AT THE INTERSECTION

The new frontiers of the digital ecosystem may be where we least expect them—in oceans and farm fields.
Sometimes the difference between a good relationship and a great one is subtle.

The spring and summer months are a time of big change on a university campus. New graduates walk across the stage to receive their degrees and as they do, they enter the Dalhousie community in a new role—that of alumni. Likewise, the university itself is always changing and evolving in step with the growth of its community. As a reader, you’ll see that evolution reflected within our pages. We’re making some subtle updates to the look of DAL Mag over the coming issues to reflect our new brand, which launched in June. But it’s not just about looks. As you read through coming issues, you’ll also get a peek into where our community is going from the stories we tell.

In “Digital Disruptors,” (p. 33) Becca Rawcliffe explores Here We Code, the movement aimed at further solidifying Nova Scotia’s spot on the tech-hub map. You’ll meet the 2022 Aurum Award winners, alumni of distinction leading and innovating in their communities (“Time to Shine,” p. 28). And Kim Humes walks us down the research garden path, surveying how small-scale growers are supplementing their grocery store purchases with backyard bounty (“How Does Your Garden Grow?,” p. 23). We encourage you to mark your own evolution by submitting a Class Note (email classnotes@dal.ca), by sharing your thoughts on our content (email editor@dal.ca)—and by sharing the stories you see here with others (you can find our content online at https://www.dal.ca/news/dal-magazine.html).

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The difference is a great relationship
This spring allowed a very welcome return to in-person convocation ceremonies after the pandemic required us to move our celebrations online for the past two years. It was especially inspiring to watch the Class of 2022 cross the stage. This graduating class had to navigate frequently shifting public health restrictions and moved to and from online learning throughout much of their studies. Yet, they overcome these great obstacles in pursuit of their academic goals. Knowing how these students grew and adapted even in the face of so many pressing global challenges—I am confident that they graduated as stronger, more resilient, and more compassionate global citizens, precisely the attributes that the world vitally needs right now.

This summer, we will also host special convocation ceremonies to recognize graduates who completed their studies in 2020 and 2021 and took part in virtual celebrations. Since the beginning of the pandemic, we have been committed to creating opportunities for graduates who wanted to cross the stage in-person to do so once public health restrictions allowed it, and we are thrilled to finally be able to honour this commitment.

This year's Aurum Award winners, among our most exceptional and distinguished group who continue to make positive contributions to Dalhousie and the world, are special recognition of our students' achievements and the importance of their work. The Aurum Award is the most prestigious award at Dalhousie and recognizes academic excellence and research contributions made by our graduating students. This year, we are highlighting two exceptional graduates: Ashley Jackson and Pamela Palmater.

Ashley Jackson, a 93rd Rhodes Scholar, is a former Dal medical student who is completing his fourth-year student at the University of Ottawa's College of Medicine. Ashley, a member of Canada's Mi’kmaw/Black community, is one of only 11 students across the country to be chosen as a member of Canada’s Rhodes Scholars Class of 2022. A native of Nova Scotia, Ashley is completing his Bachelor of Arts degree at King’s and Dalhousie with a combined honours in Political Science and Law. Ashley’s Rhodes application focused on innovation and development of research solutions from under-represented populations to address pressing global challenges. His research project, titled “The place-based approach for Mi’kmaw and Black nursing students,” explores the role of traditional medical schools in supporting Mi’kmaw/Indigenous and Black students in nursing programs and graduate studies.

Pamela Palmater, a lawyer, educator, activist, and author, is a former student of Dalhousie’s College of Sustainability and the Environment. Pamela is the founder and executive director of the Institute on Governance, a nonprofit organization that promotes good governance in public and private organizations. Pamela’s research focuses on the importance of ocean literacy and its role in promoting a sustainable future. Her work has been recognized with the 2021 Mitacs Award for Outstanding Innovation—Postdoctoral, which recognizes exceptional research contributions made by postdoctoral fellows in Canada.

Dalhousie graduates are among the most employable in the world, according to the 2021-22 Global Employability University Ranking and Survey. Globally, Dalhousie ranked 187. Employers were asked to vote for up to 15 top performers from a list of 2,000 universities. The ranking features the 250 highest-rated institutions and includes universities from 44 countries and regions. Dalhousie’s placement in the top 200 highlights the university’s commitment to preparing graduates for the workplace. For the first time in the 11 years of the survey, soft skills and subject specialization have exceeded the perceived academic excellence of the university as a priority for employers. Digital literacy was also identified by employers as a new focus with increasing importance.

The 93rd Rhodes Scholar, Ashley Jackson, and Pamela Palmater are examples of the exceptional talent and leadership that our graduates bring to the world. Their achievements serve as motivation for us to continue to support the next generation of leaders and innovators who will shape the future of our global community. We are proud to welcome the Class of 2022 to our global alumni community—a distinguished group who continue to make positive impacts in communities all around the world.
Older adults face mobility issues post-COVID

Adults over age 50 who experience mild or moderate COVID-19 are at greater risk of worsening mobility and physical function even if hospitalization is not required to treat the virus, according to research out of Dalhousie and other Canadian universities. Susan Kirkland, a Dalhousie research professor and head of the school’s Department of Community Health and Epidemiology, co-authored the paper that is believed to be one of the first to evaluate the association between mobility and COVID-19 in older adults. The findings, which used data from the Canadian Longitudinal Study on Aging (CLSA), suggest that many patients who experience even mild COVID-19 have persistent and troublesome symptoms. Researchers surveyed more than 24,000 people over the age of 50 from across Canada during the initial phase of the lockdown in 2020 to determine the effect of a COVID diagnosis on their mobility. Participants with COVID-19 had nearly double the odds of worsening mobility and physical function compared to those without COVID-19, although most had mild or moderate symptoms.

—Alison Auld

Global team tackles depression crisis

The world is failing to tackle the persistent and deepening crisis of depression, according to a Lancet and World Psychiatric Association report that says a whole-of-society response is needed to reduce the global burden of the illness and address widespread failures to tackle the persistent and deepening depression crisis. Dr. Rudolf Uher, a Canada Research Chair in Clinical Genetics and Psychiatric Epidemiology, co-authored the report’s examination of depression causation. “The risk for depression is shaped by genetic disposition, physical conditions, and social environment. We need to address all these aspects to help reduce the toll that depression takes on our lives,” says Dr. Uher. The 25 health experts from 24 countries who make up the commission say governments, health-care providers and researchers need to work collaboratively to improve both care and prevention, fill knowledge gaps and increase awareness to tackle what is one of the leading causes of avoidable suffering and premature death worldwide.

—Alison Auld

Dahn and Baylis this year’s Killam Prize winners

Françoise Baylis and Jeff Dahn were honoured with the $100,000 Killam Prize, winning two of the five prestigious awards granted annually by the Killam Trusts. Offered to Canadian scholars who have distinguished themselves in their fields, the Killam Prize is considered the top national award of research excellence. “It is a historic achievement for our university to have two Killam Prize winners in one year. Drs. Baylis and Dahn are known internationally for advancing knowledge in their fields — areas that promise to shape the way we live in the future,” says Deep Saini, Dalhousie’s president and vice-chancellor. Drs. Baylis and Dahn are only the fifth and sixth Dalhousie faculty members to receive a Killam Prize since the awards were created in 1981. Biology’s Brian Hall (2005), Philosophy’s Susan Sherwin (2006), Chemistry’s Axel Becke (2016), and Medicine’s Ford Doolittle (2007) are past recipients. “Dr. Baylis is a leading voice in the discussion of how we should proceed with human genome editing for reproduction, and Dr. Dahn is a major force in battery science, creating urgently needed sustainable energy solutions. Both scholars’ work is making a substantial impact, and their Killam Awards are extremely well deserved,” says Dr. Saini. —Andrew Riley and Caitlyn MacDonald

History at McGill University. Gaudet becomes the third Dal student in two years to receive the scholar- ship. It carries full funding for tuition and fees, a living stipend of $2,000 a month, connections with mentors and the opportunity to participate in an intensive leadership development program. As McGill and Montreal now beckon, Gaudet is excited to see where her scholarly and professional studies lead her next. Her advice to others who might be considering an application for the coming year’s cohort of McGill MacBain Scholars: “Just apply. The interview...
process alone is really rewarding. They make it worth your time. They get to know you and ask you questions that are really important and help you reflect on your work.”  
— Matt Reeder

