of Calgary, AB, in April 2020

'55 Margaret Emily Kurrant, Dip(Nu), '56 BScN, of Calgary, AB, in June 2020

'55 **Albert Roger Pasini**, BSc(CivEng), of Edmonton, AB, in June 2020

'55 **Vivian Marie Prestash**, Dip(Ed), '66 BEd, in July 2020

'55 **Colby Herbert Quilliam**, BCom, of
Tucson, AZ, in July 2020

'56 **Marjorie Bowen (Hawka)**, Dip(Ed), '57 BEd, of Edmonton, AB, in May 2020

'56 **Gerald Clifford Knutson**, BSc(PetEng),
of Calgary, AB, in
August 2020

'56 **Myrtle Eva Seguin (Lenko)**, BEd, '69 Dip(Ed), of Edmonton, AB, in August 2020

'56 **Wilbur Samuel Tripp**, DDS, of Pincher Creek, AB, in May 2020

'57 **Daniel E. Cournoyer**, BEd, '65 Dip(Ed), in 2020

'57 **Ormand Dwayne Lavenne**, BA, of Calgary, AB, in September 2020

'57 **Helen Anne Lemay**, BA, '60 BEd, of Trochu, AB, in August 2020

'57 **Kathleen Elizabeth Lougheed (Hubbard)**,
Dip(Ed), '61 BEd, of Red
Deer, AB, in July 2020

'57 **Benjamin George Saik**, DDS, of Calgary, AB, in August 2020

'57 **Robert William Stanich**, BSc(ChemEng), of Calgary, AB, in June 2020

'58 **Loretta May Baker**, Dip(Ed), '79 BEd, in June 2020

'58 **John Edgar Colbert**, BSc(ChemEng), in September 2020

'58 Ivan James Curry, BSc(ChemEng), of Comox, BC, in September 2020

'58 **Gweneth Yvonne Mabbott (Nelson)**,
BSc(HEc), of Abbotsford,
BC, in January 2020

'58 **Daniel Irvine Peters**, BSc(Ag), of Calgary, AB. in January 2020

'59 **Donald Valentine Kilback**, BEd, '66 MEd, of Red Deer, AB, in May 2020

'59 **Ruth Theresa Zeller**, Dip(Nu), '70
BScN, of Camrose,
AB, in August 2020

1960s

'60 **William Ross Castor**, MD, in December 2019

'60 **Marjorie Alice Kelm**, BSc, in July 2020

'60 **Charlotte Lauralee Root**, Dip(Nu), '61
Dip(Nu), of Calgary,
AB, in July 2020

'60 **Norma Anna Youngberg (Pedersen)**,
BEd, of Kelowna,
BC, in July 2020

'61 **Adele Ethel Bendoritis**, Dip(Nu), of Thorsby, AB, in June 2020

'61 **Barbara Elizabeth Downs**, BA, of Vancouver, BC, in May 2020

'61 **Ralph Carl George Haas**, BSc(CivEng),
'63 MSc, '18 DSc
(Honorary), of Waterloo,
ON, in June 2020

'61 **Larry Patrick Milligan**, BSc, '63 MSc, in May 2020 '61 **Alexander Ratsoy**, BEd, of Calgary, AB, in August 2020

'61 **Alvin George Stenson**, BA, of Edmonton, AB, in September 2020

'61 **Gary Bruce Webb**, BCom, in September 2020

'61 **Russell Emerson Wells**, MSc, of Edmonton,
AB, in March 2020

'61 **Raymond Alexander Frank Wilkinson**, BSc, of Calgary, AB, in June 2020

'62 **George Richard Dunnigan**, BEd, of
Edmonton, AB, in
September 2020

'62 **Helge Loegstrup Hansen**, BSc, of Calgary,
AB, in February 2019

'62 **Hubert William Kitchen**, MEd, '66 PhD, of St. John's, NL, in July 2020

'62 **David Donald Powley**, BEd, '64 BA, '71
MEd, of Sherwood Park,
AB, in September 2020

'62 **Bruce Strathearn Rawson**, LLB, in May 2020

'63 **Nancy Elizabeth Allison (Duggan)**,
BA, of Canmore,
AB. in June 2020

'63 **Noel Paul Gour**, BEd, '69 BA, '83 MEd, '88 PhD, of Edmonton, AB, in July 2020

