cornerstone

CELEBRATING PHILANTHROPY AT THE UNIVERSITY OF ALBERTA

SPRING/SUMMER 2016

Vice-President of Advancement
Heather McCaw

Senior Director
Robert Moyles

Supervising Editors
Mary Lou Reeleder
Cynthia Strawson

Editor-in-Chief
Lisa Cook

Managing Editors
Amie Filkow
Christie Hutchinson

Associate Editor
Karen Sherlock

Art Director
Marcey Andrews

Senior Photographer
John Ulan

Editorial Assistant
Stephanie Bailey

Proofreader
Philip Mail

Cornerstone is published twice a year by the Office of Advancement, Strategic Communications, and is distributed free of charge to supporters and friends of the University of Alberta. The views and opinions expressed do not necessarily represent the views of the University of Alberta or the Office of Advancement. All material copyright ©. *Cornerstone* cannot be held responsible for unsolicited manuscripts or photographs.

ISSN: 2292-7964
Publications Mail Agreement No. 40112326

If undeliverable in Canada, return to:
Office of Advancement
University of Alberta
3-501 Enterprise Square
10230 Jasper Ave.
Edmonton, AB T5J 4P6

To give:
Phone: 1-888-799-9899
Email: giving@ualberta.ca
Online: giving.ualberta.ca

To contact Cornerstone*:*
Phone: 780-492-6321
Email: cornerstone@ualberta.ca
Online: cornerstonemagazine.ca

MIX
Paper from responsible sources
FSC®
www.fsc.org

On the cover:
Student Chantelle Bowden and donor Cathy Bullock on the boardwalk in Santa Cruz, Calif., March 2016.
Photo by John Ulan

cornerstone

CELEBRATING PHILANTHROPY AT THE UNIVERSITY OF ALBERTA

Jason Kapalka, right, has been a storyteller all his life. He turned that skill into success with games like Plants vs. Zombies, *but these days his life is a little more analog. Between a morning excursion for coffee and bedtime stories at home on Vancouver Island, he tells tales in the form of mysterious packages and sci-fi taverns (page 16).*

Photo by John Ulan

BY THE NUMBERS: POTENTIAL

The University of Alberta is filled with people eager to transform possibility into opportunity. Here are a few examples of what they have achieved.

2
Syrian students accepted at UAlberta in January 2016 through the President's Award for Refugees and Displaced Persons

3
Tier 1 Canada Research Chairs at the Alberta Transplant Institute leading the way in transplant surgery and immunology

50
students in the pioneering class of the Peter Lougheed Leadership College

71
UAlberta students who have earned Rhodes Scholarships since 1913, including three new scholars in 2015 — the most of any university in Canada that year

1
video game developed by undergraduate students to help train health-care providers to resuscitate newborn babies

17,000
square metres in the new donor-supported Physical Activity and Wellness Centre on North Campus

72
grants approved by the Alberta Healthy Schools Community Wellness Fund, a joint project involving the School of Public Health and the provincial government, to support healthy and safe school communities

100
per cent of Faculty of Native Studies grads who report finding employment within three years of graduating

403
people who donated to Giving Day 2015, raising $61,272 to support mental health programs on campus

30,120
hours of community work completed by students through Community Service-Learning courses in the 2014-15 academic year

To support UAlberta's ongoing success, visit giving.ualberta.ca or call 1-888-799-9899.

Unlimited Possibilities

A little more than a century ago, a young man arrived in Calgary looking for an opportunity for himself and his future family. He found work in the meat-packing industry, a tough start for any young person, but he wasn't deterred. He worked hard. He kept his goal in sight. And, eventually, he forged a life as a rancher in southeastern Alberta.

That young man was my great-grandfather and, while he wasn't short on vision, I doubt he imagined his great-grandson would lead the University of Alberta — an institution that, in his day, was also young and filled with possibility.

I thought of my grandfather as I read about Michael Bullock (page 24). Growing up in Saskatchewan, Bullock was told to shelve his dreams because the family didn't have enough money. So he made his own way in the world: he worked hard, focused on his goals and let nothing stand in the way of becoming a doctor. He didn't stop once he achieved his dream, though — he and his wife, Cathy, resolved to make the road easier for future doctors.

This issue is filled with such stories of possibility. In the past year, my wife, Suromitra, and I have come to know more about UAlberta's philanthropic community. I've learned that our university's champions are people who believe opportunity doesn't just knock at the door. It must be sought out. Potential is fulfilled through hard work and adaptability, the same characteristics that transformed the young province of my great-grandfather's time into a thriving powerhouse. Sometimes, though, potential can only be fulfilled when a caring community clears a path.

Universities are great equalizers. Here students unearth hidden talents; the seed of an idea can blossom into a transformative discovery. Universities are engines of social, cultural and economic prosperity — but they do not stand alone. After all, it takes a community of committed people to transform possibility into opportunity.

David H. Turpin, President and Vice-Chancellor of the University of Alberta

The work of building a great and enduring institution can only be accomplished with our university community. To learn more about supporting excellence in teaching and research at the University of Alberta, turn to page 48.

Vivere Legato

STORY BY MATT REA | PHOTOS BY JOHN ULAN

As a young woman who lived with a severe stutter, Anna Schwartz turned to music to express herself. ISTAR helped her find fluency beyond the piano

At the piano, Anna Schwartz doesn't stutter. Sitting by the window in her Winnipeg home, her fingers dance across the keys, filling the air with Tchaikovsky. She's playing *August: Harvest*, a piece she learned more than 20 years ago as a teenager auditioning for admission to the Ufa College of Fine Arts in Russia. The music, a mix of abrupt staccato and smooth legato, describes the harvest scene in ways that, for many years, Anna's words never could: the urgency of peasant farmers, the rattling of carts, the smell of tall rye.