$3.7 million in new funding

To attract the world’s best researchers, Dalhousie must provide the tools and spaces they require to meet their goals. To build labs, purchase technical equipment and acquire leading-edge soft- and hardware, the university has received substantial support from the Canada Foundation for Innovation’s John R. Evans Leaders Fund and Research Nova Scotia, which together have contributed $3.7 million in new funding for infrastructure. “Great researchers need great facilities. The support of our funders helps ensure we have the leading-edge research environment necessary to continue recruiting and retaining top talent from around the globe,” says Alice Aiken, Dal’s vice-president research and innovation. From new capabilities in nuclear magnetic resonance to the creation of dedicated spaces to conduct Indigenous research, Dalhousie is now set to empower its scholars to engage in some of the most sophisticated research in the world.  
— Andrew Riley

Putting the blues to good use

Dalhousie’s Faculty of Agriculture and Clever Fruit Products, a Nova Scotia-based food company, are partnering to conduct research on converting locally grown wild blueberries to high-value food ingredients. The four-year project is led by Vasantha Rupasinghe, professor of functional foods and nutraceuticals in the Department of Plant, Food, and Environmental Sciences. The Industry and Alliance Program of the Natural Sciences and Engineering Research Council of Canada is contributing $320,000 to be used to optimize a novel process to generate encapsulated food ingredients from fermented wild blueberry. “This value-added agri-food process is a combination of ancient knowledge on generating health-promoting fermented food and innovative food nanotechnology,” Dr. Rupasinghe explains. “The new food ingredients will be assessed for their efficacy in reducing the risk of cardiovascular disorders, a rising health problem in Canada and worldwide that can lead to social and economic burdens.”  
— Stephanie Rogers

All in the name of science

Students in a new beer-making course launched this past fall at Dal took time to gather together at Dalhousie’s T-Room pub on Sexton Campus last November to share a sampling of their newfound knowledge and the ales they made. Gianfranco Mazzanti created the Brewing Science course to offer students interested in process engineering a compelling real-world application to test their knowledge. “This was the first time I ever brewed, and I loved it,” says Dr. Mazzanti, an associate professor of the Department of Process Engineering and Applied Science. “The majority of these students are chemical engineers who want to expand their knowledge of processes. What I’m doing is combining some science with engineering aspects with the act of making the beer.” Dr. Mazzanti was joined at the event by a guest lecturer from Shelburne, N.S.-based brewery Boxing Rock, which helped students hone their skills throughout the term. “We partnered with Boxing Rock, and they took us to the factory and spent all day training us. Teaching us how to do industrial beer,” says Dr. Mazzanti. Students delivered poster presentations of their efforts in the TUNS Brewing facilities—a research-based brewing operation based at Dal.  
— Mandy King

Locally grown wild blueberries may reduce cardiovascular disorders

Get the latest Dal News at dal.ca/news
found.
Archiving Dal’s history

The name of this column, “Found,” alludes to images and items discovered in the University Archives that shed a little light on the history of Dalhousie and the wider community. Sometimes what we find is actually an absence of archival records—a hole in the history. The image you see here is from the Nova Scotia LGBT Seniors Archive, a community-led initiative started by Professor Jacqueline Gahagan in 2019 to preserve and provide access to records of the activities of senior members of the LGBT community across Nova Scotia. The LGBT Seniors Archive’s mandate is to increase the visibility and community involvement of LGBT seniors in Nova Scotia by working with them directly to preserve a cultural memory of their activities and to develop an open and accessible physical and digital archive for use by community members, researchers, students and the Nova Scotia Department of Seniors, among others. Everyday operations involve consultation with LGBT seniors across the province, and donated materials are appraised, processed and preserved at Dalhousie University Archives. When community consultation and donations drew further attention to the lack of traditional archival records in Nova Scotia pertaining to lesbian history in particular, the LGBT Archive developed the Lesbian Oral History Project, which will allow lesbians in Nova Scotia to share their personal experiences and tell the stories they feel are important to preserve for posterity. This joyful image from the Halifax Gay Pride March of 1996 was taken by Anita Martinez, a photographer and long-standing community activist and volunteer, in particular with reference to the peace movement, women’s equality and empowerment groups and LGBTQI rights. She’s one of many valued donors to the archive who are helping to make what was lost—or missing—found.

— Jennifer Lambert

Learn more about Dal’s University Archives at dal.ca/archives
Environment

Bleached reefs still produce

A global team of researchers has found that coral reefs that become bleached by warming waters can still provide important fish nutrients to millions of people that rely on them for food.

The findings show that while reef ecosystems change after bleaching, they can still support diverse small-scale fisheries and the fish caught are rich in micronutrients vital to the health of millions of people in the tropics.

Aaron MacNeil, an associate professor in Dalhousie’s Department of Biology and co-author of the study, says this work is significant since coral bleaching events are becoming increasingly frequent and severe, placing greater stress on these vulnerable ecosystems. He adds that the work reveals that marine fish will continue to provide a valuable food source in the face of climate change, underscoring the need for effective fisheries management for many years to come.

RESEARCHER: Dr. Aaron MacNeil, Faculty of Science

People

Black studies research gains new home

There’s a new home for Black studies research at Dalhousie that will serve as a centre of excellence supporting the work of established and emerging Black scholars. By forging a robust and interdisciplinary research agenda, the new Black Studies Research Institute will encourage researchers to work across academic fields, including medicine and sciences, which often fall outside of the traditional scope of Black studies.

OmiSoore Dryden, Dalhousie’s James R. Johnston Chair in Black Canadian Studies

Science

Fido may know more than you think

They are cute, beloved by their owners and could have a vocabulary that is far more advanced than humans appreciate.

New research out of Dalhousie University shows canines can respond to an astonishing 89 words and phrases on average, with some responding to many more.

RESEARCHER: Dr. Sophie Jacques, Catherine Reeve, Faculty of Science

Environment

High altitude microplastics

There may be no final resting place for microplastics, only temporary stops before they carry on in a continual cycle, say researchers who found the tiny plastic particles in the pristine air high in the French Pyrenees.

The international research team, led by Dalhousie’s Steve Allen, sampled air 2,877 meters above sea level at the Pic du Midi Observatory. They tested 10,000 cubic metres of air per week between June and October of 2017 and found all samples contained microplastics—tiny plastic fragments less than five millimeters in diameter.

Dr. Allen, an Ocean Frontier Institute researcher in Dalhousie’s Department of Earth and Environmental Sciences, determined that the captured particles came from as far away as North Africa and North America. They also sourced the microplastics to the Mediterranean Sea and Atlantic Ocean, suggesting plastic that leaves the ocean can reach high altitudes.

The discovery suggests microplastics in the free troposphere—an atmospheric superhighway above the clouds—can likely travel greater distances and reach more remote parts of the planet.

RESEARCHERS: Dr. Sophie Jacques, Catherine Reeve, Faculty of Science

RESEARCHER: Dr. Sherry Pictou, Faculty of Management

Foregrounding Indigenous perspectives

Dal researcher Sherry Pictou will help lead a $24 million project to foreground Indigenous perspectives on biodiversity and the well-being of Indigenous Peoples around the world.

The project, titled Àrramăt, will involve over 150 Indigenous organizations, universities, and other partners. It will empower Indigenous Peoples in countries including Canada, India, Vietnam, Thailand, Uganda, Mali, Brazil, and others to address issues such as food security, human-wildlife management, and the decolonization of science.

Dr. Pictou says it is an important opportunity to bring forward Indigenous voices and concepts about humanity’s relationship with biodiversity to reveal new and urgently needed solutions.

“My hope is, if you look deeply into Indigenous concepts and practices there is something fundamental within Indigenous world-views—this worldview based on a reciprocal, respectful relationship with the ecosystems that we live in—that can inform the way that we’re doing things and change things for the better.”

RESEARCHER: Dr. Sherry Pictou, Faculty of Management

RESEARCHER: Dr. Sophie Jacques, Catherine Reeve, Faculty of Science

Image credit: Sherry Pictou will help lead Àrramăt, a project aimed at foregrounding Indigenous perspectives on biodiversity and well-being of Indigenous Peoples around the world.
Dal alumni and faculty share their books, television shows, films, webinars and podcasts.

**BOOK**

*The Odyssey of Star Wars: An Epic Poem*
BY JACK MITCHELL

Dr. Mitchell, associate professor, Department of Classics, uses the ancient literary form of epic poetry to put a new spin on the *Star Wars* saga.

**BOOK**

*A Child of East Preston*
BY WANDA THOMAS BERNARD

Senator and former Dal professor of social work Dr. Bernard chronicles her youth growing up in the segregated African Nova Scotian community of East Preston in the 1950s and 60s.