'63 **Elizabeth Ann Matheson**, BSc(Pharm),
of Edmonton, AB,
in August 2020

'63 **Gerald Nicholas Tighe**, BA, of Edmonton, AB, in August 2020

'63 **Lorne Baird Warneke**, BSc(HonsCert),
'67 MD, of Edmonton,
AB, in August 2020

'64 **Duane Harold Catterall**, BA, '67 LLB, in June 2020

'64 Bertram Oliver Fraser-Reid, PhD, of Pittsboro, NC, in May 2020

'64 **Anne Geddes-Atwell (Geddes)**, BA, of Otsego, NY, in July 2020.

'64 **Elsie Herle**, BEd, '71 Dip(Ed), in September 2020

'64 **Douglas Craig McTavish**, BCom, of
Toronto, ON, in July 2020

'64 **Arnold Ostfield**, BA, '66 BEd, of Edmonton, AB, in July 2020

'64 **Heather Leona Wall (Mitchell)**, Dip(Nu), in September 2020

'65 **Emery Gillmore Dosdall**, BEd, of Surrey, BC, in August 2020

'65 **Eric Feigel**, BCom, in September 2020

'65 **Alastair Roy Mont**, BEd, of Victoria, BC, in March 2020

'65 **Ajmer Singh Sidhu**, BEd, of Cold Lake, AB, in June 2020

'65 **Clarence Peter Stelmaschuk**, DDS, of Abbotsford, BC, in August 2020

'66 **Robert David Forsyth**, MD, of Las
Vegas, NV, in June 2020

'66 **George Karvellas**, DDS, of Edmonton, AB, in July 2020

'66 **Stuart H. Mowat**, BPE, of Okotoks, AB, in September 2020

'66 **Donald Etheridge Steele**, BEd, of Surrey, BC, in January 2014

'66 **Steve Warchola**, BEd, in September 2020

'67 **O. Elsie Scheideman-Bamber**, BEd, of Spruce Grove, AB, in June 2020

'67 **Alexander Olchowecki**, MSc, of Salt Spring Island, BC, in March 2020

'67 Hans Michael Reich, BSc, '71 LLB, of Edmonton, AB, in August 2020

'67 **Ken William Richards**, BSc, '70 MSc, of Lethbridge, AB, in December 2019

'67 **Phillip Maurice Thomas**, BSc(Ag), '74 MSc, of Lacombe, AB, in June 2020

'68 **Stuart Charles Donaldson**, BA, of Okotoks, AB, in April 2020

'68 **Roy Clive Alan Fearon**, DDS, of Camrose, AB, in September 2020

'68 **Newell Phillipot Hudson**, BEd, of Edmonton, AB, in May 2020

'68 **Glenda Marion Ross**, Dip(Nu), of Calgary, AB, in June 2020

'68 **Robert Garland Snead**, PhD, of Tulsa, OK, in June 2020

'69 **Donald Wayne Whiteman**, BSc, '69
MD, of Trenton, ON, in February 2020

'69 **Lawrence Douglas McCann**, MA, '72 PhD, of Victoria, BC, in June 2020

1970s

'70 **Stephen Michael Cregg**, BEd, of Red Deer, AB, in December 2019

'70 **Maurice Wayne Freedman**, DDS, in July 2020

'70 **Lois Marie Jenkins**, BEd, of Evansburg, AB, in August 2020

'70 **Bernard Luttmer**, BSc(CivEng), of Pickering, ON, in September 2020

'70 **Cynthia Judith McRae**, Dip(Nu), in June 2020

'70 **Larry Walter Nowak**, BSc, '74 Dip(Ed),
'83 MEd, of Cochrane,
AB, in July 2020

'70 **Reginald Lloyd Salter**, BEd, of Calgary,
AB, in June 2020

'70 **Alan Francis Smith**, BEd, '78 MEd, of Red Deer, AB, in June 2020

'71 **Bernadette Gaetz**, BEd, of Calgary, AB, in September 2020

'71 **Robert Blaine Johnston**, BA, '72 Dip(Ed),
'81 Dip(Ed), of Rimbey,
AB, in July 2020