As a child in Ufa, Anna practised piano for six hours a day, working toward her dream of becoming a concert pianist. Where many children resist practising, Anna did so happily: living with a severe stutter, she was more comfortable expressing herself through music than speech. When she spoke, she stumbled over individual words, struggled to get through sentences and strained to add emphasis and inflection to what she was saying.

"I was always the one who people [had to] speak for," Anna says, seated at the piano stool. Her stutter is now barely noticeable.

"We use our speech to show what we feel, to show what we mean," she says. "When I stutter, I'm not able to show the emotion behind what I'm saying. I might have a particular message in mind but it comes out very different because I'm not showing the intonation when I'm struggling through the words."

Things got more complicated when Anna, along with her sister and mother, moved to Canada. The normal challenges of high school were compounded by multiple barriers to communication. Not only did her classmates speak a different language, but Anna's stutter grew so severe she could barely utter a word.

"It was horrible," she says. "I couldn't understand what was going on. That whole first year I basically couldn't speak at all. It was very hard to make friends."

Again, music helped her cope. A teacher discovered her talent at the piano and invited her to be the choir accompanist. For Anna, a girl who normally ate lunch alone, choir rehearsals were a welcome diversion.

In 1997, when Anna was 18, a friend who also stuttered told her about the Institute for Stuttering Treatment and Research at the University of Alberta's Faculty of Rehabilitation Medicine. Since 1986, ISTAR has helped close to 3,000 clients improve their speech.

ISTAR was the answer, but it was in Edmonton, and Anna's family in Winnipeg had very little

money. Support from ISTAR's FAST Fund and from Winnipeg's Jewish Child and Family Service allowed Anna to fly to Edmonton and attend a four-week intensive clinic.

She began therapy at ISTAR that summer and caught on quickly. The treatment required constant practice and discipline, both of which Anna excelled at because of her music training. She seized any opportunity to work on the fluency methods she learned at ISTAR, such as controlling her breathing or pacing her articulation. "I would go out on the street and just practise, talking to strangers."

After ISTAR, life changed for Anna. She became more confident in her speech and more capable in social situations. She graduated from high school and university. Inspired by the impact ISTAR and its therapists had on her life, she chose to pursue a career helping others. She is now enrolled in medical school and has six children.

"Before, when I stuttered, it felt like I was in a cage. ISTAR helped me to get out of the cage," she says. "ISTAR allowed me to dream."

Anna is still deeply connected to music — all of her children play and there is a music room in their home (above) — but it's no longer the only way she expresses herself. She connects with others and shows her emotions through speech. That's something she never dreamed of doing.

ISTAR helps people conquer their speaking difficulties and lead successful lives. The institute has earned a global reputation for its transformative impact as both a research and treatment facility, thanks in part to the generous support of donors including the Alberta Elks Foundation/Elks & Royal Purple Lodges, the Elks & Royal Purple Fund for Children and the Boberg family. To learn more about how to support ISTAR, turn to page 48.

Filling a Gap

STORY BY ALIX KEMP | PHOTOS BY JOHN ULAN

SHINE, a free dental clinic for underserved communities, makes a lasting impression on patients as well as the students who volunteer there

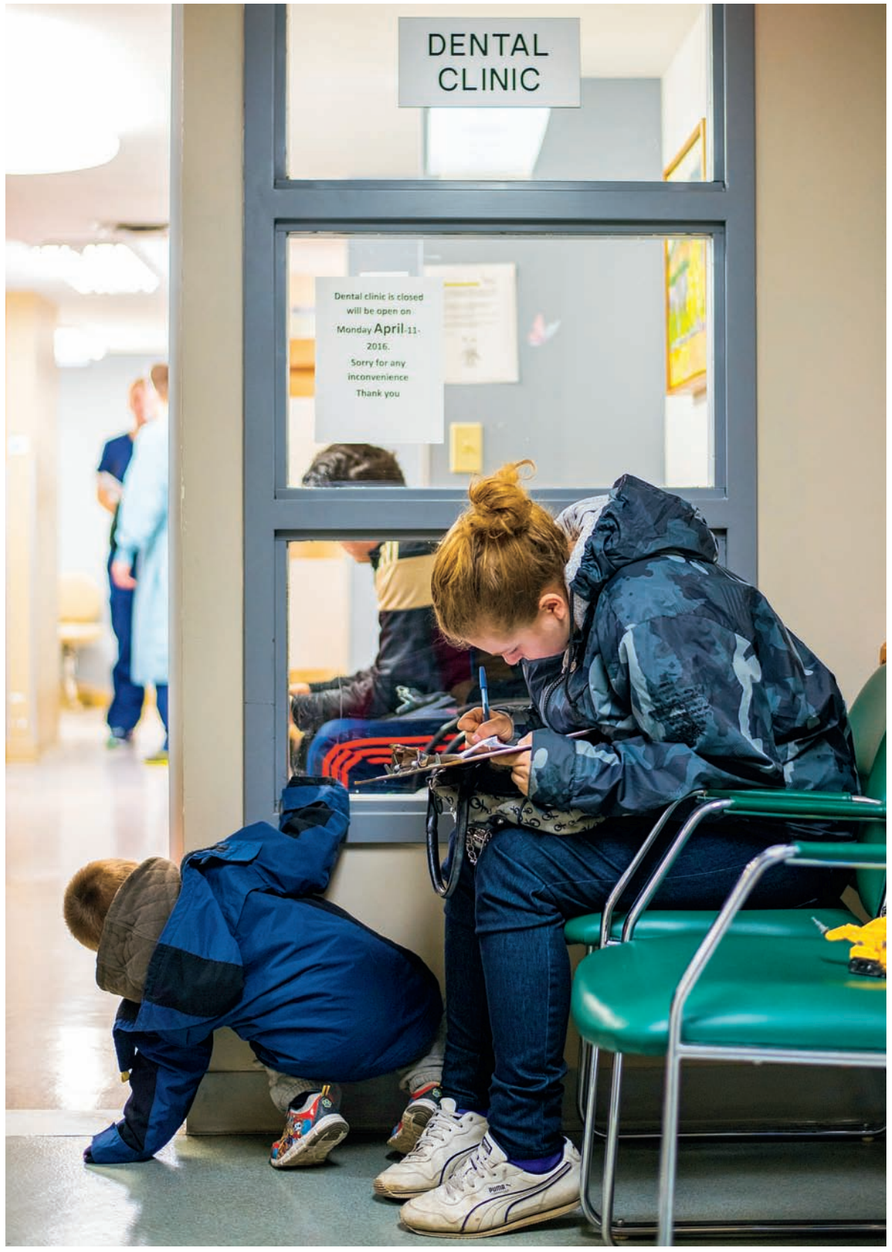
When Monica Baker lost her job as a veterinary medical assistant, things seemed bad. Then one of her molars started aching, a constant shooting pain in her jaw. Without dental benefits, Baker wasn't sure where to turn for help. "I don't have any savings, and I didn't know what I was going to do." Eventually, a friend suggested she look into the dental programs offered by the University of Alberta.