**BOOK**

*What Storm, What Thunder*
BY MYRIAM CHANCY (MA’90)

Chancy’s novel intimately portrays the aftermath of the devastating 7.0 magnitude earthquake that struck Port-au-Prince, Haiti, in 2010, and charts the inner lives of a cast of affected characters.

**PODCAST**

*The Refuge*
BY ISRAEL EKANEM AND CYRRC

The Child and Youth Refugee Research Coalition (CYRRC) has launched a new podcast, *The Refuge*, a conversation hosted by Israel Ekanem that brings listeners into conversations between youth with refugee experience, community partners and academics on issues affecting children, youth and families in Canada.

**BOOK**

*Daughters of the North: Jean Gordon and Mary, Queen of Scots*
BY JENNIFER MORAG HENDERSON (MA’02)

This historical biography reframes a turbulent period in history by focusing on Jean Gordon (the first wife of the Earl of Bothwell, husband of Mary, Queen of Scots) who became Countess of Sutherland: the most powerful woman in the north.

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**PODCAST**

*The Sam Taylor Podcast*
BY SAM TAYLOR

Kara Barnard and Rika Kebede (MBA’21) join Rowe School of Business professor Samantha Taylor to discuss the launch of the very first Deloitte Greenhouse in the world, based at Dalhousie University.

*Did you know you can order books and more online from the Dalhousie Bookstore? Go to dal.ca/bookstore*

**events.**

Activist Cindy Blackstock advocates for Indigenous children
At Dal’s 2022 Shirar Shalom Lecture in March called Spirit Bear: Echos of the Past, Cindy Blackstock (LLD’18) described the decades-long human rights challenge she has successfully pursued around Canada’s inequitable provision of child and family services to Indigenous and non-Indigenous Canadians.

African-Nova Scotian businesswomen share their experiences
An online panel in February called Embracing Diversity: Black Women Build Businesses supported the Atlantic Promise Scholars Initiative. Jalana Lewis (JD’13), Dalhousie’s director of African Nova Scotian community engagement, hosted entrepreneurs Renée Boudreau (BA’15), Shekara Grant (BA’19), Ashley Hill (BA’13) and Joyce Adomast as they described overcoming imposter syndrome and building support networks.

Coffee Chats host panelists from around the world
In online Coffee Chat with President Saini and Special Guest events this winter, President Saini hosted conversations with alumni panelists in China, India and Kenya. Those joining from around the world gained insights into the challenges and rewards of leading through unprecedented times.

**AND MORE!**

**IMAGINING THE FUTURE OF LIBRARIES**
Dr. Carla Hayden, America’s 14th Librarian of Congress, delivered the Dalhousie–Hornecks National Leadership Lecture on February 1, 2022: Library Engagement in a Pandemic and Post-Pandemic Virtual World.

**CHEWING ON FOOD INSECURITY**
At an online event in the Open Dialogue Live series called Taking a bite out of food security in December, Dal alumni and researchers discussed the importance of sustainable food production and the agricultural industry, and socioeconomic considerations that impact food security and equity.

You can watch recordings of these and other Dal events on our YouTube page at YouTube.com/DalhousieU.

Want to receive event invitations? Update your address at alumni.dal.ca/update or email alumni.records@dal.ca

See the latest events listings: alumni.dal.ca/events
BRICE SCHESCHUK (BComm’94) is managing partner with Globalive Capital, an investment platform focused on venture, technology and innovation. He’s also a speaker associate of Creative Destruction Lab in Atlantic Canada.

24 HOURS

6:30 A.M. I fuel up with coffee and a healthy breakfast while skimming the New York Times, Bloomberg and other publications. I flip between having Monocle or Bloomberg Radio on in the background. I check emails and my calendar to prepare for the day’s meetings and tasks ahead.

8:30 A.M. I arrive at Creative Destruction Lab (Atlantic) at Dalhousie’s Rowe Building for mentor meetings with start-up companies looking to build the next massively scalable company in Canada. In a room buzzing with energy, each founder interacts with more than 50 business mentors who provide guidance. Discussions are provocative and challenging.

12 P.M. Over lunch I hop on Zoom to mentor two companies—one in Nigeria and one in Vietnam—I encountered through Techstars Toronto, a popular global accelerator. Sometimes I shake my head and wonder how someone like me, who grew up Saskatchewan in the 1970s, is now providing guidance to a new generation of entrepreneurs all over the world. We really do live in a global village.

1:30 P.M. I lead a MindFrame Connect workshop at Volta, Canada’s east coast innovation hub, on elevating the craft of mentorship and building skills for entrepreneurial resilience. MindFrame Connect is a not-for-profit located at Dalhousie I co-founded to address specific deficiencies we saw in the entrepreneurial ecosystem.

3 P.M. I am interviewed for a podcast discussing financial literacy concepts and the need for a broad societal focus on building those foundational skills.

4:30 P.M. Time for a run! I lace up for a 10K. I try to workout six days a week to keep my mind clear and body moving.

6 P.M. My wife and I head to The Bicycle Thief for oysters, cioppino (Italian seafood stew), beef tenderloin, a local IPA and an Italian red wine.

7:30 P.M. I moderate a panel organized by Treble Victor, a not-for-profit organization focused on assisting military veterans in their transition from the service to civilian employment, education and/or entrepreneurship. I served in the Canadian Naval Reserve in Regina and Halifax and enjoy giving time to this important cause.

9 P.M. My day ends with preparing questions for a CPA Ontario board meeting. I sit on about 15 boards and need to be ready to help them advance their strategic plans.
“Always love coming back and performing at the Cohn. It reminds me of my days as a student at Dal.” Dutcher says. “Every time I stand on that stage it allows me to reflect on the growth since those days.”

When the curtain rose on Resounding, the concert to mark Dalhousie Arts Centre’s grand re-opening in late May 2022, Jeremy Dutcher (BA’12) was there to help celebrate.

Dutcher is a classically trained operatic tenor and composer who blends his Wolastoq First Nation roots into the music he creates. He returned to Dalhousie to co-headline the celebration marking the completion of the Arts Centre’s expansion.

His combined degree in music and social anthropology helped Dutcher find his voice—literally and figuratively. He learned to sing with precision, power and control while coming into his own as an Indigenous artist who blends distinct musical aesthetics that shape-shift between classical, traditional and pop to form something entirely new.

During a stint working for the Canadian Museum of History after he graduated, Dutcher discovered voice recordings singing forgotten songs and telling stories that had been taken from the Wolastoqiyik generations ago. Back at his piano, feeling out melodies and phrases, he engaged in what he calls “dialogue with the voices of his ancestors.” These “collaborative” compositions created bold and unique pieces that he brings to life through affective performances.

“I’m doing this work because there’s only about 100 Wolastoqiyik speakers left,” says Dutcher, who grew up a member of Tobique First Nation in New Brunswick. “It’s crucial for us to make sure that we’re using our language and passing it on to the next generation. If you lose the language, you’re not just losing words; you’re losing an entire way of seeing and experiencing the world from a distinctly Indigenous perspective.”

Resounding not only announced the successful conclusion of a $40 million fundraising campaign, but also the enhancement and expansion of a world-class performing arts facility in Halifax.

The campaign enabled improvements in the form of new teaching, rehearsal and performance spaces. Now, Dalhousie will have more cross-disciplinary learning opportunities and will benefit from state-of-the-art rehearsal and performance spaces. Audiences returning to the Arts Centre will enjoy new features like an interior garden, improved air quality and soundproofing, and they’ll be able to attend additional performances in the building’s new Joseph Strug Concert Hall.

Dutcher says improving the Dal Arts Centre and having top of the line places for young people to perform in the Atlantic region is important. “I’m really excited to be part of the celebration.” —Alison DeLory

“Dalhousie has been huge in terms of getting us started. Dal’s Office of Commercialization and Industry Engagement connected us with numerous Dal Innovates resources and programs that have truly set us up for success,” says David Hodgson.

Innovator

Third year medical student David Hodgson and his partner (and spouse) Sara Fedullo (BENG ’21) are breathing new life into the asthma inhaler market through their start-up, HOLLO Medical.

Inspiration: After learning about the problems with inhalers in a workshop with a respiratory therapist at a Halifax hospital, Hodgson was vexed by the thought of kids gasping for breath and not getting the medication they need. He saw an opportunity for innovation and knew exactly where to turn to make it a reality. “I was studying for finals and Dan came bursting in and said, ‘I have this great idea and you are the perfect person to help me,’” said Fedullo, whose background in 3D printing made her the ideal collaborator.