'71 **Betty Ellenora Rawlinson**, BA, of St. Albert, AB, in July 2020

'71 **Sharon Kathleen Schaefer (Davey)**, BSc(HEc), of Ituna, SK, in April 2020

'72 Louis Franklin Cass, BSc(MetEng), of Edmonton, AB, in June 2020

'72 **Ronald Nicholas Guglich**, BSc, '73 Dip(Ed), in June 2020

'72 **Gerhard Johannes August Kennepohl**, PhD, of Oakville, ON, in July 2020

'72 **Rita Kathleen McCauley**, BEd, in September 2020

'72 **William Gary Selman**, BSc(Med), '74 MD, of Calgary, AB, in July 2020

'73 **Bonnie Gail Byron (Rawluk)**, BEd, in July 2020 '73 **Helmut Fitz**, BSc, in May 2020

73 **Terrance Edwin Heggerud**,
BSc(MechEng), '85
MEng, of Wetaskiwin,
AB, in July 2020

'73 **Larry Micheal Juse**, BEd, '85 MEd, in 2020

'73 **Geraldine Beatrice Kilgannon**, BEd, of Victoria, BC, in June 2020

'73 **Richard William Newson**, BCom, of Victoria, BC, in June 2020

'73 **Lesia Audrey Osoba**, BA, '76 MBA, '85 BEd, of Edmonton, AB, in June 2020

'73 **William Clarence Shields**, MBA, of St. Albert, AB, in June 2020

'73 **Herbert John Visscher**, BSc(Spec), of Calgary, AB, in July 2020

'73 **David Douglas Weir**, BPE, '75 Dip(Ed), of Edmonton, AB, in February 2020

'74 **Meinrad Edmund Banda**, BEd, '78 MA, '81 PhD, of Edmonton, AB, in July 2020

'74 **Arnd Bohm**, BA(Hons), '75 MA, of Ottawa, ON, in May 2020

'74 **William James Cowan**, BSc(Speech/ Aud), of Candle Lake, SK, in August 2020

'74 **Sharon Louise Dube**, BA(Spec), '93 MEd, of Edmonton, AB, in July 2020

'74 **Socrates Kowalchuk**, BEd, in September 2020

'74 **Patricia Anne Mackie**, BEd, of Edmonton, AB, in August 2020

'74 **Lawrence Eugene Miskey**, BA, '76
LLB, of Edmonton,
AB, in July 2020

- '74 **Ronald Miron Oraniuk**, BCom, '78 BA, of Edmonton, AB, in September 2020
- '74 **Jacqueline Lorraine Picard**,
 BSc, of Edmonton,
 AB, in May 2020
- '74 **Joffre Joseph Plaquin**, BEd, '76
 Dip(Ed), of Millet, AB, in September 2020
- '74 **Sylvia Zonia Tokarek**, BScN, of Medicine Hat, AB, in July 2020
- '74 **William Brydon D. Ward**, BSc(Forest), of Lac La Biche, AB, in September 2020
- '75 **Heinz Karl Auschrat**, BEd, of Edmonton, AB, in August 2020
- '75 **Warren Earl Greene**, Dip(Ed), in June 2020
- '75 **Carol Lee Hurl (Berner)**, BA(RecAdmin), of Edmonton, AB, in May 2020
- '75 **Vern William Hurst**, BA(Spec), of Sandusky, OH, in August 2020
- '75 **Joseph John Lehane**, LLB, of Innisfail, AB, in September 2020
- '75 **Sandra Ann Mikalonis**, BEd, '76 Dip(Ed), '80 MLS, of St. Albert, AB, in July 2020
- '75 **Joann Montegary (Pollock)**, BEd, of Lacombe, AB, in August 2020
- '75 **Linda Marlene Moore**, BEd, of Toronto,
 ON, in July 2020
- '75 **Shirley Marilyn Ross**, BSc(MedLabSci), '99 MSc, '03 PhD, of Edmonton, AB, in September 2020
- '76 Murray William Dorin, BCom, of Edmonton, AB, in April 2020