What Baker found was SHINE, a student-run dental clinic that operates out of the Boyle McCauley Health Centre in downtown Edmonton. Emerging from a 2005 initiative to provide health services to inner-city youth, SHINE (Student Health Initiative for the Needs of Edmonton) provides free basic dental care, largely fillings and extractions, to low-income patients of all ages.

While the care SHINE provides may be basic, the impact it can have on patients is anything but. Oral infections are not only painful but can also be life-threatening if left untreated. Missing or diseased teeth can take a toll on people's confidence and make searching for a job difficult. Dental care isn't covered by Alberta Health Services, so those who are unemployed and without dental coverage may have difficulty accessing even basic services.

Many patients learn for the first time about the basics of oral hygiene at the clinic, setting them on a path to dental health, says Marissa Struik, a third-year dentistry student and one of the clinic's co-chairs. "We have 10-year-old patients come in. They don't brush their teeth, they've never flossed, they've never seen a dentist, and they have to lose their primary teeth because of decay. We hope by teaching them oral-care basics — and by explaining the importance of dental care — we can help save their permanent teeth."


EXIT


DENTAL
CLINIC
Dental clinic is closed
will be open on
Monday April 11
2016.
Sorry for any
inconvenience
Thank you

What makes SHINE unique is that it is primarily staffed and managed by student volunteers. Every Saturday, dental students and dental hygiene students co-ordinate intake and provide the majority of care at the clinic, with oversight from the Faculty of Medicine & Dentistry and the guidance of professional dentists who also volunteer their time.

Although working at SHINE isn't a requirement of the dentistry curriculum, the clinic offers students valuable hands-on experience in performing procedures and running a dental practice, while exposing them to patients they might not otherwise see.

Struik began volunteering there in her first year of dental school, working as an assistant. SHINE provided a broader context to what she was learning in class. She could see first-hand how necessary dental care was, especially to people who might not otherwise be able to afford it. "In the first years, sometimes when you're studying medical textbooks you're thinking, 'This is not what I wanted to do.' But it all comes together when you're actually doing dental work," she says.

Now that Struik is in her third year, she is able to pass along her enthusiasm and experience to the younger volunteers — making her involvement all the more gratifying.

The energy of the young volunteers makes visiting the SHINE clinic a positive experience for clients like Baker. "I've always had bad experiences with dentists, but SHINE was different," she says. "The students were friendly. They put me at ease by explaining exactly what was going to happen."

Last year, the team helped more than 300 patients. To help cover some expenses, SHINE's student volunteers host an annual golf tournament attended by industry suppliers, local dentists, alumni and faculty from the Faculty of Medicine & Dentistry. Funds raised in past years allowed SHINE to renovate the clinic in 2011, installing new equipment such as dental chairs, a panoramic X-ray machine and a sterilization unit.

For Struik, volunteering at SHINE has given her a better sense of the way she wants to run her own dental practice. "I've seen firsthand how inaccessible dental care can be to people with a low socio-economic status," she says. "I'm committed to finding ways to change that."

–With files from Stephanie Bailey

SHINE Dentistry provides a variety of free dental services to Edmonton's underserved communities. SHINE gives University of Alberta dentistry students hands-on experience in clinical practice and builds social responsibility.
To learn how you can support SHINE, turn to page 48.

The Art of Story

STORY BY MICHAEL HINGSTON | PHOTOS BY JOHN ULAN

Games. Taverns. Mysterious packages. Jason Kapalka has created a life from his love of storytelling

During a recent visit to a friend's house, Jason Kapalka became intrigued by a strange sculpture that looked straight out of an H.P. Lovecraft horror story. To Kapalka's surprise, the sculpture turned out to be part of a mail-order "experience" courtesy of the Mysterious Package Company, a Toronto-based collective specializing in "unannounced deliveries of a strange and otherworldly nature."