WHY IT MATTERS: “You can’t just stuff a spacer in your pocket. We want to empower kids by giving them a spacer they will want to use and show their friends,” says Fedullo. “Our spacer will be the most portable valveless holding chamber ever produced and made in such a way that it matches the performance of industry-leading chambers,” adds Hodgson.

Foundation: With their market defined and a functioning prototype in hand, the pair are now working with Dalhousie’s Emera ideaHUB and Halifax-based innovation hub, Volta, and are raising funds to scale up their enterprise. “The next step for our development is to seek regulatory clearance,” says Hodgson. “We’re almost ready to get the stamp of approval to test our device and eventually sell it across North America and beyond.”

Innovation: When you see someone take a puff on an asthma inhaler there’s a good chance the medication isn’t getting to their lungs. The medicine releases quickly, making it difficult to time exactly when to inhale it. This can be especially hard for kids, which is why they are supposed to use spacers, chambers that briefly suspend the medicated mist to give them time to inhale it. But spacers are bulky, awkward, and often left at home—not where they’re needed when an attack strikes. HOLLO Medical has created a spacer prototype that makes it easier for kids to get the lifesaving medication they need.

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WHY I GIVE

As lead volunteer for the Dalhousie Event Centre campaign, **DR. BILL STANISH** is ensuring the Dalhousie, Halifax and Maritime communities can reap the future facility's benefits for generations to come.

Over the last 50 years, Dr. William (Bill) Stanish (MD’70) has built an impressive career in sports medicine and orthopedic surgery at Dalhousie.

But while he usually treats elite athletes, Dr. Stanish has also been a passionate advocate of sport and recreation for everyone—and this dedication to promoting active living motivates him as a proud alumnus to give back to Dal as champion of the Dalhousie Event Centre.

“Exercise is the best remedy for uplifting spirits and the perfect way to tackle the ravages of aging,” says Dr. Stanish, noting community involvement and deep friendships also promote health and well-being.

He says his best friends today are the same people he played sports with in the 1960s at Dal: “We’re old codgers now but we still work out together almost every day and have that same mutual respect and friendship that develops from competing together.”

When the Dalhousie Memorial Arena was torn down a decade ago, varsity teams and the Dalhousie and neighbouring communities lost a beloved venue for intramurals, public skating and Dal Tiger hockey camps. Recognizing the opportunity to make sports and recreation once again more accessible, and recalling his own glory days as team captain of both the varsity hockey and football teams, Dr. Stanish is thrilled the university is building the new Event Centre.

Construction has begun on the site of the old arena and is expected to be completed in fall 2023. The Dalhousie Event Centre will feature an NHL-sized ice sheet with an alternate floor surface for Dal and community events, as well as a state-of-the-art facility for the Dalhousie Physiotherapy Clinic. Varsity, club and intramural teams will return to the Studley campus, buoying campus spirit and offering new activity options.

Dr. Stanish looks forward to seeing the new centre’s impact on the health and happiness of university and local communities. And as a long-time supporter of Special Olympics and other sport organizations, Dr. Stanish will also work to expand access for people with intellectual and physical challenges, and for other underserved communities.

“I see it as a central hub on campus, whether it’s watching the Tigers, gathering for festivals and special events, or rekindling alumni hockey leagues—the appeal for our community can’t be overemphasized. This will truly be a community centre.”

—Jodi Reid

WHY I DO IT

**MARRIAM ABOU-EL-HAJ** fosters connection on campus with the help of a little floof.

**HER BACKSTORY:** Marriam Abo-El-Haj is a registered psychologist and is part of Dalhousie’s Student Health and Wellness Centre team. She often works in tandem with St. John Ambulance-certified therapy dog and very good boy, Oscar. Abo-El-Haj started one of the first university therapy dog programs in Nova Scotia while at Mount St. Vincent University before making the move to the Dal.

**HIGHLIGHTS:** Now, every Thursday she runs Puppy Power Hour in the Student Union Building. Students (and faculty and staff) can come, interact with Oscar and get their puppy fix. Abo-El-Haj says she enjoys getting out from behind the closed doors of the office to interact with students in a different setting. She says Puppy Power Hour is a great way to destigmatize counselling services.

“Twenty years ago, if I had a booth at an event that said ‘counselling services,’ people would walk past and look away. Now they flock to it.”

Apart from the time she takes Oscar out to meet his adoring fans, Abo-El-Haj also sees about five individual clients a day as part of an interdisciplinary team of doctors, nurses, social workers, psychologists and counsellors, all working to support students through the major life transition that is attending university and, often, living away from home for the first time.

“University is such an amazing time, there’s so much growth. But there’s a lot of pressure as well,” says Abo-El-Haj.

Despite being on a busy campus, connecting with others can be a challenge when work piles up. Abo-El-Haj notes that our attachment to technology can further that sense of isolation. The past two years of pandemic have also created additional strains on people’s mental health.

For many, the idea of seeing a counsellor can be intimidating, but when Abo-El-Haj and Oscar are on duty, they make it easier and more organic for students to connect and to learn about the services available to them if they’re struggling.

WHY I DO IT: For those on campus, taking time out of their hectic day to interact with a dog can be an instant destressor. Abo-El-Haj puts it, “Sometimes students ask, ‘So, what does Oscar do?’ and I say, ‘How do you feel?’ Then they say, ‘I feel good!’ and I say, ‘That’s what he does!’”

And the research backs it up. It’s well established that pets can reduce blood pressure, alleviate stress, depression and anxiety, and encourage mindfulness. Abo-El-Haj says Oscar is a pro at getting people to stop and give him pets—sometimes up to 20 people will be gathered around him, some of whom come week after week.

“I love to see people’s smiling faces or see them relax and giggle when Oscar comes anywhere near them. There’s just an instant decompression that happens when students, faculty or staff get to be around him. You can’t buy that!”

—Ann Marie MacKinnon
How Does Your Garden Grow?

A new Dal study tracks Nova Scotian gardening habits one pot and plot at a time

By Kim Humes
many of us, the green, yellow, red and blue stripes of Canada’s Food Guide are etched in my memory. I remember learning about it in school and can picture the folkly illustrations of the vegetable, grain, dairy, and meat servings we should have daily. In January 2019, Health Canada unveiled their “new food guide,” which eliminates food groups and recommended servings. Instead, it encourages eating “plenty of vegetables and fruits, whole grain foods, and protein” plus more plant-based choices. While these recommendations are nutritionally sound, they are not realistic for every Canadian. Many healthy food choices are financially out of reach for Canadian families. The COVID-19 pandemic has decreased affordability while increasing our anxiety about food access and supply. Many consumers are exploring alternatives to traditional bricks-and-mortar grocery shopping, including gardening and home food production.

An interdisciplin ary research study at Dalhousie (funded by Research Nova Scotia) is exploring these new behaviours. The study, “Home Food Gardening in Response to the COVID-19 Pandemic: Lessons for Food Security Considerations,” uses geographic information systems (GIS) technology to crowdsourcing data on home gardening in Nova Scotia. The research team wants to find out the scope and extent to which Nova Scotians have turned to home food production since the onset of the pandemic, and to examine the impact these activities have on food security in the province.

According to the Food and Agriculture Organization of the United Nations (UN), food security is achieved “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy lifestyle.” It’s an issue with multiple dimensions—global and local alike. Seasonal fluctuations, differences in national and international versus household supply, food preparation and utilization, and stability over time all play a role. One can be food secure one minute, and suddenly food insecure the next.

“The foundational factor informing food security is income,” says Kathleen Kevany, associate professor in the Dalhousie Faculty of Agriculture. “Also, food environments—the types of foods available, accessible, and affordable in the area—impact the healthiness of food consumed. Growing some household food addresses a small component of these larger issues.”

Exploring how individuals are coping and creatively wrestling with food insecurity is particularly pertinent in Nova Scotia, which has the highest recorded rate of food insecurity in Canada; nearly one in six households have inadequate access to food. Elizabeth Fitting, associate professor, Sociology and Social Anthropology, teaches a course called Food Activism and is a member of the scientific committee of the AAL. “More than four in ten single-mother households suffer food insecurity in this province,” says Dr. Fitting. “Fourteen per cent of those households are living with severe food insecurity.”

