Bringing WORLDS Together

DALHOUSIE UNIVERSITY

Dalhousie's campaign for transformational change

FACULTY OF AGRICULTURE
CASE FOR SUPPORT

2024

Feeding the future

The only faculty of agriculture in Atlantic Canada, we have a proud, rich history of providing industry-leading education and research since 1905. Based in Truro, Nova Scotia, we connect Dalhousie University with rural communities in our region and beyond. Our beautiful campus is home to a working, on-site teaching farm and we offer 1,000 acres of fields, gardens, greenhouses and a variety of animals for hands-on learning and research.

We educate and inspire the agricultural leaders of tomorrow. Our close working relationships with producers, industry and government help create a thriving, innovative and responsive Atlantic Canadian agricultural sector.

We are deeply committed to being a world leader in addressing global and local food security, sustainability, and health and well-being. Our faculty, staff and students appreciate our responsibility to increase food production and decrease environmental impact. We aspire to revolutionize agriculture in this region, which will have far-reaching impacts. More than ever, we understand that change needs to take place now. And we aim to create solutions and new generations of agriculturalists to be the vanguard of that change.

Every contribution to this campaign — big or small — will help us achieve these goals. This campaign will bring the worlds of technology and agriculture together to find better, more sustainable ways to feed the world. It will attract new people to the field, and prepare and inspire them to be future-ready leaders in agriculture research, innovation and practice. And it will help us honour Indigenous practices and ways of knowing and bring our collective expertise to communities and farms here and around the globe.

Enhancing Our Impact

Inspiring Future-Ready Leaders

We aspire to be the most student-centric agricultural campus in Canada, offering exceptional education and hands-on learning opportunities. This campaign will provide the support our future agricultural leaders need to succeed, whether they focus on farming, food, aquaculture, climate, sustainability, economic development, big data or engineering — the possibilities and permutations are virtually limitless. It will ensure all students can enjoy an accessible, inclusive rural campus. Our graduates will flourish as skilled, innovative and community-minded global citizens who will make meaningful contributions in Atlantic Canada or wherever they call home.

1. Support for student success — $6M

Financial and academic supports help talented undergraduate and graduate students focus on learning. We will enhance and establish scholarships, bursaries, awards and internships that attract and support students. These supports will consider historically underrepresented groups and reflect the diversity of our community. Our goal is for every qualified student to have access to a Dalhousie Agriculture education.

I CAN SEE THE IMPACT AROUND ME EVERY DAY. THIS IS THE BEST JOB I'VE EVER HAD.

— JOHN RAYMOND

Where hands-on experience meets exploring passions

Agricultural Business grad John Raymond (Class of '23) has enjoyed exceptional hands-on learning experiences through "SUSTAIN by Cultiv8" — the Faculty's donor-supported, student-run farm program that bridges education and experiential learning while supporting food security, sustainability and the local economy. Now conducting research and pursuing a career in his field of study, Raymond is the Cultiv8 Farm Coordinator.

"The whole Dalhousie experience has really opened new opportunities for me to explore my passions. The theoretical and practical experience I've gained — especially through SUSTAIN — has given me an incredible foundation.

"SUSTAIN has become more than a little farm that shows students how vegetables grow. Now it's also an awesome hub of research, student learning and community engagement, where we develop solutions for our future farmers and learn about product creation and development, food security and entrepreneurship.

"I really believe in it because I can see the impact around me every day. This is the best job I've ever had."

Engaging in High-Impact Research

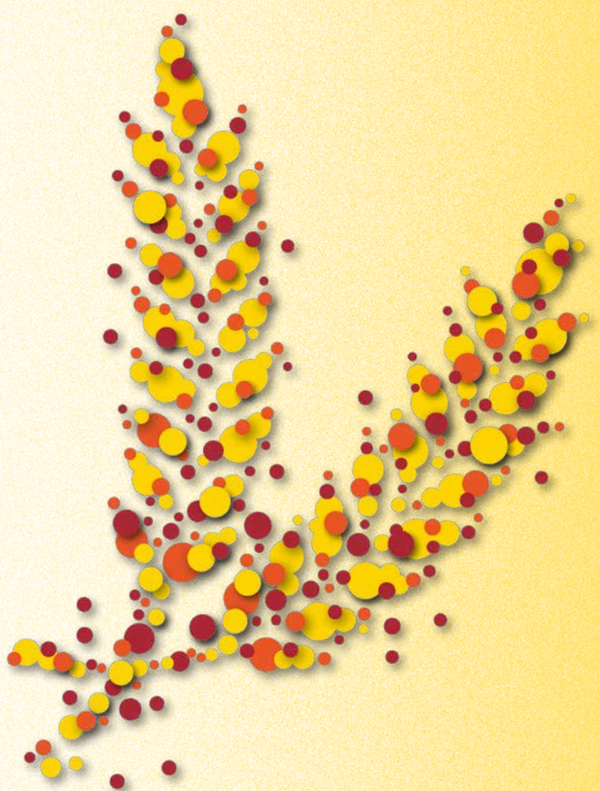
Over 85 per cent of the research we do is "applied" research — meaning our solutions and innovations directly address real-world needs. By engaging our students early and often in research, we are training new generations to seek solutions and deeply consider the wide-ranging impact of their work.

