MESSAGE FROM THE DIRECTOR OF ADVANCEMENT

DEAR ALUMNI AND FRIENDS

Do you remember your first day on campus as a University of Waterloo student? Perhaps you arrived to a Faculty named Applied Health Sciences or Human Kinetics and Leisure Studies. Some alumni remember being a student at Waterloo before we were a Faculty. They came to campus as a student in the Department of Recreation and Leisure Studies or in our very first department, the Department of Kinesiology.

This fall, our Faculty expects to welcome approximately 3,500 students. Some may be on campus and some may remain virtual. Either way, they are our future alumni and we know that you join us in welcoming them to Waterloo and your home Faculty.

In a previous Health Hub, Dean Lili Liu shared the strategic plan for our Faculty. Thank you to alumni volunteers, students, faculty, staff and friends who have been developing tactics with us to help execute our mission and vision.

Our vision for a healthier world has inspired us to launch the Faculty of Health Student Experiential Learning Fund. We know many of our students go on to service careers in not-for-profit and health-care organizations. While this fund will support all undergraduate students, funding preference will go to students interested in learning and contributing to the health and well-being of those organizations doing social good. Positions may include co-op and paid internships. To help contribute to it, please use the attached donation slip.

Thank you for your sharing your time, treasure and talent with us this year. You help us to be better.

Warm regards,
Sherri Sutherland
Director of Advancement, Faculty of Health
DEAN’S MESSAGE

DECADES OF IMPACT

In my two years with the Faculty, I have had the pleasure of meeting many alumni, some in their home towns, but more recently, online. One thing that always amazes me, though, regardless of how we met, is the degree to which you care about improving the lives of others and how you strive to make an impact in your field. While I know that’s the way our faculty and staff approach their own work, I realize a Faculty focused on health attracts students who care about other people in the first place.

For this issue of Health Hub, we’re exploring the ways in which alumni have been making an impact in their various fields. Whether it has to do with the way data is used to improve services for Canadians, or whether it’s breaking the glass ceiling in aviation, improving the effectiveness of wearable technologies, or improving health care in our communities – alumni have been both making waves and quietly working behind the scenes to make lives better over the last five decades.

We also strive at the organizational level to improve the lives of individuals, communities and populations – whether it’s through research, education or partnerships. To that end, we’ve included some areas of notable impact in which the Faculty has been involved since 1967.

As always, I hope you enjoy reading about fellow alumni and I encourage you to reach out if you have story ideas you would like to share, either with me or our alumni and advancement team.

Lili Liu
Dean, Faculty of Health
When Dave McVetty began the Recreation and Leisure Studies program at the University of Waterloo in the early 1980s, there was no such thing as the Internet. Desktop computers were in the early stages of being introduced into offices.

But McVetty (BA ’87, Recreation and Leisure Studies) ended up becoming an expert in the gathering and management of data.

After 34 years with Parks Canada, most recently in roles that involved leading data strategy teams, he has just started a newly created position as manager of the data centre of expertise at Employment and Social Development Canada.

It is an unusual trajectory for someone in recreation and leisure studies, and McVetty certainly didn’t start out thinking that data management might be his life-long career.

When he came to Waterloo’s program from the Niagara region, he thought he might end up becoming a recreation director. Soon, he began helping professors who needed help in their research projects. “I needed the money, so I started off doing some very basic data entry and phone interviews to gather information.”

From there, his interest in data just grew. “I began taking courses from these same professors on research methods and statistics,” McVetty says. “Computers were new in workplaces at the time but I realized that this was an opportunity to turn something I liked doing into a career. I thank Waterloo for that, because if I had gone to any of the other schools for recreation, I may not have had the opportunity to realize that.”
Hooked on data

After he graduated, he went to work for Parks Canada, where computers had recently been introduced. Many on the staff found those computers to be clumsy and frustrating, but McVetty’s experience at Waterloo made him the go-to help person.