As with many systemic social problems, the barriers to food security are highest for low-income people, single parents, women, people with disabilities, seniors, people of African descent, urban indigenous people, immigrants, and those with intersecting identities. The COVID-19 pandemic has widened existing social gaps. Many have experienced job or housing loss, contributors to further food insecurity. And all of this is heightened by climate change. Jennifer Giek Martin, a lecturer at the School of Information Management and GIS consultant on the AAL study, explains: “We’ve seen massive drought in western Canada this past year, where most Canadian wheat comes from, so what happens to wheat and wheat products like flour? Growers in BC produce an immense amount for the rest of Canada, but the heat, fires, and flooding there recently put this in jeopardy. We need to think about what these things mean for food availability for Canadians and not just assume it will all work out.”

Against this backdrop, it’s no surprise that more and more people are looking for ways to take matters into their own hands— with gardening gloves in tow. Yet household food production is an under-researched topic. Health Canada recently published updated recommendations for healthy eating, and little is known about the consumption patterns of these foods here in Nova Scotia. The crowdsourced GIS web application developed by the research team will help fill these gaps. Nova Scotians are invited to submit their home gardens.

To learn more, or to submit your own (Nova Scotia only) data, visit: https://bit.ly/3Mr52Rl

To find out how to cultivate your own green thumb, visit: https://savvygardening.com/

Read about the Agri-Food Analytics Lab: https://www.dal.ca/sites/agri-food.html

Learn more about the United Nations Sustainable Development Goals (SDGs): https://sdgs.un.org/goals
Personal and community food gardening has a long history. Victory gardening during the First and Second World Wars was seen as patriotic, as it supported food supplies for the front lines. If we consider COVID-19 to be a global victory, growing food for victory over it can be a patriotic act. However, the AAL study posits that this has little support from government. Halifax Regional Municipality supports community gardens on municipal lands but has a list of strict requirements, including a clear purpose for growing the produce. Community gardens are required to be managed by a non-profit group and membership and participation is application-based. This places both a financial and an administrative burden on community groups, most of which are volunteer run.

Food security is not the only reason that people are growing their own food. “Gardening is very good for mental health,” says Niki Jabbour. Jabbour is a graduate of the Faculty of Agriculture, and is a professional garden writer, author, radio host, and speaker who specializes in food gardening. Her website SavvyGardening.com is a comprehensive hub of home gardening tips, and she has written four award-winning gardening books. “Gardening forces you to get outside and provides physical exercise. Many people took to it since the pandemic started for these benefits, and as a home-based hobby to combat boredom. Our web visits increased to 2.5 million per month in 2020—it was a boom year—but I noticed an increase in interest in food gardening after the 2008 economic crisis, and that growth hasn’t stopped. Growing your own is a great way to save money and access unusual foods.”

Jabbour stresses that home food gardening can be very simple. Even without a yard, plants can be grown in containers or indoors. Although winters in Nova Scotia are long, gardening can still be a year-round activity. “We are seeing many more home greenhouses, poly tunnels (a type of tunnel greenhouse), and cold frames. Crops like lettuce, arugula, kale, and fresh herbs like parsley and thyme can be grown here in all seasons without supplemental heating.” Her advice for new home gardeners is to start small with one planter or container, plant easy-to-grow vegetables such as tomatoes, cucumbers, and bush beans, and do a bit of research to ensure you’re providing proper light and moisture.

Emily Tregunno, co-owner of The Halifax Seed Company Inc., the oldest continuously operating family-owned seed company in North America, agrees. “The great thing about home gardening is you can make it what you want: you can have one container, or you can supplement all of your vegetables. It is so rewarding to see customers who picked up the hobby in 2020 still coming in. Nurturing plants and working into the soil is a huge stress reliever.” For Tregunno, the flavour of grocery store produce just can’t compare to the taste and freshness of home-grown. The company is seeing a much younger demographic getting into home gardening, including young children. It is an inspiring hobby for all ages. As Tregunno says, “It is great to see your child eat kale [that they helped grow] for the first time when you thought they would never try it.”

Issues of food supply and food security are complex and will, ultimately, require solutions to match. Food research like the AAL study helps illuminate behaviour patterns and system inequities which can inform decision making. As Grek Martin says, “It will be interesting to see how individual food production develops as external forces like the pandemic and climate change interact with our ability to obtain food. This study is a crucial step towards understanding the relationship between people and food availability at the local level.”

Despite long Nova Scotia winters, Niki Jabbour says it’s still possible to garden year-round.
Meet the 2022 Aurum Award winners—a group of alumni recognized by their peers for their outstanding achievements and innovation, community engagement and leadership.

This year’s winners include a chief, a judge, a survivor’s advocate, an architect and a mental health care provider, but they are so much more than their professions. They are dedicated contributors to the social, cultural and economic well-being of society. We are proud to honour them.

For more, including a video featuring the winners, visit alumni.dal.ca/aurum2022.

By Mark Campbell

SIDNEY PETERS:
CREATING OPPORTUNITIES

What is the best advice you have to offer others?

“Someone once told me that you should surround yourself with good, positive people, because there is so much negativity out there. Also, you should understand how important family is. I don’t know how many times I thought about something that seemed complicated and after talking to my kids and hearing them say what was on their minds everything seemed simple.”

What do you enjoy most about your work?

“The feeling of providing a better community for people. The only way that I can do that is by creating opportunities for them. But one other thing I like about what I do is that every day is different. You never know what the next phone call might be or who will walk into your office. You could be dealing with politicians or helping families in need.”

What has been the most transformative experience in your journey?

“Gaining respect from individuals [who] you may not think are going to respect you. And the sense that you’re there to help not just one, but to help all. It’s all about all, for example, all First Nations, not just Glooscap. The opportunities that result from participating in so many different events and boards has been a real eye opener.”

When Chief Sidney Peters (Dip Tech Agriculture ’84) became the fourth chief of Nova Scotia’s Glooscap First Nation in 2012, the community was struggling with an aging population, limited economic prospects and negative media coverage of band remuneration. Drawing on his experience with Indigenous housing programs, he led the effort to rebuild the community’s fortunes and pride through new policies, housing and investments. Now, Chief Peters is setting his sights on a bold new goal for Glooscap: financial self-sufficiency.

NICK PEARCE
GLORI MELDRUM: OFFERING SUPPORT

What is your favourite advice to give others?

“I often say the beautifully broken—people who have been through trauma and are working on healing—are the ones who will change the world because of the empathy and compassion they’ve had to discover within themselves, often at a young age. They are the real gamechangers.”

What is the best part of what you do?

“The kids. They arrive at Be Brave with what I call ‘vacant eyes.’ They’ve experienced so much trauma. And when I come back for their grad a year later, they are smiling, they are more confident, and I can see their lives have changed. I didn’t get to go to a program like this, so being able to give them that one big gift of attending a world-class treatment centre is beyond worth.”

What do you want to encourage in the community?

“That survivors stand up, if not for themselves, for the kids in their community. The statistics are that one in three girls and one in six boys is a survivor of child sexual abuse. But you don’t see one in three girls or one in six boys speak out when they’re adults. We shine light on darkness by using our voices as survivors. It’s the right and courageous thing to do so that other people know it is okay and so that the kids know that someone loves them.”

BRYAN LANGLANDS: WORKING GENEROUSLY

What is the best advice you ever heard?

“The French architect Henri Cirianni once said that the beauty of Zaha Hadid’s architecture was, in part, its generosity. Let me explain. A doorway is functional. It’s a passageway. But an arch is more than functional. It is grander, it is larger, it expresses the structural forces applied to it and it has an inherent beauty. That is what I interpret as what he meant by ‘generosity.’ I believe that when you look for moments of generosity in your work, you become more successful. I always look for ways to bring that into the design of hospitals. Generosity does not have to be a grand gesture, it can be as simple as placing a window at the end of a corridor, which lets daylight into the middle of a nursing unit.”

What do you enjoy most about your work?

“One is mentoring younger medical planners and sharing my passion for striking a balance between regulations and practice. The other is that through design and through shaping design regulations, I get to impact how health care is delivered across the country. That is incredible.”

What lesson did you learn the hard way?

“I stuttered as a child. It takes a lot of confidence-building to overcome the insecurities related to that. I don’t know if it is a lesson, but I think it is important to build confidence in yourself because as you do, it becomes self-sustaining.”

PATRICIA LINGLEY-POTTIE: PROMOTING WELLNESS

What do you enjoy most about your work?

“The fact that I have been able to work with some great people to develop an innovative, scientifically proven and validated system of care that supports people of all ages across Canada. Making a difference in people’s lives has been a life-long passion of mine and I am driven every day to continue my dedication to improving mental health and well-being.”

What is the biggest professional challenge you face?