People who sign up for the MPC experience (or are signed up — it's often a gift) receive peculiar objects in their mailbox over the course of a month or more: a series of fake letters and newspaper clippings, postcards and even larger objects like a glow-in-the-dark "zombie finger." The objects build upon one another, eventually coming together to tell a full story with the recipient as main character. The end result is one of having just returned from an eerie journey to a faraway land.

Fascinated, Kapalka decided to track down the creators of the MPC (easier said than done; it is called the "Mysterious" Package Company, after all) and in 2015 became involved as an investor and business adviser.

This involvement with a company so rooted in the analog world might seem like an odd move for the co-founder of PopCap Games and one of the minds behind enormously successful games like *Bejeweled* and *Plants vs. Zombies*. The former, an addictive gem-matching game, had sold more than 50 million units by 2010; the latter broke debut sales records on Apple's App Store upon its release in 2009.

"[The MPC] is both novel and retro, in the sense of getting away from digital stuff and toward physical things you can hold in your hand," he says of the project. "I found that quite refreshing."

But Kapalka is more than an entrepreneur. He is also a writer whose work, from game design to investing, always centres on storytelling.

The MPC's strange and supernatural atmosphere is a return to familiar territory for the Edmonton native, who spent years studying creative writing during his bachelor's and master's degrees at the University of Alberta in the early 1990s, honing a collection of short stories with titles like "The True and Sad Story of Lena the Scream-Cleaner" and "Happy Eating on Ugrath 3." At the time, academia wasn't known for embracing genres like science fiction and horror, he says, but Kapalka found ways of sneaking his passion into the classroom. The key was phrasing them just right. "Instead of 'fantasy,' you'd call it 'magical realism,'" he remembers. Voila.

Kapalka devoted time to more than just his studies while he was at UAlberta: he was also an avid gamer. He began writing freelance reviews for a computer-game magazine, which led to him being recruited to San Francisco after graduation. He landed a job writing editorial content for

an ambitious dot-com startup called the Total Entertainment Network in 1995. From there he headed to Seattle to found PopCap Games with two friends in 2000.

At PopCap, Kapalka's love of storytelling merged with the gaming scene. *Bejeweled* was the company's very first outing, and business boomed right until the moment Kapalka and his partners sold PopCap to Electronic Arts in 2011.

These days, he lives with his wife, Debbie, and their two children in the quiet Vancouver Island town of Comox, B.C., where his storytelling talents continue to be in demand when putting his three-year-old daughter, Alexis, to bed. In addition to whipping up ideas for mysterious packages and bedtime stories, he recently financed entries into the nascent "nerd-bar" scene, with Vancouver's Storm Crow Tavern and Storm Crow Alehouse. The bars forgo sports and Bud Light for classic horror movies, board games and microbrews.

It was during a chance conversation with novelist Thomas Wharton — a former classmate and now an associate professor in UAlberta's Department of English and Film Studies — that Kapalka learned the writer-in-residence program urgently needed funding. The English department's larger list of needs was so comprehensive, it even included replacing the 1970s-era orange couch in the student lounge. Kapalka decided to fund it all.

In addition to providing a significant financial boost to the writer-in-residence program in 2013, Kapalka endowed two memorial prizes in creative writing. The first is named for his late father, Stephen. The second, for Darren Zenko, Kapalka's former classmate and fellow contributor to *the Gateway* student newspaper, who died of cancer in 2012 at age 38. Each year, the Zenko prize allows a handful of students to attend the Banff Centre's Writing With Style course — which Kapalka and Zenko could never afford when they were students.

Kapalka also wrote a cheque to support the literary magazine *Glass Buffalo*, which exclusively features UAlberta student writers. It reminded him of a similar magazine he worked on back in his day called *Dead Tree Product*. "Compared to what we were doing, it's pretty slick," he says of the publication, which was named Best New Magazine in Alberta in 2014.

Kapalka hopes his donations will help sustain the next generation of writers — whether their stories end up in books, spoken out loud at bedtime or unspooled through mysterious packages that will unnerve unsuspecting recipients for years to come.

Thanks to Jason Kapalka's support, the University of Alberta's Writer-in-Residence program is the longest continually running program of its kind in Canada. The Stephen Kapalka Memorial Prize, named for his father, and the Darren Zenko Memorial Prize are given to students who have completed a writing course with superior academic achievement and demonstrate merit and the potential to excel in writing. *For more information, turn to page 48.*

Time to Enjoy the Beautiful Things

STORY BY OMAR MOUALLEM | PHOTOS BY JOHN ULAN

The Bullocks worked hard to build their dreams.
That's why they chose to make life a little easier for others

Chantelle Bowden remembers her mom's little black budget book very well. Once a month it was splayed on the kitchen table, around which Chantelle and her brother were expected to sit and learn about their single-parent family's cost of living. "It was a struggle sometimes," says Bowden, now a medical student at the University of Alberta. "We lived with my grandparents for several years." The point of their mom's teachings wasn't to lower their expectations but to have them learn that they'd have to work harder than other kids they knew growing up in Chilliwack, B.C.

Sixty years earlier and two provinces over in Saskatchewan, a teenager named Michael Bullock heard a similar message from his single mom. Growing up during the Great Depression, he didn't need to be told that a dollar was hard-earned. He laboured in wheat fields and nickel mines and competed with men who were much older for scrap metal and rail jobs.

Decades later, the lessons learned during his hardscrabble youth would connect Michael to Bowden and 15 other young people who grew up with the knowledge that nothing worth having comes easily.