In one of his early roles at Parks Canada, he helped the department figure out a strategy for how to count visitors to national parks and historic sites. “That sounds simple but it wasn’t,” McVetty says. At the time, there wasn’t a good way of doing it at Thousand Islands National Park, especially when there were no gates. He developed a study to count people and match them to the garbage collected by cleaning staff. “Assuming that people generate garbage at roughly the same rate, all we had to do was count the number of garbage bags and that gave us a rough estimate of the attendance.”

From there, McVetty got hooked on how data could be turned into useful information that can inform program policies and decisions.

He ended up getting involved in socio-economic research that generated economic impact studies and feasibility studies for new parks projects. Eventually he became the manager of social science for Western and Northern Canada and then took on roles that involved analyzing data to help the department become more efficient and make better decisions about the use of resources.

Carve out a new role

His new role involves helping the managers in Employment and Social Development Canada co-ordinate information gathering and make better use of labour data. People in different parts of the department are often gathering data that can be repurposed for other uses if the right questions are asked. As manager of the data centre of expertise, “my role really is helping to provide that infrastructure so that they can ask those questions, and get the answers.”

Since the position was just recently created, “the exciting challenge is in carving out this new role,” he says.

McVetty strongly believes that data can be used to provide better service to Canadians. That’s impact that he hopes his work will have had at the end of the day.

“I want to make sure that the programs that the government provides are not only doing what they’re supposed to do, but will pleasantly surprise people in terms of how nimble they can be, how responsive they can be, and how the money can be spent to have the biggest impact.”
I just always spoke my mind and felt very well respected.

Nancy Barber had no idea she would be breaking glass ceilings when she enrolled in the Recreation and Leisure Studies program at the University of Waterloo in 1994. But she soared to remarkable career heights in the male-dominated aviation industry, becoming the first female chief operating officer at Bombardier, a storied Canadian manufacturer of business jets.

Barber (BA ’98, Recreation and Leisure Studies) just recently left that position to start her own consulting company that is focused on sustainable aviation and advanced air mobility, a segment of the aviation industry that could become the future of urban transportation.

Her impact was recognized last year, when she was named one of Canada’s Top 100 Most Powerful Women and also received the Elsie Award for Business from the Northern Lights Aero Foundation in recognition of her contributions to aviation and aerospace in Canada.
Executive suites

Her initial goal in recreation and leisure studies was to get into the management side of the travel and hospitality business. That changed after she got a summer internship position at Bombardier, a company where her father worked as an engineer. She loved the job and after she graduated, the company offered her a permanent position. Over the course of the next 22 years, she advanced up the career ladder, eventually landing in the executive suites.

Barber says as a young woman, she never thought of herself as breaking glass ceilings. “I just always spoke my mind and felt very well respected,” she says.

As she advanced, she had to get used to often being the only woman in the room. There are power struggles, and it is always extremely competitive in the executive ranks of a large corporation, Barber says. But she adds that she was lucky to be in a company with leaders who provided a lot of support and encouraged diversity.

As chief operating officer, she was responsible for the manufacturing operations. “We produced the Learjet, Challenger and Global aircraft platforms. I was responsible for five factories in Wichita, Kansas, Toronto and Montreal that produced about 150 aircraft a year,” Barber says. “There were 7,000 employees building aircraft within my organization. We were responsible for building, testing and delivering the aircraft to the customers.”

Growth trajectory

The company was on a growth trajectory. Then, the COVID-19 pandemic hit. It significantly affected the entire aviation industry, including Bombardier.

“We had just introduced the Global 7500 aircraft and in the first year of my role as chief operating officer, we were highly focused on getting that aircraft into stable production. But then, when March 2020 hit, it was unbelievable,” Barber says. “We reacted very quickly, suspending production for several weeks to ensure the health and safety of our employees, and allowing us to implement rigorous COVID-19 protocols in our factories. We had to reduce production in line with market demand, which was estimated to be by 30 per cent.”

Try something new

Bombardier was recognized with the 2021 Health and Safety Mercure award for its rigorous and successful health and safety measures during the pandemic. “I’m very proud of what we did,” Barber says.