“The COVID pandemic. We adapted our programs to help our clients manage the impacts of the pandemic. We expanded demand for our services. We stepped up to help other mental health organizations get online. And we supported our staff who were also experiencing mental health impacts. It has been a disruptive and challenging time… Everyone should be encouraged to start a mental wellness routine. It is just as important as a physical wellness routine. A good way to get started is to take 10 minutes every day to do something you really enjoy.”

What lesson did you learn the hard way?

“Vulnerability. When I worked on my PhD, I met with my committee for the first time, which included colleagues I’ve worked with to develop Strongest Families. They treated me like a student, which they should have, but it took me by surprise. After taking a step back for self-reflection, I realized it is okay to be vulnerable when your role and relationship with others changes. And it is important to accept constructive feedback because that’s what makes us stronger and more driven to be successful, even as leaders.”
DIGITAL DISRUPTORS

As Nova Scotia climbs the ranks as one of North America’s fastest growing tech hubs, Dal makes moves to address the talent gap.

By Becca Rawcliffe

SHEILA RAY:
STRENGTHENING COMMUNITIES

What is the best part of what you do?
“The opportunity to make a difference. That’s why I became a judge. It gives you many opportunities to do that, and not just in the court. For example, I volunteer, teach, write and am doing my PhD. I appreciate opportunities to learn, and I want to reciprocate. I want to help create a better experience for others.”

What do you want to encourage in the community?
“One thing I’d like to see is more public legal education. If you read a short article or hear a three-minute soundbite about a court decision, you might think it was inappropriate. But if you were in court, and you heard what the judge heard, you might reach the same decision. More public legal education encourages understanding about what the courts do and enhances confidence that justice is being administered fairly.”

What has been the most transformative experience in your life?
“I had an idyllic childhood growing up in Nigeria. But one day, there was tension in the air, and I was told, ‘You’re not going to school today!’ No one explained at first what was going on, but I eventually discovered there had been a military coup. My whole life changed. That experience taught me to enjoy what you have when you have it, because you could lose it in a day.”

Thank you to our community members who nominated an alumna for an Aurum Award this year. The Dalhousie Alumni Association Awards Committee once again found themselves with the wonderful problem of having an abundance of excellent nominations to review. Choosing five people to name as Aurum Award winners was not easy when so many were deserving.

It is always inspirational to learn more about our vast, global alumni community and to pause to consider the incredible and varied ways they are strengthening society. Their stories and their insights are the evidence that having dreams and living with purpose are fulfilling.

If you know an alumna who deserves to be recognized for their outstanding achievements and innovation; community engagement and leadership; and contributions to the social, cultural and economic well-being of society, take note: nominations for 2023 Aurum Awards open on September 1, 2022, at alumni.dal.ca/aurum2022.

Watching her parents successfully overcome adversity and win respect, Justice Sheila Ray (BA’77, LLB’80) resolved to continue to break down barriers that prevent people from achieving their potential and contributing to their communities and society. As the first South Asian-Canadian woman appointed to the Ontario Court of Justice, she has made progress. Through her decisions, articles, speaking and volunteer activities, Justice Ray is not only reshaping the justice system but also strengthening communities, ensuring there is more fairness and support for those who experience adversity.

Shannon Kelley, an undergraduate BVSc student working with MSc student Emily Blacklock in Fraser Clarke’s aquaculture research lab, designed a method for photographing crabs with different wavelengths of light to spot differences in shell quality/erosion.
With a workforce of 26,000 and companies large and small either moving into Nova Scotia or starting up here, tech industry growth isn’t set to slow down. “Over the last five years the number of computation positions and projects has really increased because everyone is now using computational tools to explain what is happening in the brain,” Dr. Maguire explains. “Now thanks to advances in genomics and artificial intelligence, we can potentially diagnose resistance more quickly while also learning more about how it works and changes over time.”

With the widespread digitization of disciplines and industries, computer science knowledge and skills are in demand, and not only in fields that have been traditionally considered “digital.” Carlos Hernandez-Castillo has witnessed a sharp shift in the nature of the skills needed. “Here We Code is a rallying cry,” says Andrew Rau-Chaplin, Dean of Dalhousie’s Faculty of Computer Science. “While we are spearheading this, we are really just part of a much bigger puzzle. Through Here We Code, we want to showcase the digital success story of Nova Scotia, but also help to create a platform to aid further growth, collaboration and opportunities, particularly for youth across the province.”

For Dalhousie, this moment presents opportunities to expand digitally focused education, research and partnerships. Over the next five years, Dalhousie will grow overall computer science enrollment to 2,500 students across undergraduate and graduate programs. The Faculty of Computer Science isn’t doing this alone, but rather in collaboration with other faculties across the institution. Central to this will be the hiring of cross-appointed researchers at key intersections.
The rise of digital innovation has radically changed the way in which some of Nova Scotia’s more traditional industries are doing business, creating opportunities that didn’t exist before across the province. From blueberry and apple farming to lobster fishing, the case studies range far and wide.

Take agriculture for example. What has historically been known as a labour intensive, physical discipline is rapidly becoming a big part of the technology sector with areas such as farming and aquaculture adopting digital tools and methods to become more effective and efficient.

“This shift is directly impacting the education and research taking place at Dalhousie Faculty of Agriculture, creating an increased need for digital skills, knowledge and collaborations—something the dean of the Faculty of Agriculture and Campus Principal of Dalhousie Agricultural Campus, David Gray, is keen to address. “Sometimes interesting things happen where disciplines touch, but in the current space between computer science and agriculture there’s a significant overlap. We’ve been working with the key sectors of agriculture to identify the challenges that they’re facing and will be facing over the next 10 years. All of them have come back with slightly different lists but the one thing that’s effecting everyone is data and technology,” explains Dr. Gray.

“As a faculty, we’re looking at areas such as smart farming and it is all about leveraging data to make farming efficient. It touches pretty well every area of agriculture and uses digital applications across GPS, GIS, drone technology and AI. We are also one of only two universities in Canada that run an aquaculture program, and the aquaculture industry is quite progressive in relation to digitization, automation and utilization of data. There is a lot that we can learn from that industry.”

Key areas for expansion will include the exploration of cross appointments between agriculture and computer science, increased numbers of research students and postdocs working in this space, as well as plans to build on the work taking place through the Dalhousie-based Institute for Big Data Analytics.

The past few years have seen digital opportunities expand across the province through hubs such as the Verschuren Centre for Sustainability in Energy and the Environment in Sydney, N.S. The increased interest in technology and its applications at the Dalhousie Agricultural Campus in Truro demonstrates that the appetite for digital exists outside of large urban centres.

“We have seen an increase and an upgrading of the IT infrastructure in rural areas,” says Dr. Gray. “It’s become a tool for the farming and agricultural sector, creating opportunities that didn’t exist before because of digital adoption.”

Another traditional Nova Scotian industry that’s adopting digital extensively is the growing oceans sector. With the most ocean technology companies in Canada, the province is making its mark in supporting ocean sustainability on a large scale.

When Jen LaPlante thinks about oceans, she can’t help but think about data. It’s not surprising given the executive director of DeepSense works with ocean companies day in and day out to use data in order to better understand impacts on the environment. Supported by IBM, the Province of Nova Scotia, the Atlantic Canada Opportunities Agency, the Ocean Frontier Institute, the Centre for Ocean Ventures and Entrepreneurship and Dalhousie, DeepSense connects companies with experts in AI and machine learning to help them better understand how to create, use, adopt and optimize technologies.

“Companies that typically haven’t been technology users or providers are realizing there is a significant advantage to expanding their data capability and making themselves more efficient through technology,” says LaPlante.

“If we use offshore wind as an example, leveraging drones to verify operations and identify any challenges with equipment saves significant manual time and effort. Using underwater cameras augment underwater inspections, allowing for data collection during less-than-ideal weather conditions. Data is collected around energy generation, network connections and so on. The example of offshore wind is similar to aquaculture or other systems operating on the water. There are entire ecosystems of data to collect and take advantage of as we shift to renewable energies and in Nova Scotia we’re very well positioned to take a leading role in this.”

The very real threat of climate change is making this need more pressing than ever before. As offshore wind power gains momentum, offshore oil and gas retirement becomes more important, and autonomous vessels become a near future reality, the opportunities for optimizing data and technology are exploding.
With this increased adoption across industries comes more jobs and an increased need for a workforce with the digital skills required to keep up. DeepSense connects computer science students from across the province with ocean companies through student-led exploratory data, AI and machine learning projects. It's a model that matchmakes skills and expertise in oceans and technology to help companies use their data more effectively while providing students with crucial work experience and connections. Many of these students go on to secure work in the sector after graduation.