As a young man, Michael had his sights set on becoming a doctor but after he completed high school, his mother persuaded him to choose a different field. Medical school was too expensive, she said. It was also very hard to get into. After the Second World War, medical schools across North America were swamped with applicants fresh off the battlefield.

Instead, he got his undergraduate degree, trained as a medical technologist in Saskatoon and then worked at the local hospital. But he never abandoned his dream of becoming a doctor. At 30, he applied to what is now the University of Alberta's Faculty of Medicine & Dentistry and, thanks to impressive references and plenty of work experience, was accepted without an interview.

Determined to save for school, he spent very little and rarely slowed the pace. During every break from his studies, he drove roughly 2,600 kilometres — on roads that, today, would hardly be considered suitable for back alleys — to work at three medical centres in Oakland, Calif. Higher wages in California justified 20-hour driving days and a round-the-clock work schedule. Bullock graduated in 1960, not only debt-free but with considerable savings.

Nobody handed Michael his medical degree — he earned it through dogged determination — but he still considered the experience a privilege, says his wife, Cathy. Her husband was so grateful for the opportunity that decades later, in 1991, the couple established an award to support UAlberta medical students who are self-reliant and have earned money to help pay for their education.

Michael died in July 2015, just weeks after his 90th birthday and 50th wedding anniversary. He left behind a treasure trove of papers and letters filled with anecdotes about his life, the importance of hard work and how he and Cathy wanted their award to ease the struggle of students who were most likely to succeed despite adversity.

The Bullocks believed debt was a scourge and wanted to sponsor students with a proven work ethic — the ones who worked after class and took summer jobs instead of summer vacations. They wanted to help students like Bowden, who

completed her degree in physical therapy debt-free, thanks to seasonal work and a volleyball scholarship. Now, one of the first students to enrol in UAlberta's joint MD/MBA program, she dreams of opening her own psychiatric clinic.

In 2011, Bowden was excited to receive the Dr. Michael and Catherine Bullock Award, which provided financial support for her entire four years of medical training. "It felt like recognition of the hard work and frugality I had already accomplished," Bowden says. "If I hadn't won the award I probably would not have been able to afford the MBA and would have had more scholastic debt to work off after graduation."

"Chantelle's a go-getter," says Cathy, who continues to advise on the selection process from her home in Saratoga, Calif. It was Bowden's work ethic — house-painting in the summer and doing administrative work to save for tuition — that put her over the top. The Bullocks wanted to reward students like Bowden by allowing them to take part in the kinds of social activities that Michael wasn't able to enjoy until much later in life.

In a handwritten letter dated July 22, 1995, he wrote: "No one should have to work as hard as I did by choice." His nature was to keep his head down and his sleeves rolled up. He didn't play sports. He didn't see movies. He didn't attend his graduations. "I didn't marry until 1965," he wrote. "My wife found me. I certainly never had the time."

Cathy was also raised to know the value of a dollar. The Stanford graduate and former Spanish-language teacher was born in Brooklyn, N.Y., to Italian immigrants — her father was an opera singer — and worked in canneries and vacation resorts through the summers to help pay for university.

The difference between her experience and her husband's, she says, is that things came to her more easily. She enjoyed her summer jobs, and her parents' hard work afforded her the best possible education, whereas Michael's work was gruelling and he never received outside help. Practically by force of will, he propelled himself to a pediatric residency at one of the most prestigious hospitals in the U.S., the Cedars-Sinai in Los Angeles, where in 1961 he received $300 a month, working 105 hours a week. His patients were often the children of movie stars, including Frank Sinatra and Sammy Davis Jr. Two years later Michael joined a pediatric group in San Jose with two partners.

The Bullocks, who didn't have children, saw the UAlberta award as an opportunity to leave a legacy and help hard-working students like Bowden, who is pictured with Cathy in Saratoga on these pages. "We wanted them to be well-rounded," Cathy says, "to enjoy the beautiful things in life — music, art, literature — and take time to smell the roses."

While it's uncommon for students and donors to develop a relationship, the Bullocks wanted to see how their support and mentorship would change someone's life over time. Through the years, Michael and Cathy hosted the award recipients at their home and even travelled to Edmonton to attend their graduations. Many of the 16 students have kept in touch with the couple long after graduation. "In our hearts we consider them our foster children," Michael wrote in one of his many letters. "They are a great joy."

Bowden, who invited Cathy to her wedding this past February, remembers Michael as gentle and kind. "Their philosophy is 'see a need, fill a need,' " Bowden says. "I feel like I gained another pair of grandparents."

Since 1991, the Dr. Michael and Catherine Bullock Award has provided financial support to students for their entire four years of medical training. Students are selected for their integrity, frugality and determination — qualities that demonstrate self-reliance. *Turn to page 48 for more information.*


PHONE 252 713
PATIENT'S NAME
ADDRESS 12759
DIAGNOSIS
TREATMENT
APPOINTMENT
CHARGE Plenty
DATE 12/25/66
COLLECTED
Spoiled housewife
and Career girl
Christmas present
a surprise
total loss

Natural Wonders

STORY BY SARAH PRATT | PHOTOS BY JOHN ULAN

Ron Madge has spent a lifetime unlocking the secrets of the natural world — now he wants to help others find their own answers

Ron Madge is waiting on the front porch of his childhood home in Calgary at exactly noon, a canvas messenger bag tucked under one arm. After a polite greeting as he climbs into the passenger seat, he buckles his seatbelt and navigates the few blocks it takes to reach his favourite restaurant, Dragon Pearl.