Nevertheless, the cutbacks did take a toll on Barber, especially after experiencing both 9/11 and the financial crisis of 2008 in the aerospace industry. It was time for her to reflect on what would be the best next steps in her career. Earlier this year, she decided to leave Bombardier and set up Barber Complete Consultancy, which focuses on helping aerospace clients manage key strategic projects, including sustainable aviation and the advanced air mobility vehicle space.

This is a whole new area that involves using electric vertical takeoff and landing aircraft to move people and cargo in areas where other modes of transportation might be slow, such as in large, congested cities. “This is the future of urban air travel, so it is very exciting,” she says.

Barber is an example of how being open to new challenges and opportunities can open career doors. Her advice to young people is “find your passion and take time to travel and see the world.” She has been to 46 countries and says that seeing other parts of the world makes a person a better global citizen and helps to inform leadership decisions.

She also continues to have an impact as a mentor for young women and encourages them to pursue their dreams. “I am a firm believer in, ‘If you can see it, then you can be it,’” she says.
Today’s sophisticated medical devices are miracles of modern medicine, extending and saving the lives of millions of people every day.

Whether it is an anesthesia machine in a hospital, a chemotherapy infusion pump, a CPAP device worn for sleep apnea, or a home COVID-19 test that can give you results in 15 minutes, people marvel at what medical technology can do.

But Michael Lau (BSc ’02, Kinesiology, Ergonomics Option) thinks about an aspect of medical device technology that typically gets less popular attention – the ergonomics of the user interface.

He is the human factors leader at the Insight Innovation Center, a consultancy company in Chicago that is a subsidiary of Nemera, a French-based supplier of medical devices in the pharmaceutical and biotechnology sector.

“Other companies hire us to design and develop medical products,” he says. “These could be things like injection and other drug-delivery devices, diagnostic devices, surgical tools, or any medical equipment used in hospitals or homes.”

Whatever the problem is, it can be helped through good human factors design. The possibilities are endless.
Human factors

His team of engineers gathers inputs through research, analysis, usability testing and prototyping to help inform designs and to validate that products meet the needs they were designed for in the hands of their users. That’s where “human factors,” also known as ergonomics, come into play.

Whether it is something small like an insulin injection pen used by individuals, or a sophisticated piece of robotic equipment in a surgery bay, it has to be safe and easy to use, Lau says. “Humans come in all different shapes and sizes, with varying levels of capability, and with very diverse ways of thinking. How do you design something that makes sense for everyone?

“We work with designers and human factors engineers to figure out how to design products so that they can be used in a safe and effective manner. We want to make sure that when these devices are in the hands of lay users or in the hands of nurses or doctors, they can use them properly without hurting themselves or their patients by doing something incorrectly, out of sequence, or not doing it at all.”

The field of human factors wasn’t something Lau was specifically thinking about when he arrived from Toronto to study Kinesiology at Waterloo. He initially wanted to be a physiotherapist. “I was looking for a program that would lead to a health-care type of a profession,” he says.

Prevent, not treat

But while studying kinesiology, he discovered ergonomics. He realized that instead of treating injuries after they happen, he could help prevent injuries in the first place. His undergraduate advisor, Jim Frank, encouraged him to go on to graduate school, which led to his master’s and PhD in Industrial and Operations Engineering at the University of Michigan Center for Ergonomics.

Although most people tend to think of ergonomics in terms of setting up office workstations or redesigning manual work to prevent repetitive strain injuries, there are many exciting applications in the medical device industry, Lau says.

“There is a vast landscape of medical devices to work on. Think about any device that you might use at home or from the pharmacy for health-care reasons, or that’s used in hospitals. Figuring out what people need and how to embody it is at the crux of good medical device design. The regulated nature of the industry also means that manufacturers are required to do extensive usability testing prior to approval.”

At-home wearables

An exciting transition in medicine involves the greater use of at-home wearable devices. Internet-connected sensors, digital devices and the miniaturization of medical equipment give people the ability to have treatments or monitor physiological signs while going about their regular day.