One of our key research areas is food security. Spanning the "farm-to-fork" continuum, our research seeks to find better, more sustainable ways to feed the world. Our region is ideally suited to explore agricultural innovations that tackle food security, as well as climate change mitigation, access to clean water and economic growth. With our focus on small-scale, diverse production, along with big data and innovation, we are uniquely positioned to solve our region's and the world's greatest challenges. Our goal is to expand and accelerate this important research to improve food security for an ever-growing global population by creating the Food for the Future Smart Farm and Innovation Hub on our Agricultural Campus.

To realize our vision, we need significant infrastructure improvements. Each component of the Food for the Future Smart Farm and Innovation Hub will include new or upgraded buildings, technology and equipment, as well as additional faculty and increased funding for scholarships and research. The Hub will feature an advanced data, sustainability and technology research and education centre. It's where thought leadership and innovative solutions will thrive. Where we can support our regional industry in unprecedented ways and solve complex issues with local, national and global implications. This campaign will fund several elements within the Food for the Future Smart Farm and Innovation Hub:

1. Sustainable Food Systems Facility — $20M

Digitization is transforming the agriculture sector. Our new Sustainable Food Systems Facility will give our world-renowned precision agriculture team the high-tech tools and infrastructure they need to make advances that matter. This state-of-the-art facility will attract youth and talent to the Faculty and field. It will provide a sandbox for students and researchers to learn, innovate and collaborate with partners. It will enable us to create clean, precision technologies and find better and more sustainable ways to feed a growing global population. The Facility will help us optimize technologies for Atlantic Canada's farming systems and bolster the region's prosperity.



2. Animal Management Centre — $18M

Our Animal Management Centre initiative will rebuild our dairy facility and upgrade our sheep and poultry housing. The Centre will offer the latest industry technologies to support training, research and development. Fully integrated with the Sustainable Food Systems Facility and linked to industry databases, the Centre will be a testbed for emerging “plug-and-play” technologies with access to real-time agricultural data. It will improve efficiency and profitability, while ensuring food production is safe, successful and sustainable. The Centre will reinforce our commitment to the highest animal welfare standards and industry best practices.

3. Sustainable Precision Aquaculture Centre — $16M

The world is facing a 50- to 80-million-tonne shortfall of food fish by 2030. Canada has aggressive goals to address this crisis through aquaculture expansion, and our Sustainable Precision Aquaculture Centre will play a key role in achieving those goals. Dalhousie’s world-leading aquaculture and marine science specialists operate the largest university-owned seawater/aquatic research centre in Canada. And our faculty work with industry to develop technical qualifications for those new to or working in the aquaculture field. The Sustainable Precision Aquaculture Centre will significantly expand these resources. It will address key barriers to industry growth, support aquaculture research and training, and facilitate collaborations. The result will be a safer, more sustainable aquaculture industry.

THE FACULTY OF AGRICULTURE PLAYS A CRUCIAL ROLE IN KEEPING THE DAIRY INDUSTRY HEALTHY IN ATLANTIC CANADA.

— JEANNIE VAN DYK

Where commitment meets success

Jeannie van Dyk (Class of ‘78) and her husband John McLellan (Class of ’77) are dairy producers in Noel Shore, Nova Scotia. Van Dyk has a long history in the agricultural community, from early consultant work for the NS Department of Agriculture, to her current roles as Vice-President of the Agropur Board and as a Dalhousie volunteer.

“I come from a long line of proud Aggies, which continued after me with my own children. We care deeply about the dairy industry — our livelihood and our lives are built around it. I’ll always be a strong supporter of Dalhousie’s Faculty of Agriculture because I believe it plays a crucial role in keeping the dairy industry healthy in Atlantic Canada.”