- '76 **Naseem Abdulrasul Jadavji**, BSc, of Phoenix, AZ, in June 2020
- '76 **Richard Sidney MacGillivray**, PhD, of Arnprior, ON, in June 2020
- '76 **Leonard Norman McLean**, Dip(Ed), of
 Caroline, AB, in June 2020
- '76 **Daniel David Secter**, BSc, '81 DDS, of Calgary, AB, in June 2020
- '76 **Teresa Marie Somerville**, BEd, in June 2020
- '77 **Randall Scott Bain**, BMus, of Edmonton, AB, in August 2020
- '77 **Douglas Simpson Davis**, BEd, '01 MA,
 of French Cove,
 NS. in June 2020
- '77 **Gerald Michael Gabinet**, BCom,
 in August 2020
- '77 **Marilyn Alice Harker**, BEd, of Calgary, AB, in August 2020
- '77 Margaret Lillian Osborn, BEd, in June 2020
- '78 **Anne Elizabeth Budd,** BScN, of Kingskerswell, England, in May 2020
- '78 Anthony Richmond Lambert, BSc(Hons), of Canmore, AB, in April 2020
- '78 **Natalie Lillian Maschuk**, MEd, of Edmonton, AB, in May 2020
- '79 **William Herbert Cruikshank**, BSc, '86 MPM, of Edmonton, AB, in August 2020
- '79 **Laurie Jay Heule**, BSc(Pharm), of Calgary, AB, in April 2020
- '79 **Douglas James Nadworny**, BSc(Spec), '80 BSc(SpecCert),

- of Calgary, AB, in August 2020
- '79 **Roger William Walter Schilf**, BSc, in September 2020
- '79 **Donald Peter Schurman**, MHSA, in August 2020

19809

- '80 **Jit Keng Lim**, BSc(MechEng), of Edmonton, AB, in July 2020
- '81 **Stephen Lee Broderick**, BA, in May 2020
- '82 Mary Theresa Ball, Dip(Ed), in September 2020
- '82 **Edith Gertrude Brewer**, BEd, in May 2020
- '83 **Esther May Siry**, BEd, of Peace River, AB, in August 2020
- '84 **Kwok Shong Chiang**, BCom, of Singapore, in June 2020
- '84 **Suzana Ilona Angela Tsui (Rozsa)**, BA, in August 2020
- '85 **Lewis Nancy Bell**, BA, of Edmonton, AB, in July 2020
- '85 **Gordon Ward Jackson**, BSc(Spec), '87 BCom, of Edmonton, AB, in August 2020
- '85 William John Rutledge, MSc, of Edmonton, AB, in June 2020
- '86 **Brian James Curial**, LLB, of Edmonton, AB. in August 2020
- 86 Bradley Richards MacNaughton, BSc(Spec), of Wetaskiwin, AB, in July 2020
- '87 **Robert Michael Fraser**, BEd, of Camrose, AB, in May 2020

- '88 **Charles Toth**, BSc, of Edmonton, AB, in August 2020
- '89 Holly Margaret Hebner, BEd, of Edmonton, AB, in June 2020

1990

- '90 **Ronald Stanley McMullen**, MEd, of
 Kelowna, BC, in May 2019
- '91 **Frances E. Allen**, DSc (Honorary), of Schenectady, NY, in August 2020
- '91 **Zinnia Pearl Koren**, of St. Albert, AB, Dip(Nu), in June 2020
- '91 **Fritz Lenk**, BA, of Edmonton, AB, in May 2020
- '91 **Ian Scott Parsons**, BSc(Spec), '93 MSc, '97 PhD, of Edmonton, AB, in July 2020
- '92 Tammy Lee MacDonald-Doran (Vassallo), BEd, of Georgetown, ON, in August 2020
- '92 **Ryan Milton Thomas**, BSc, of Edmonton, AB, in September 2020
- '94 **Christian Peter Reece**, BSc, '03 MSc, in August 2020
- '95 **Jerrold Lyne Kachur**, PhD, of Edmonton, AB, in June 2020
- '96 **Stephen William Greenhalgh**, BA, '98 MA, '03 MLIS, '20 Cert(VisualArts), in May 2020
- '97 **Stephen Philip Dow**, BEd, of Powell River, BC, in May 2020
- '98 **Kristin Lee Flaro-Forsyth**, BEd, of Elk Grove, CA, in April 2020