At the restaurant, Madge removes his newsboy cap, adjusts his cardigan and places his bag on an empty chair. He orders his usual (if unusual) dish: an upon-request-only blend of wonton and hot-and-sour soup. The retired entomologist, who celebrated his 81st birthday a few days earlier, is soft-spoken and effortlessly dapper, his 28 years living in London evident in his style and careful enunciation. He tells stories in a precise way, cataloguing his interests and adventures in detail. He has brought a collection of items that represent different milestones in his life. He reaches into his bag and takes out a black and white photo of him as a nine-year-old boy with six childhood friends. A memento of a young man who was filled with wonder about the world that surrounded him.

Madge spent his childhood fascinated by science and nature. He loved catching butterflies. His mother, eager to encourage her son's curiosity, made him a net from a badminton racket hung with fine cloth. She wasn't squeamish about bugs but put her foot down when he tried to store his bottles of insects in the fridge.

His father wanted him to pursue a traditional career such as dentistry, but Madge knew early on that he would spend his life unlocking secrets of the natural world. Despite a brief romance with astronomy in junior high, he ultimately chose to study insects. That choice led to a lifetime spent in pursuit of answers.

Madge began his studies in entomology at the University of Alberta in 1953 and was surprised to be the only student in a second-year insect taxonomy course, where he learned to identify and categorize insects. It was like a private class, he says. In fact, many of his university classes were small, allowing him the kind of quiet, focused learning that would carry forward into his career.

Encouraged by his mentor, renowned UAlberta entomologist George Ball, Madge directed his keen focus and doctoral research on the ground beetle genus *Lebia*. But carrion beetles — insects that feed on the bodies of dead and decaying animals — were his true love, he says. Decades later, the mysterious creatures continue to fascinate Madge. They are surprisingly easy to collect, he explains, since all you need is a dead body. (A friend in Nova Scotia collected roadkill when he knew Madge was coming for a visit. "A good friend," he says.)

Some knowledge is found in books, but other answers can only come through experience, and so Madge's studies naturally included fieldwork. As a student in the 1950s he did a stint rearing caterpillars in Kananaskis and another fending off ticks while scouring bushes for insects in southern Manitoba. He also collected specimens in northern Alaska for the Canadian Department of Agriculture. As he recounts these stories, Madge reaches up and touches his bolo tie, the sliding clasp made of walrus ivory carved with the image of an Alaskan meat-drying hut.

After earning his PhD from UAlberta in 1963, Madge studied at the famed Natural History Museum in London, England, as a post-doctoral fellow. He remained at the museum from 1965 until his retirement in 1992, working as a beetle taxonomist for the Commonwealth Agricultural Bureaux. The museum's terracotta tiles and arched ceilings house more than 80 million specimens, including the oldest entomology collection in the world, with more than 34 million


N. defodiens


A
Further Discovery
OF
BEES.
Treating of
The { Nature, Government, Generation & Preservation } of the BEE.
With the Experiments and Improvements
arising from the Experiments
LONDON,

species of insects and arachnids. Madge describes the museum's library as a treasure that answers every question and satisfies curiosity — perfect for a man eager to spend his life collecting and cataloguing knowledge. "It's absolutely fabulous," he says. "Over time, I just found the books there were better and better."

And London offered its own mysteries for Madge to investigate — "it took me a long time to get used to looking the wrong way" — and sparked an interest in language, history and British comedy (*The Two Ronnies* was a favourite). He reaches once more into the canvas bag and this time pulls out a book of rhyming Cockney slang and a 15th-century Scottish poem. He flips through pages of the slang book, explaining how he finds satisfaction in the rhythm of the words and learning the meaning of each phrase. One of his favourites is, "Let's have a butcher's (hook)," which is Cockney slang for, "Let's have a look."

The poem *Christ's Kirk on the Green* has held his interest for decades, partially because it has the first recorded use of the word "clock." Surprisingly, the word also means beetle, and you can still hear it used in this way throughout northern Britain today. Madge has spent more than 30 years working on his own restoration of the poem. His favourite line is a young woman telling her unwanted suitor that he isn't worth two dung beetles. "I think today she would just say, 'Get lost, you creep!' " he says with a laugh.

Madge's canvas messenger bag might be nondescript at first glance, but as he pulls out one unique object after another — maps, books, photos, poetry — it becomes apparent that this simple tote is filled with a lifetime of curiosities.

The world-class library Madge has helped create at UAlberta is, too, equal parts instruction and delightful surprises. Since 1995, his financial donations helped build the Dr. Ronald B. Madge Entomology Collection, which houses nearly 500 rare and antiquarian books, manuscripts, journals and print ephemera in UAlberta's Bruce Peel Special Collections Library. Tucked in among the collection are gems such as *A Quaint Treatise on Fleas*. (The photos on these pages were taken at the Peel library as well as at the university's E.H. Strickland Entomological Museum.)

"Books go on for years," Madge says. "I hope whoever wants to use the collection will do so, and hopefully the books will still be around in hundreds of years."

His academic legacy also endures. Insects that were named for Madge include a small, dull moth and *Pachnoda madgei*, a green African beetle with orange spots.

These days Madge digs in the dirt to garden, not to hunt insects. But he continues to ponder the world around him — "entomological thinking," as he calls it, is still his favourite pastime.

"I like answers," he says. "That's why I like science but also why I like libraries and especially the Natural History Museum library in London. If you need an answer from a book you don't have to wonder if they have it — of course they do. I want that for University of Alberta students."

Thanks to Ron Madge's generosity and commitment, the University of Alberta's Bruce Peel Special Collections Library has built one of the great collections of historic entomology, notable for books of both scientific significance and esthetic beauty. To learn more about making a gift to University of Alberta Libraries, turn to page 48.