4. Centre for Sustainable Soil Management — $6M

Enhancing soil resiliency is crucial to withstanding climate change challenges. Our Centre for Sustainable Soil Management will provide a data hub and focal point for education, training, discovery and innovation in soil science, with a regional focus on soil assessment, mapping and management. With additional equipment and support, our internationally recognized experts can expand their collaborative, multidisciplinary research to improve Atlantic Canadian agriculture.

5. Food of the Future: Sustainability, innovation and food security — $30M

By 2050, the global population is expected to need a 50 per cent increase in food production. Traditional farming practices will not be able to meet this demand. Our Food of the Future project will create several sustainable solutions that contribute to food security, community health and economic development. We will seek ways to effectively extend the growing season, increase food production per acre of land use, minimize environmental impacts of food production, reduce the need for chemicals, find new uses for food and ingredients, and lower or repurpose food waste — all through innovative technology like greenhouses, containers, plant genetics and more.

6. Agriculture thought leadership and innovation — $13.5M

We want to attract the best and the brightest researchers, teachers and students to make real advances in sustainable agriculture. Through this campaign, we will create a joint professorship in data and agriculture with the Faculty of Computer Science. We will develop industry chairs that focus on dairy, aquaculture, soils and regenerative agriculture, and innovative food production and processing systems. Attracting world-leading experts will expose our students to the top minds in the field and accelerate our contributions to agricultural research.

A THRIVING FACULTY OF AGRICULTURE IS KEY TO A THRIVING ATLANTIC CANADIAN AGRICULTURAL SECTOR AND TO IMPROVING GLOBAL FOOD SECURITY.

— DR. JOHN BRAGG, CC ONS

Where innovation meets thriving industry

John Bragg is Chairman, President and Co-Chief Operating Officer of Nova Scotia-based Oxford Frozen Foods Limited, the world's largest supplier of wild blueberries. He has been working closely with the Faculty of Agriculture for more than three decades.

"We partnered with the Faculty on everything from improving crop yields to creating state-of-the-art processing operations. We would not be where we are today — an international leader — without the innovations and technology the Faculty has developed for us. A thriving Faculty of Agriculture is key to a thriving Atlantic Canadian agricultural sector and to improving global food security."

Lifting Our Communities

The Faculty of Agriculture's roots are firmly planted in Atlantic Canadian soil. And while we've grown strong partnerships within our region, we have also branched out to serve the world. We strive every day to lift our local, national and global communities. Our Atlantic Agricultural Interpretive Centre will bring an exciting new dimension to our robust community outreach and education activities.

1. Atlantic Agricultural Interpretive Centre — $5M

A partnership with Discovery Centre International and the Nova Scotia Federation of Agriculture, the Atlantic Agricultural Interpretive Centre will be the region's premier destination to learn about agriculture and inspire the next generation of agricultural innovators. Interactive exhibits will engage the public, expanding their knowledge, interest and support for modern agriculture. The Interpretive Centre will focus on the food produced in Atlantic Canada and how it connects our region with Canada and the world. It will explore aquaculture, smart farming, vertical farming, workforce development, research, environmental stewardship, nutrition and more. Mi'kmaq community members are engaged in developing the Centre to ensure accurate content and representation.

THE CENTRE WILL HELP THE GENERAL PUBLIC UNDERSTAND JUST HOW IMPORTANT AGRICULTURE IS IN ALL ASPECTS OF OUR LIVES.

— CAROLYN VAN DEN HEUVEL

Where outreach meets community impact

Carolyn Van Den Heuvel (Class of '10) developed a deep passion for agriculture while growing up on a beef farm in Antigonish. Now Executive Director of the Nova Scotia Federation of Agriculture, this proud Dalhousie Agriculture alum is a champion for farmers and advancing the industry in Nova Scotia.

"We're thrilled to be a partner with Dalhousie Agriculture in building the Atlantic Agricultural Interpretive Centre. Together we'll bring fantastic educational opportunities to youth and families in the Atlantic region. The Centre will really engage youth in learning about agricultural careers and will help the general public understand just how important agriculture is in all aspects of our lives."

An investment in Agriculture — an investment in life

Agriculture plays a key role in addressing some of the most pressing issues of our time. It can help feed the world, mitigate climate change and ensure a sustainable environment for our future. No other sector impacts our lives more.