'98 **Cory Rey Ollikka**, BEd, of Hollow Lake, AB, in July 2020

2000s

- '00 **Jeffrey Allister Miles**, BCom, in June 2020
- '00 **Jeffrey Robert Thomsen**, BPE,
 of Edmonton, AB,
 in July 2020
- '01 **Ryan Michael Guenette**, BCom, of Yorkton, SK, in May 2020
- '02 **Jonathan Patrick Lee**, BMedSc, '03 MD, of Calgary, AB, in June 2020
- '03 **Karen Elizabeth Martinovic**, BEd,
 of Edmonton, AB,
 in June 2020
- '04 **Dawn Sarah Zimmer**, MN, of St.
 Albert, AB, in July 2020
- '08 Michael Joseph MacDonald, BSc(EnvSci), in September 2020

2010s

- '10 **Melissa Anne Michelle Tirrell**,
 BCom, of Edmonton,
 AB, in June 2020
- '11 **Nolan Sawatzky**, BA, of Edmonton, AB, in May 2020

If you've lost a loved one who was a University of Alberta alumnus, contact alumni records at alumrec@ualberta.ca, 780-492-3471 or 1-866-492-7516.

SPEAKER'S CORNER

By Mifi Purvis, '93 BA

When COVID-19 hit, infectious disease specialist Lynora Saxinger spent up to 60 hours a week sorting through the flood of evolving literature and filtering out reliable information to inform Alberta's response. But the really hard work came in communicating it to the public. This is what she learned along the way.

WORK DEEPLY AND QUICKLY

Clinicians and others tasked with making health policy recommendations have to be able to synthesize vast and evolving information to make good decisions quickly, says Saxinger. After she and her colleagues on the Alberta Health Services Scientific Advisory Group reviewed and discussed information, they were ready to make public health recommendations, sometimes within days.

ENTER THE FRAY

The pandemic-panicked public wanted answers, but there was too much unfiltered information. They needed high-quality content, but misinformation was spreading fast. "After being an appalled observer on social



media. I decided that one thing I can do is enter the fray and provide information to the best of our current knowledge," Saxinger says. "I have done over 700 media pieces since March. It's not one of my life goals; I'm an introvert."

KNOW THAT BUILDING TRUST TAKES TIME

Science is a process by which "someone has an idea and people poke and prod at it until, finally, we find that this is actually the truth," Saxinger says. Usually, this scientific process happens without the world watching in real time. But each time a paper was released about COVID-19, it appeared in headlines as the new truth, superseding what came before. "It looked a lot like flip-flopping when, in fact, it's the way we build a body of knowledge."

DISSOLVE THE LINE BETWEEN THE UNIVERSITY AND THE COMMUNITY

Communicating about COVID-19 showed Saxinger how crucial universities are in a community. "They distil what's going on and make meaning of it. In academia, we tend to answer things to our own scholarly satisfaction, then move on." But the pandemic has increased the permeability of the interface between universities and the public's desire for knowledge. "Our responsibility doesn't end until we get that information into the hands of other people."

Saxinger is one of many speakers to share expertise through alumni webinars. You can hear more from her on page 9. Visit uabgrad.ca/ OnDemand for more content.

DON'T MISS OUT ON ...

Navigate the waters of your new career with an experienced sailor by your side. With alumni mentorship programs, you'll be matched with a volunteer mentor to help you cultivate the business and interpersonal skills you need to move forward in your career. Apply for mentorship or become an alumni mentor at uabgrad.ca/careersupport.



LIVING ROOM LESSONS

Forgot where you put your smartphone again? Learn practical tips to sharpen your memory from the 2019 Canadian Memory Champion, Jim Gerwing, '83 BPE, '14 MEd. And check out more free webinars featuring U of A experts: uabgrad.ca/OnDemand.



PODCAST WISDOM

"Vaccines are probably the single greatest achievement of biomedicine. They save millions of lives every single year and, despite that, we have this misinformation circulating around them."

Timothy Caulfield, '87 BSc(Spec), '90 LLB, U of A law professor and research director of the Health Law Institute, discusses vaccine fact and fiction for the alumni podcast The Line.