But these devices, such as wearable on-body infusion pumps, have a lot of strange human factors details that have been considered, Lau says. These include where you have to put it on the body, whether the person’s skin can support the weight of the device and how to design it so that people can wear it on their bodies for perhaps days at a time. “Think about all the activities you might do in a day. How do you design a wearable that allows a person to sit, sleep, exercise, bathe, eat, work, play, or care for small children without falling off?”

Lau says he hopes the University of Waterloo will encourage young people to pursue this field. “There are not enough good human factors engineers out there right now and the demand is high,” he says. “Students with a solid grasp of how humans perceive, think, move and act, who understand product development process rooted in user-centered design, who can work and communicate with anybody – be it a senior citizen, a child, a neurosurgeon, marketing professional, or engineer – and have an eye for design and detail are in high demand.”

The work is extremely satisfying because it has a huge impact on improving health-care outcomes, Lau adds. Good design in medical equipment and devices means better treatment outcomes and less pain and suffering for patients.
For Alexandra (Ali) Barras, being a good family physician is about more than the well-being of individual patients. It is also about the health of entire communities.

“I see my future as being a family physician in rural Canada, but not just a physician for individuals,” says Barras. “I also want to affect change at the community level and use my public health skills for projects and initiatives to improve health in communities.”

It is a goal that very much mirrors the diverse range of experiences she has had during her journey to becoming a physician.

Barras (BSc ’14, Health Studies) recently graduated from medical school and has started a residency in family medicine in Lethbridge. Along the way, she has worked on international health projects in Tanzania and Bolivia.

“"I want to be able to see a need and figure out how to address that need."
More recently, the effects of climate change have figured prominently in research coming out of the School of Public Health Sciences and Recreation and Leisure Studies. Whether it affects primary care, food sustainability and contaminants, Indigenous ways of being or tourism development, the question of how to sustain a healthy planet in the face of climate emergency is pressing. Paired with the use of big data and health systems, some researchers are also making an impact around the world, such as Mongolia and rural Africa.

Some faculty members have begun to focus on issues of equity and thinking about health and wellness as a basic human right. Whether it’s studying how the health of Indigenous, racialized and 2SLGBTQ+ communities is affected by policy and organizational systems, or whether it’s challenging the notions of how marginalized communities access health care, sport and other areas of public life, research in these areas stands to fundamentally change the way our society works.

At Waterloo, she was also an athletic administrator and student engagement officer and became a student program lead for the Canadian Centre for Ethics in Sport, a role in which she created a steroid education program. As a health promotion facilitator in Alberta, she worked on a suicide prevention training program.

The road to becoming a physician has been winding, but she says all these eclectic positions are tied together by the theme of improving the well-being of communities.

She made a conscious decision to seek out diverse co-op experiences rather than just focus on getting the high academic grades to get into medical school. “I didn’t want to give up all the amazing experiences that came with co-op,” Barras says.

One of her co-op positions took her to Tanzania, where she created content for the HIV/AIDS education program developed by an organization called Art in Tanzania.

**Much to learn**

“I learned so much from the people there,” she says. “That sparked me to also do a minor in international development at Waterloo. I just realized how little I knew and how much more there was to learn.” In Health Studies at Waterloo, students learn about the social determinants of health, “but to actually see them in practice was an important learning experience,” she adds.

While doing her master’s in Alberta, she also went to Bolivia for four months, where she worked for an organization that was developing a strategy for food sovereignty and school breakfast programs in rural areas. “That was an amazing experience and I felt that based on what I had learned at Waterloo, I was able to provide some assessment tools and contribute to that organization,’ she says.

During her medical studies, she continued work on the suicide prevention project for the Alberta government. That too contributed to her skills as a physician. “To be able to support people through those difficult points in their lives is something that I am passionate about, both as a physician and as a person.”

She was in the final year of her medical school program when the COVID-19 pandemic hit. “That forced us to become more creative in terms of how we see patients, be it virtually, or talking to them on the phone,” she says.

**Active listening**

Barras says throughout all these experiences, she gained the most important skill that a physician can have, which is active listening. “I really enjoy that aspect of allowing people to tell their stories. That is one of the main reasons for wanting to get into family medicine. I really enjoy listening to people and I think that in our technology driven world, with screens on all the time, we don’t listen enough.”