The world is at a critical juncture, but the Dalhousie Faculty of Agriculture is ready. We are revolutionizing the field through education, technology, research and innovation. The many people behind this revolution — students, faculty, researchers, alumni, and community, industry and government partners — appreciate the impact and potential of their work, and strive every day to do even more, even better.

We hope you'll join us as we commit to delivering the results we need today, while planning for the solutions of tomorrow. Whatever your level of support, your gift will have a real and meaningful impact on people and projects that will change our world for the better.

Simply put, your investment in Agriculture is an investment in life.

To learn how you can support the healthy future we are growing, please contact us.

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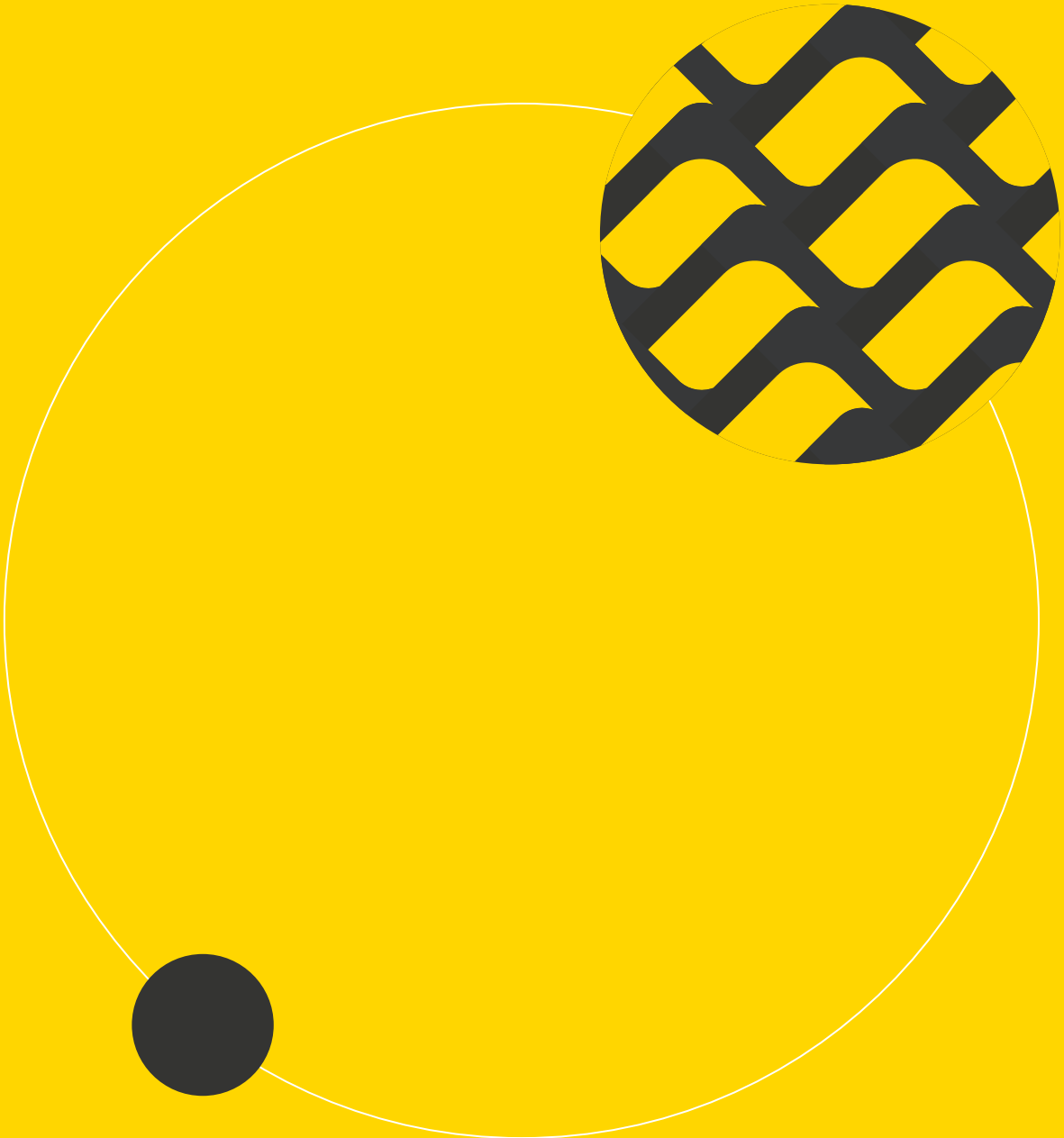

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