The importance of digital skills is being recognized in disciplines across the post-secondary landscape, with aspects of computer science increasingly getting integrated into curriculums across degree programs—something that Dr. Gray has top of mind when thinking about the future of agriculture at Dalhousie. He has plans to expand undergraduate computer science options to the Agricultural Campus through joint program offerings between the Faculties of Agriculture and Computer Science.

“There is a very real need for this to happen now,” says Dr. Gray. “One of our responsibilities is to ensure that students are ready for employment, and understanding computing, coding, artificial intelligence and those other areas is crucial now. Agriculture is a technology and data business, so for our graduates to be employable and successful, even if they're going back into their family business of running a farm, they need to understand this. It's a core competency.”

One hundred per cent of Dalhousie computer science students who complete a co-op or internship component of their program secure work on completion of their program, illustrating the very real need for skills and expertise. Steps to address this gap are very much under way. Initiatives like Here We Code support the ever-growing buzz around Nova Scotia as a destination for migration and growth. With the province having recently reached the major milestone of surpassing a population of one million people, it’s clear that digital will play a key role in creating further momentum.

WE'RE VERY WELL POSITIONED TO TAKE A LEADING ROLE IN THIS

[ Jen Laplante ]

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Music traverses countries and cultures and defines part of what it is to be human.  
By Ryan McNutt

Music lights up our brains. Neuroimaging studies give us a sense of just how powerful music is. “Much more of the brain becomes activated when we engage with music than in most other activities,” says Dr. Stewart, a classically trained piano accordion player who plays in various musical groups. “When you play music with other people, you activate even more of your brain. You also activate your reward system. Our reward systems of the brain are the feel-good parts.”

Music’s power comes from its complexity. Many species on earth respond to music—but our ability to anticipate its patterns and build on them occurs in uniquely human ways. “Music is a complex element in the scope of human development,” says Andrea Curry, a graduate of Dal’s Fountain School of Performing Arts (BMus’06) who’s now a practicing music therapist. “Music has context. It has rhythm. It has melody. It has memory and history. If it has lyrics, it has a meaning… Our own memories and abilities and experiences will interplay with how we experience a piece of music and how it works or doesn’t work for us.”

Music can make us better at certain kinds of tasks. The feel of a song is another factor in how it works. In a study co-authored by another Dal medical researcher, Gabriela Ilie, participants who listened to high-pitched classical music were more successful at completing a task focused on creativity—and reported being in a more pleasant mood while doing so. And when it came to completing tasks that required rapid decision-making, people who listened to faster-paced music did better than those who listened to slow music. The results illuminate music’s ability to impact our mood and arousal. Try completing your household chores with a more upbeat soundtrack next time and see how it goes.

Music brings people together. Dr. Stewart, who also serves as co-director of Dalhousie Medical School’s Musical Humanities HEALS program, is particularly interested in the role music plays in the lives of emerging health care professionals. As part of the Research in Medicine program, she has supervised research on the similarities between health professional teams and singing or playing in a musical group. In another project, she’s explored how the COVID-19 pandemic has affected a capella groups unable to sing in person. “If you’ve sung beside someone in harmony, it really shifts something in another setting. It really promotes that ability to interact with them. I’m really interested in professional choirs in health care—how people can actually get to know one another in that setting and sing and have fun together, and how that influences their interactions in the workplace.”

Music can help us heal. Research has shown music to have a remarkable power when it comes to addressing both physical and mental ailments—something Curry gets to see every day as a music therapist. She explains that what distinguishes using music to feel better or differently and doing formal music therapy with a therapist is the clinical intent and experience. “It’s using music as the therapeutic tool to reach non-musical outcomes, whether that’s a physical goal, a mental health goal, an educational or developmental goal or overall wellness.” She’s gotten to make and share music with adults trying to re-learn movement after a brain injury, and kids working through speech deficits. Whether it’s making music with a guitar, piano, or voice, or even just listening to recordings, she says it’s immensely fulfilling to see how music can be a tool on people’s journey towards living a better life on their own terms. “We say that music meets you where you are, and it can take you where you want to go.”

LEFT AND ABOVE: Christin Roper created the illustrations at left and above in charcoal on newsprint. They are a combination of live gesture drawings and photographic studies of Dalhousie’s Wind and Jazz ensembles, and were created while experiencing their performances live.
1960s

61 Donald Fraser (BEng) has retired. He spent 40 years working in international development, after which he divided his time between volunteering and consultant work. As a consultant he mentored Nova Scotia companies on entering and sustaining export work in international development. He and his partner Monica spend time in Nova Scotia and Texas.

68 Randy Barkhouse (BSc, MA’70) received the CURAC Tribute Award in 2021. He has been very involved in the Association of Dalhousie Retirees and Pensioners (ADRP), both as president and webmaster, a position he originated in 2009. He serves as the ADRP representative on the university’s Pension Advisory Committee and is chair of the College and University Retiree Associations of Canada (CURAC).

69 Sid Freedman (MA, BSc’76) taught psychology at the post-secondary level for 10 years then retrained in clinical psychology, working in hospitals in Calgary and London. He then had a full-time private practice until retiring in 2019. He is a past president of the Canadian Society of Clinical Hypnosis. In 2021, he and his wife, Betty Freedman (BSc’67, MA’71) moved to B.C. to be closer to their children and grandchildren.

1970s

71 Don Lohnes (BArch) has recently published his second book, a novel titled Architect. It takes place primarily in Nova Scotia and involves friendship, family, tragedy, construction, schools, the practice of architecture, marriage, family, a court case and an attempted murder. His first book, titled So You Want to Build a House, was published in 2014.

Adrian Underwood (MA) returned to the United Kingdom after graduation, where he spent a long career in boarding school education, serving as teacher and headmaster, and eventually as national director of the Boarding Schools Association (BSA). He led the development of a comprehensive training program for staff working in U.K. boarding schools. He fully retired in 2016 but continues supporting schools in volunteer roles.

73 Donald Trider (BSc, MSc’76, DDS’84) is looking forward to retirement with Hulda Trider (BA’75), his spouse of 42 years, after a varied and enjoyable career encompassing private practice, military practice, teaching, organized dentistry and participating as an examiner for the National Dental Examining Board of Canada for over 37 years.

74 Les Grieve (BA, LLB’77) has retired from the Provincial Court of Alberta. His career as a defense counsel, prosecutor and judge spanned six decades. In retirement, he plans to read for fun (no legal briefs), ski with wife Deb Grieve (BA’76, BEd’77), travel and summer in Nova Scotia.

75 Cathy J Campbell (BPE, MSc’77) has been named President of the Canadian Academy of Sport and Exercise Medicine for 2021-22.

76 John Miller (DDS) received a long service award in 2021 recognizing his 27 years as a member of the Board of Governors for Commissionaires Nova Scotia, a non-profit that focuses on providing employment for veterans.

Robert Putnam (BComm) was inducted into the Nova Scotia Sports Hall of Fame in 2021. He was a standout fastpitch softball pitcher for the Brookfield Elks, making 10 appearances for the Brookfield Elks, leading them to gold, silver and bronze medals. He is retired from his role as Director of Finance for the Town of Truro. Robert is well known for playing guitar alongside his daughter Alycia on the fiddle and his wife Kelly on the fiddle. Robert was part of their “They Proudly Served” series. The focus was on women who served in the Gulf War. Lynn was the first female

77 Dr. Richard Gibson (BME) has received this year’s Prix d’excellence en enseignement (Excellence in Teaching Award) from the Université de Moncton—where he has taught musical theory and composition since 1984—an award given annually to one professor recognizing superior pedagogical engagement. Richard credits his studies in music at Dal and particularly Dr. Dennis Farrell for setting him up for success in his field.

78 Lynn Doucette (BPE) was featured by Veterans Affairs in 2021 as part of their “They Proudly Served” series. The focus was on women who served in the Gulf War. Lynn was the first female

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mission crew commander aboard a USAF Airborne Warning & Control System (AWACS) E-3 in theatre.

1980s

'80 Lee Cohen (LLB) was appointed to the Order of Nova Scotia on December 7, 2021, by Lieutenant Governor of Nova Scotia Arthur J. LeBlanc. Lee is a lawyer, social justice advocate, refugee clinic organizer and mentor. He won an Aurum Award in 2021.

'81 Steve Willson (BEng) is now a mortgage agent after 20 years of corporate life with DuPont and 20 years of consulting with Panoptika, a company he started with his wife Megann Willson (BA’80). Panoptika continues, but Steve’s focus is now on helping people with their single most significant expenditure—their home. Megann is a real estate agent in Toronto, so together they offer everything someone needs to build their future.