She wants to integrate all of these skills to help communities deal with broader issues that affect health, such as assisting those experiencing homelessness.

“I see myself as being part of a community and being a resource for the community,” she says of the future impact she hopes to have. “I want to be able to see a need and figure out how to address that need.”
Melody Lee (BSc ’14, Kinesiology) and Neil Martin (BSc ’14, Kinesiology) have some exciting news to share since graduating:

“We bought our first house together in the Waterloo area six years ago, got married during the pandemic last summer in our backyard and just gave birth to our son, Myles, on May 3, 2021!” Professionally, Melody opened her own studio called The Spine Studio, where she specializes in pre- and post-natal care. Neil’s first co-op term at Depth Training turned into his full-time career post-graduation. He has since been promoted to head strength and performance coach and trains high-performance athletes, including NHL and OHL players.

#UWHealthAlumni

Shankavi founded HRIM Wellness, a clinic that actively works with the community to help educate, inspire and conduct physical and mental health programs. HRIM Wellness has been running for a year and has helped the senior population, the special needs community and those embarking on a new wellness journey.

Alex joined Myodetox, a growing manual therapy clinic consisting of physiotherapists, chiropractors and massage therapists, when he finished school. He now owns and operates their newest clinic, Myodetox PATH, in the heart of the Toronto financial district. This is their 11th clinic between Toronto, Vancouver and Los Angeles.

Alexandra began a new role as project manager of the University Health Network’s (UHN) new Geriatric Emergency Medicine Initiative. This initiative seeks to improve care, experiences and outcomes for older adults in UHN’s Emergency Departments through design, best practices, quality improvement, education, research and community outreach.
CLASS NOTES

PATRICIA DOLLA
BA ’11, RECREATION AND LEISURE STUDIES
Patricia recently received a promotion at Make-A-Wish Canada to national events manager. Patricia started working for Make-A-Wish in a local role with the Quebec chapter in 2018.

JR GAUTHIER
BSC ’07, KINESIOLOGY
JR is excited to be heading back to school after 14 years since graduating to complete his graduate diploma in Aging and Health at Queen’s with an end goal of completing a master’s degree.

DIVYA GUNGADIN
BSC ’17, KINESIOLOGY
Divya went to teachers’ college and is now a French Immersion intermediate teacher – “loving every second of it.” She started her career during the pandemic but says it’s already been one of the most rewarding experiences. She has been appointed as the intermediate curriculum lead at her school next year and looks forward to teaching science and making it fun. She also hopes to continue working towards dismantling racism and helping students find their voice.

HILARY PROUSE
BA ’19, RECREATION AND LEISURE STUDIES
Hilary started working as the administrative assistant for the Alumni and Advancement Office at Algoma University in Sault Ste. Marie, Ontario.

THIV PARAMSOSEHY
BSC ’13, HEALTH STUDIES
Thiv founded a startup, Adracare, that was acquired by WELL Health. He says Waterloo is where he found his passion in digital health.

KYLE TRAIN
BSC ’09, KINESIOLOGY
Kyle is currently working at Sun Life as a trainer in the Group Disability department. He was recently nominated for a Sun Life 2020 CEO Award of Excellence.

KEVIN CONNELL
BSC ’16, KINESIOLOGY
Kevin met his partner Leigha when they were both living in residence at Ron Eydt Village. They have now been married for eight years.
“When students have a chance to integrate their career with care for society, they embark on some of the most meaningful learning experiences of their lives,” Liu says. “For example, students working with organizations fighting for social justice gain a firsthand glimpse of the world through someone else’s eyes.”

She says the Fund is intended to promote innovative thinking among Health students. “From conducting research, to recommending actionable solutions, to problems faced by local organizations, Faculty of Health students have a well-honed set of skills to contribute to worthy causes.”

In return, the opportunity to immerse themselves in a real work setting can catalyze tremendous personal growth and professional discovery. “Health students may be one internship away from learning how they can use their unique career paths to serve others, but they need support to take the next step. That’s where the Experiential Learning Fund comes in.”