A Centring Space

STORY BY CAILYNN KLINGBEIL | PHOTOS BY JOHN ULAN

The Aboriginal Student Services Centre offered Charis Auger a place to explore her Aboriginal identity and begin to understand her own story

On a mild weekend evening last winter, Charis Auger joined a large round dance in a gym at the University of Alberta. Hundreds of people clasped hands and moved as one to the beat of drums. For Auger, attending the event — held in memory of Elder Marge Friedel — is a recent, yet important, tradition. Auger grew up without any connection to her Aboriginal culture. That changed when she was introduced to Friedel, a Métis elder involved with the Aboriginal Student Services Centre on UAlberta's North Campus.

"I really didn't have an identity until I met Marge Friedel," says Auger, 29, a Cree woman in her final year of an undergraduate degree in native studies.

Friedel, who died in 2011, was passionate about education and helping students stay focused on their studies. Every Wednesday morning she visited and mentored students at the centre, which offers support and services for more than 1,000 First Nations, Métis and Inuit students who attend the university.

Raised in the small northern Alberta town of Slave Lake, Auger was 17 when she had her son, Phoenix. She dropped out of high school and struggled with an abusive relationship and, later, addiction and homelessness. She didn't see herself ever going to university, but people told her she was smart, and she listened. She enrolled in an educational assistant program in the town of Athabasca and later moved to Edmonton with her son, upgrading her education while sleeping on a friend's couch. "It was quite the struggle," she says. But for the sake of her son she stayed focused on moving forward. She wanted to show him that regardless of what life throws at you, success is possible.

Auger first learned about the centre in 2010 through her involvement in UAlberta's Transition Year Program for Aboriginal students. The centre's "dream team," as she calls the staff, helped her find housing and made sure her son had a warm winter coat. It was at the centre that she met Friedel and started to learn more about her Aboriginal identity, an experience that has been life-changing.

Inside the centre, large wood columns outline various doorways. The space feels beautiful and safe to Auger, like home. One doorway leads to

a smudge and meditation room, where Friedel took time to teach her how to smudge. Auger now prays to Friedel in the same room they once sat in together.

Through another doorway, a reference room contains hundreds of books on Aboriginal themes and stories. Growing up, Auger had never been taught about residential schools. It was eye-opening to learn what her relatives had endured. Her new-found knowledge also helped her better understand her own story and how the intergenerational impact of residential schools has affected her life. The centre offers a space for dialogue, she says. "First with ourselves, and then with others."

Many of the centre's resources rely on donor support, including academic tutoring, providing students with daily fresh fruit and giving new students backpacks filled with supplies. A Christmastime initiative donates gift cards to single parents, allowing them to purchase a present for their children. "I know that every single day a student is going to walk through that door and need help in some way," says Shana Dion, director of the centre. Monthly stew-and-bannock meals are integral to connecting students with each other and building community, Dion says. "It's the connections that make [the centre] so special. This truly becomes a home away from home."

For Auger, the many supports she received have helped her thrive. "It's the reason why I'm still here today," she says. "I've come an extremely long way." And even though the influential elder, Friedel, is gone, her life's work continues to guide Auger. Today, Auger's 12-year-old son attends amiskwaciy Academy, a public school where Friedel was a founding elder. The Edmonton school emphasizes Aboriginal culture, language and traditions — things Auger's parents didn't expose her to when she was growing up.

Auger recently completed a certificate in Aboriginal governance and is working on another in community service learning. She volunteers for the centre and iHuman Youth Society, keen to share her culture with others. At the recent memorial round dance, for example, she brought her mother, who had never been to one. The crowd moved together like the heartbeat of the community. It's that community — discovered within the centre, through Elder Friedel — that has lifted Auger and helped her succeed. "The centre has helped lay the foundation to where I am today," she says. "Having my culture and identity has allowed me to feel rooted. Now I can continue to grow up and reach out."

The Aboriginal Student Services Centre supports First Nations, Métis and Inuit students on their academic journey at the University of Alberta. The centre honours the Indigenous world view of education as a continuous ceremony of learning. *To learn more about how to support the centre and its programs, turn to page 48.*

IN CONVERSATION

How to Play a Long Game

STORY BY MIFI PURVIS | PHOTOS BY JOHN ULAN

When your goal is to transform science, it helps if you can think several moves ahead

Jonathan Schaeffer knows that playing the long game nets better results than going for a quick win. A computer scientist, one-time tournament-level chess player and dean of the Faculty of Science since 2012, Schaeffer was originally attracted to UAlberta to work with Tony Marsland — one of only two people in Canada working in Schaeffer's area of interest at the time.

Schaeffer researches artificial intelligence. His team created the checkers-playing program Chinook, the first computer to win a human world championship for any game. In 2007, the team announced checkers was solved — meaning perfect play by both sides leads to a draw. Make a mistake, however, and Chinook will pounce.

Schaeffer, shown here in his home with his personal collection of books on polar exploration, shares how he applies that same winning approach to transforming the Faculty of Science.

Is it true people find you playing games in your office?
This used to be the norm a few years ago, but not so much today! Although if you visit my office and I'm playing a game, I'm actually doing research. I study artificial intelligence in game-playing computer programs. That means I get to research the latest AI technologies and apply them to games.