The number of grads and their guests who strolled through the U of A Botanic Garden for free during Alumni Week(end) in September. Grads also attended online museum and campus tours, interactive webinars and virtual reunions as part of Alumni Week(end)'s extended campus-to-couch edition.

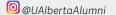
The number of single-use surgical masks distributed to students and staff at the U of A Bookstore free of charge. The masks were donated in the spring, a gift from alumni and friends who live in Beijing, Shanghai, Shenzhen and Hong Kong.



Be Social









No surprise, most of us won't celebrate this many.

It might surprise you to learn that in 2016, there were over 8,000 centenarians in Canada*. As Canadians, we're fortunate to enjoy a high life expectancy, yet no one ever really knows what the future will bring.

So if something were to happen to you, would your loved ones have the financial reserves to be able to pay bills and cover living expenses? **Alumni Term Life Insurance** can help. It can be used in any way" your loved ones need and now comes in two plan options – Term Life and Term 10. That's a financial safety net for your family, any way you slice it.



Get a quote today. 1-888-913-6333 or Manulife.com/uAlberta

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.

- * Source: The Star, 100-Year Old Canadians Fastest-Growing Age Group In The Country, 2017.
- ** Conditions, Limitations, Exclusions may apply. See policy for full details.



The start of winter ushers in a season of twinkle lights, snow sports and sub-zero temperatures. Despite the weather—or perhaps because of it—grads have always found reasons to relish the season. Here are some of their favourite winter memories from years gone by. Find more campus memories or share your own at facebook.com/UAlbertaAlumni.

Making snow angels with my now-hubby while walking home from the pub.

-Chantal Ritcey, '99 BA(Hons), '10 MLIS

I lived in residence in the early '70s, when there were many intra-res activities. Floors were paired up and in January we celebrated King Louis week, building massive ice sculptures in front of Kelsey Hall. We got up to crazy antics trying to sabotage the other floor teams.

–Bonnie Hunka, '75 BPE, '93 MEd



oing the AntiFreeze games with my close friends.

-Jamie Hudson, '16 BSc, '16 Cert(ResearchSci), '19 BScN, '19 Cert(IntLearning)

I will never forget walking by the FarmHouse fraternity in Garneau at 7:30 a.m. on the way to my 8 a.m. class. Their walkway was always shovelled! Farm boys always got their chores out of the way bright and early. Every single day!

-Lacey-Dawn Testawich, '05 BA(NativeStu), '05 BEd

I attended in the late '60s, early '70s, when **Clare Drake**, '58 BEd, '95 LLD (Honorary), and the Bears
were the best entertainment in town. Also, hanging
out at Rutherford or Cameron Library in between
classes with a hot drink.

—Jeff Pollitt. '73 BEd

I remember taking a walk at about 9 p.m. on Nov. 1, 1959. It was snowing lightly. It was so warm, I had a summer jacket on. The snow on the ground was a mass of sparkling diamonds. It was so quiet, it was like being in a cocoon. I could not believe my luck, going for fresh air at that time in Edmonton when everyone warned me, a girl from southern Alberta, that it was the coldest place on Earth.

-Margaret Hicks, '62 BSc(MedLabSci)



I have vivid memories of wearing Eddie Bauer wool socks and my purple Birkenstocks, hobbling to class on crutches in the ice and snow.

-Colleen Freeman, '92 BE





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/ualbertaalumni Or call 1-888-589-5656



The TD Insurance Meloche Monnex home and auto insurance program is underwritten by Security National Insurance Company and distributed in Quebec by Meloche Monnex Insurance and Financial Services Inc., Damage Insurance Agency, and in the rest of Canada by TD Insurance Direct Agency Inc. Our address: 50 Place Crémazie, 12th Floor, Montréal, Québec H2P 1B6.



Former international student **Dilip Kembhavi and his** wife, Alaka, wanted to give back to the community that gave them so much.

By arranging a gift of life insurance to the university, the Kembhavis will help more students than they ever imagined possible.

To learn how you can make a difference by giving a gift of life insurance, please contact us:

780-492-2616 | giving@ualberta.ca | uab.ca/LifeIns



For general inquiries about *New Trail* or the Alumni Association, please contact us: **780-492-3224** | alumni@ualberta.ca.