To contribute to the Experiential Learning Fund, please use the donation slip included in the centre of this magazine.
JOIN TEN THOUSAND COFFEES

Are you interested in giving back to current Faculty of Health students? Share your career and life experiences with students as they navigate their education, co-op positions and look for a job after graduation.

How? Through one-on-one matches with students – or host an ‘Office hour’ event to share your career expertise and experience with a small group of students and alumni.

Or are you an alumnus at the early stage of your career and looking for others who have a career path similar to what you hope to achieve? Join our network and use the member list to find alumni to connect with who are eager to help fellow Faculty of Health alumni.

Sign up today to start your mentoring and networking journey!

tenthousandcoffees.com/schools/uwaterloo

For more information or assistance, contact your Alumni Advancement Officer, Jenn Bentley, at health.alumni@uwaterloo.ca.

UPCOMING EVENTS

SEPTEMBER 24-25, 2021
ALUMNI BLACK & GOLD DAY @ HOME
Grab your Waterloo gear and get ready to celebrate virtually! We’re planning a full weekend of virtual entertainment, learning opportunities and stories from campus for you to enjoy from the comfort of your own home! Stay tuned for a detailed schedule and keep your contact information up to date to receive your invitation.

uwaterloo.ca/health/alumni-friends/events

NOVEMBER 30, 2021
GIVING TUESDAY
Save the date! Watch for the Faculty of Health challenges that you can support to help unlock additional funds for the Faculty of Health!

JANUARY 2022

UY WELL-FIT 20TH ANNIVERSARY KICK-OFF
2022 marks 20 years of the UW WELL-FIT cancer and exercise program! We will begin the year with an exciting virtual kick-off event and continue with special events, including the CCCARE For UW WELL-FIT Fitness Challenge in May, BBQ on June 5, 2022, and our Roaring 20s UW WELL-FIT Gala on November 12, 2022. Details will be available closer to the new year on the CCCARE website.

uwaterloo.ca/cccare

JUNE 3-4, 2022
ALUMNI WEEKEND
SAVE THE DATE and contact Jenn Bentley at health.alumni@uwaterloo.ca to plan a class reunion or special event at Alumni Weekend 2022. If you are a class of 1997 or 1972 grad, consider hosting a 25th or 50th anniversary reunion! Get involved!
STAY CONNECTED

uwaterloo.ca/alumni/connect

JOIN LinkedIn and identify yourself as a Faculty of Health grad
linkedin.com/showcase/uwaterloohealth

JOIN the Alumni Chapter in your area
As a part of our Global Alumni Volunteer Network, our chapters can be found in 11 cities around the world. Alumni chapters offer a wide variety of activities for local alumni and students abroad on co-op and exchange terms.

uwaterloo.ca/alumni/chapters

SPEAK to our students at a career event
To connect with current students and share your career journey and expertise, contact us at:
health.alumni@uwaterloo.ca

SHARE your career and life updates
uwaterloo.ca/health/class-notes

HIRE Waterloo co-op students or graduates
uwaterloo.ca/hire

SUPPORT the Faculty of Health
uwaterloo.ca/health/support

ATTEND Waterloo alumni events
uwaterloo.ca/alumni/events

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HIRE Waterloo co-op students or graduates
uwaterloo.ca/hire

SUPPORT the Faculty of Health
uwaterloo.ca/health/support

ATTEND Waterloo alumni events
uwaterloo.ca/alumni/events

NOMINATE AN ALUMNUS

Faculty of Health alumni are contributing to the health and well-being of society through significant professional accomplishments, public service and support to the University of Waterloo. Now it’s time to honour these achievements!

If you know a graduate who embodies the Faculty of Health spirit, nominate them for the Young Alumni Award or Alumni Achievement Award today.

Nominations close April 30, 2022.

NOMINATE AT:
uwaterloo.ca/health/alumni-awards

RETURN UNDELIVERABLE CANADIAN ADDRESSES TO:
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