You've said you want to set the right conditions to turn luck and insight into discovery. What do you mean?
We have an amazing faculty pushing the boundaries of knowledge. We have superb students and talented support staff — all the ingredients for success. To be a truly elite science faculty takes a huge commitment. That commitment would benefit from a fund that would allow us to do something bold. Big ideas don't happen every day. When those opportunities come along, we need to jump. So we thought of the SCI Fund as a way to get there.

What is the SCI Fund? It sounds ambitious.
It is. The SCI Fund is short for "science, creativity and innovation," and it's an endowed fund. I want to build for the future, so that 20 years from now it allows my successors to be visionary. My first year here, I had an opportunity to hire a team of scientists. They were doing breakthrough work in physics. Experts told me,

"These guys are top in this area. If it works, they will win a Nobel Prize and change the world." But the cost of this group was $1 million a year, because it wasn't just the scientists. There's a lab, there's graduate students, there's post-docs — it adds up pretty quickly. I couldn't find the money.

We have many wonderful donors who give generously, but their money is split over hundreds of pots. The SCI Fund channels as much of the giving as possible into a single pot that will let the Faculty of Science do big things. I like to say: "United we grow, divided we status quo."

What are some of those "big things" already happening in the science faculty?
I can rhyme off a bunch, but I'll forget some — and you can be sure I'll hear about it! But … paleontology. We have the world's most famous dinosaur hunter here [Philip Currie, Canada Research Chair in Dinosaur Paleobiology]. Machine learning. We have one of the top groups, internationally acknowledged. Carbohydrate chemistry — we have a world-class reputation. We have a long legacy of polar bear research. And geology. The faculty's geoscientists built this province. All these research programs, and others, need to be supported if they are to keep their "world class" status.

And yet we hear stories about serendipity and genius — that greatness will bubble to the surface, despite the odds.
Greatness bubbles to the surface — but in the right environment with the right people and the right infrastructure. The lone scientist, the genius who closes his laboratory door and emerges years later with some breakthrough, is far less likely.

So then, this is much bigger than just one project or one outcome.
An endowment of $200 million will change the Faculty of Science. We're not there yet, and during my term as dean, we will not get there. The SCI Fund is for donors who think strategically and long-term: they know the benefits may not happen for decades. We need these partners to help us do big, transformative things. The fund will support existing world-class research, allow us to move into new research areas, explore innovative teaching ideas and give us the nimbleness to grab opportunities when they come our way.

If you could fast-forward to 2050, what kind of outcomes would we expect to see from the SCI Fund?
Research and teaching outcomes are unpredictable, but some high-level outcomes will happen. We will be a stronger research powerhouse; achieve breakthrough results, many leading to commercialization; be the first choice for many of the best Canadian undergraduate and graduate students; be recognized nationally and internationally for an outstanding educational experience; see a massive increase in the revenue being generated by Faculty of Science spinoff companies; and so on. All of this is doable — it just requires a vision that we can all get behind and the necessary financial support from the university, province and generous donors.

Under Jonathan Schaeffer's leadership, the Faculty of Science is putting the next big scientific advancement within reach. The SCI Fund — an endowed fund with an ambitious $200-million goal — is a route to novel scientific ideas, methods and discoveries, positioning the faculty as a leader and academic destination. To learn how you can help transform the Faculty of Science, *turn to page 48.*

LEARN MORE

A gift to the University of Alberta is an investment in the future. An investment in the experiences and potential of our students. An investment in creativity, innovation and discovery. An investment in making our world a better place.

Vivere Legato (page 6)

INSTITUTE FOR STUTTERING TREATMENT AND RESEARCH (ISTAR)

Contact: John Voyer
Director, Advancement
Faculty of Rehabilitation Medicine
780-248-5781
jvoyer@ualberta.ca

–

Filling a Gap (page 10)

SHINE DENTISTRY

Contact: Kim Falconer
Associate Director, Advancement
Faculty of Medicine & Dentistry
780-492-5929
kim.falconer@ualberta.ca

The Art of Story (page 16)

WRITER-IN-RESIDENCE PROGRAM
and
STEPHEN KAPALKA MEMORIAL PRIZE IN CREATIVE WRITING
and
DARREN ZENKO MEMORIAL PRIZE IN CREATIVE WRITING

Contact: Angela Martincevic
Associate Director, Advancement
Faculty of Arts
780-492-9473
angela.martincevic@ualberta.ca

–

Time to Enjoy the Beautiful Things (page 24)

DR. MICHAEL AND CATHERINE BULLOCK AWARD

Contact: Kim Taylor
Assistant Dean, Advancement
Faculty of Medicine & Dentistry
780-492-4719
kim.taylor@ualberta.ca

Natural Wonders (page 32)

DR. RONALD B. MADGE ENTOMOLOGY COLLECTION

Contact: Della Paradis
Director, Faculty Development
(Social Sciences)
780-492-7537
della.paradis@ualberta.ca

–

A Centring Space (page 40)

ABORIGINAL STUDENT SERVICES CENTRE

Contact: Shana Dion
Director
Aboriginal Student
Services Centre
780-492-7254
shana.dion@ualberta.ca

–

How to Play a Long Game (page 44)

SCI FUND (SCIENCE, CREATIVITY AND INNOVATION FUND)

Contact: Michelle Fuko
Assistant Dean, Development
Faculty of Science
780-492-8824
michelle.fuko@ualberta.ca

giving.ualberta.ca

"Only by going too far can we find out how far we can go."

– T.S. ELIOT

WHAT PHILANTHROPY CREATES

Philanthropy advances creativity, supports discovery and creates positive change in the world. It opens doors for students. It creates boundless opportunities for research. It is truly transformative.

giving.ualberta.ca

UNIVERSITY OF ALBERTA