'84 Jonathan J. Cohn (BArch) has been elevated to the American Institute of Architects’ prestigious College of Fellows, which recognizes architects who have achieved a standard of excellence in the profession and made significant contributions to architecture and society.

'85 Sonya Brander (LLB) completed five years with the World Health Organization as chair of the Global Board of Appeal. She has now been appointed as chairperson of the Appeals Committee to deal with appeals against individual decisions taken by the Administrative Council at the European Patent Office.

'87 Barb Howard (LLB) has been publishing short stories, essays and books since 1993. Barb is a writing mentor and board chair for The Shoe Project, a literacy and performance workshop for immigrant women. An award-winning author, she has just published her fourth novel, Happy Sands.

'89 Youssef Abdul-Massih (BEng, MASC’91) is based in Lebanon, where he manages his own consulting firm, YAM Airports Consultancy Services. This is a natural step after leading a large team and managing the engineering and construction activities of several airport projects in Africa and the Gulf Cooperation Council (GCC).

Indira Jayaweera’s (PhD) work on carbon dioxide capture recently appeared in the featured innovator section in medium.com. She hopes her work will inspire future chemistry graduates at Dal.

1990s

'90 Charlene (Dunn) Anderson (BA) was the recipient of the Rose Schwartz Female Business Person of the Year award for the Cape Breton Regional Chamber of Commerce in October 2021.

'91 Dr. Darren Burke (BPE, MSc’95) is a global leader in the upcycling movement. His company, Outcast Foods, uses proprietary technology and localized food supply chains to upcycle surplus produce into high purity, nutrient dense, long shelf-life natural health products. In 2021, Outcast Foods opened a second facility which will help them divert more than 1 million pounds of food per month from going to waste.

'92 Meredith Ralston (PhD) is a professor of women’s studies and political studies at Mount Saint Vincent University and a documentary filmmaker. Her work has been in the areas of sex tourism in the Philippines, women and politics, homeless women and sex work in Canada. Her new book, Slut-Shaming, Whorephobia, and the Unfinished Sexual Revolution, was released in 2021.

'96 Kristin Eckland (BA) has re-opened her medical travel company, American Physicians Network. She is still practicing as an acute care nurse practitioner in cardiothoracic surgery as a locum tenens, most recently in San Francisco. Kristen just published her first fiction book under the pen name of Marnie Gellhorn and is working on the sequel.

'98 Sara Austin (BA) was recently named a finalist in the 2021 RBC Canadian Women Entrepreneur Awards in the category for national social impact. The awards recognize women business owners from across Canada who make impressive and substantial contributions to the local, Canadian or global economy. Sara is the founder and CEO of Children First Canada.

2000s

'01 Lydia Perovic (MA) is publishing her third book in 2022. The
The Faculty of Arts and Social Sciences congratulates the following administrative staff members on their recent retirements: Tina Jones (History), Paulette Chiasson (Dean’s Office), Gayle Quigley-Smith (Philosophy), Lesley Brechin (Fountain School of Performing Arts) and Donna Edwards (Classics).

Professor Matthew Herder was named one of seven newly appointed Applied Public Health Chairs announced on January 19, 2022, by the Canadian Institute of Health Research (CIHR).

In the Faculty of Dentistry, Dr. Mark Filiaggi was appointed associate dean of research and graduate studies, Dr. Sachin Seth is now associate dean of academics, and Dr. Tammy Wright is associate dean of clinics.

Dr. Sarah Fortune joined Dalhousie’s Department of Oceanography as Chair in Large Whale Conservation, a partnership between the Canadian Wildlife Federation and Dalhousie University.

**AWARDS & HONOURS**

Five Dal researchers have been awarded $1.1 million from the Government of Canada’s New Frontiers in Research Fund’s “2021 Exploration” and “Special Call on Innovative Approaches to Research in the Pandemic Context” grant competitions: Dr. Lisa Berglund from the Faculty of Architecture and Planning for her work exploring social media vigilantism in Canada’s gentrifying neighbourhoods; Dr. Alex Quinn for his work exploring the intracardiac nervous system to improve health; Dr. Syed Sibte Raza book, *Lost in Canada: An Immigrant’s Second Thoughts*, is a collection of personal/political essays. Her previous books are *Incidental Magic* (2012) and *All That Seng* (2016).
Abidi from the Faculty of Computer Science for his work harnessing machine learning to reduce cancer risks; Dr. Zhenyu Cheng from the Faculty of Medicine for his work fighting drug resistant microbes; and Dr. Graham Gagnon from the Faculty of Engineering for his work developing next generation wastewater surveillance.

The CERC Ocean research group, led by Doug Wallace, has been a driving force behind the Dartmouth firm Planetary Technologies’ win of the Musk Foundation’s XPRIZE for Carbon Removal. The company was recently announced as one of 15 $1-million (USD) milestone award winners selected from a global pool of more than 1,100 teams. In addition to Dr. Wallace, team members include Department of Oceanography faculty Dr. Daria Atamanchuk, Dr. Ruth Musgrave, and Dr. Hugh Macintyre.

Robert Barker (Associate Professor, Fountain School of Performing Arts), along with collaborator Tawnie Olson, won the American National Opera Association’s Dominic Argento Prize for Best Chamber Opera for 2021-23 for their work, Sanctuary and Storm.

The School of Management is proud to announce that Dr. Alexander Engau, associate professor in the Rowe School of Business, is the recipient of this year’s A. Gordon Archibald Teaching Award.

The School of Management congratulates BComm/BCSc student Erin Yabsley, a recipient of this year’s Frank H. Sobey Award for Excellence in Business Studies.

Professor Maria Dugas from the Schulich School of Law was named a 2022 recipient of the Belong Research Fellowship Award. Her research looks at addressing the overrepresentation of African Nova Scotians in the child welfare system.

The Faculty of Law wishes to congratulate alumni Lee Cohen (LLB ’80) who was appointed to the Order of Nova Scotia on December 7, 2021, by Lt.-Gov. Arthur J. LeBlanc. He is a lawyer, social justice advocate, and refugee clinic organizer.

COMMUNITY & CONNECTIONS

The first Here We Code Month took place throughout May in collaboration with partners on and off campus.

The month-long initiative showcased the diverse digital activities and events taking place across Nova Scotia.

EVENTS & REUNIONS

The Faculty of Dentistry Home-coming will be held on September 22-24, 2022. Events include the White Coat Ceremony, J D McLean Lecture, CE courses, and Celebration Dinner. For more details: www.dal.ca/dentistry.
FUTURE ALUMNI

Degrees of Determination

Play in Five Acts.

ACT I—It’s 2004, and Ashley Rose Goodwin is starting Theatre Studies at Dalhousie. The stage had been her safe place as she struggled with depression and anxiety. She hopes studying theatre will help turn her life around, but it doesn’t. “I really struggled at Dal the first two years. Back then, they weren’t sure what to do with me.”

ACT II—Ashley completes second year and heads back to Yarmouth for summer break. She discovers she’s pregnant and decides not to return to university. She welcomes Hudson, then Isaac and Wynston to her family. Her focus is on being a good mom, she sticks to connection to performance by teaching piano and getting involved with musical theatre at Th’YARC.

ACT III—Ashley is a single mom living in Liverpool juggling motherhood, running her private music studio and volunteering with the Astor Theatre. She’s operating on autopilot and her confidence is not keeping up with her success. “When they asked me to be the assistant director for Seussical Junior I didn’t feel right because I didn’t have my degree. Even though I had all this experience, I just felt like I needed the paper.”

ACT IV—She welcomes another son, Kenneth. She learns how to balance her theatre projects while serving at White Point Beach Resort. There, she meets Kim Brooks (currently Dean of Management) who encourages Ashley to finish her degree. Ashley returns to Dal in 2019.

ACT V—Through the pandemic, Ashley perseveres, reconnecting with her voice and her inner power. She graduates in May 2021 with an Honours degree in Theatre Studies and a minor in Music. “I want to compose music and begin performing again. I’m also thinking about doing my Master of Arts in counseling to integrate that with music and theater. I want to give kids and youth that safe space that theatre gave me.” — Stephanie Wilson

“Everyone is like, ‘how did you do it?’ I think if you really believe and want something bad enough you can accomplish it. There’s power in believing in who you are and your fire, your inner fire, and needing to keep it burning so you can share it with others.”

— Stephanie Wilson

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