

THIS IS AGRICULTURE

2014–2019 STRATEGIC PLAN



**DALHOUSIE
UNIVERSITY**

FACULTY OF AGRICULTURE

Message from the Dean

It is my pleasure to introduce the first Strategic Plan for Dalhousie University's newest faculty: The Faculty of Agriculture. In my role as Dean of the Faculty, people often ask “*what is agriculture?*” Almost immediately, my mind takes me to the range of teaching and research on this campus that is redefining our relationships with our landscapes, our oceans, our food sources and even our healthcare systems. Our commitment in these next five years is to peel back the layers of this question and rather than tell you, we will be showing you:

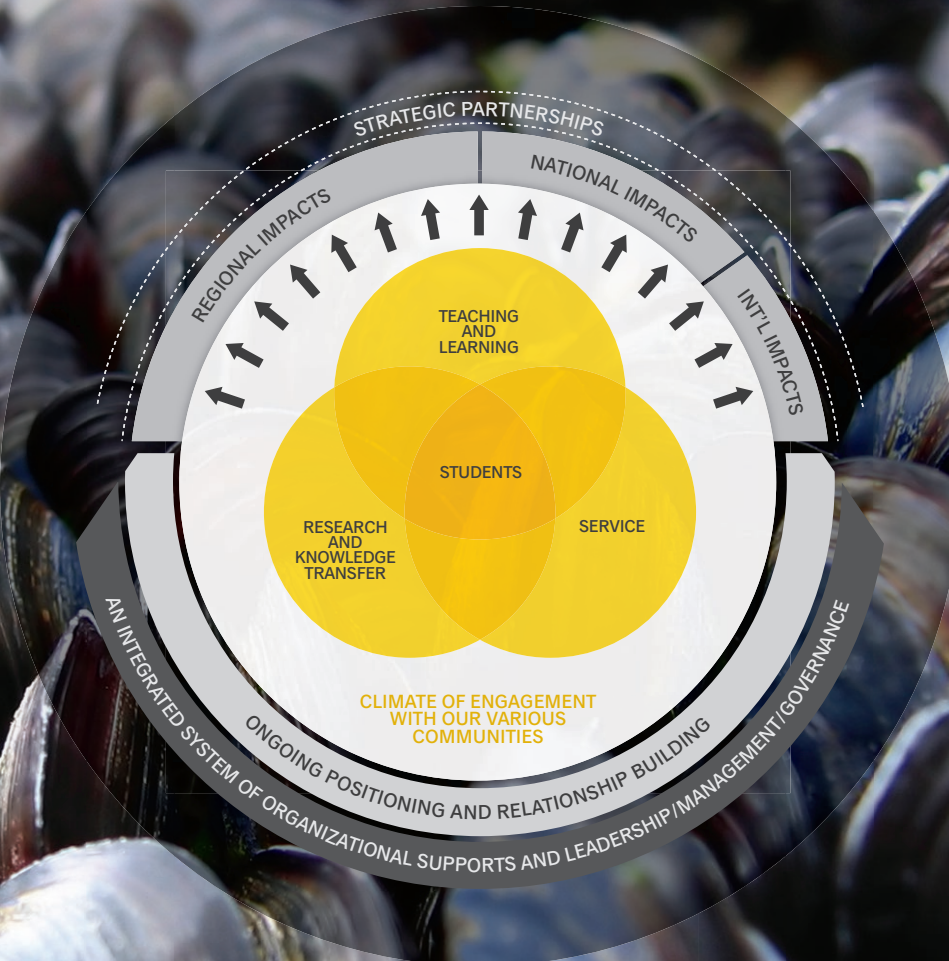
This is Agriculture.

Agriculture is grounded in developing and sustaining life at a fundamental level, but also developing communities around our agricultural activities and responding to the health and wellbeing of such communities, locally, nationally and internationally. As such, the world-leading work we undertake as a Faculty pushes the boundaries of what we understand to be agriculture, and so it should.

To practice agriculture means to use natural resources to produce commodities that maintain life, including food, fibre fuel, forest products, and their related services. This includes arable farming or agronomy, and horticulture, all terms for the growing of plants, animal husbandry and forestry.

We are also very lucky to be able to work on such a stunning campus. Since 1905, we have built an international reputation on being a unique and friendly campus community, and a place where people enjoy coming to interact with their classmates and colleagues from all disciplines, backgrounds and even countries. Our facilities underpin our excellence in both teaching and research. We are committed to ensuring that the unique nature of studying and working at the Faculty of Agriculture is maintained long into the future.

We are a community, we are a campus, we are a Faculty and we are furthering our mission of showing you and the world: ***This is Agriculture.***



Our Mission and Vision

MISSION

Specializing in post-secondary education in agriculture and its related disciplines, our scholarship, research and training generate knowledge and solutions for healthy, sustainable societies. Our outreach and international activities train leaders for local and global community engagement.

VISION

To be an international leader for education, training, research and advice to agricultural learners, partners and communities in the Atlantic Provinces, Canada and around the world.

The Faculty of Agriculture is fully aligned with the Vision and Mission of Dalhousie University.

OUR PURPOSE

We will take our place as a leading innovative, research-intensive university, inspiring a diverse scholarly community to serve our region and the world.

OUR PROMISE

- To foster an environment of teaching and learning excellence, built on innovation, collaboration and respect;
- To create a hub of world-leading research and innovation, adding to the intellectual, social and economic capital of our communities;
- To facilitate opportunities for our students, staff and faculty to connect with and serve our local, national and global communities.



***The Faculty of Agriculture
Strategic Plan (2014–2019)***
is fully aligned with that of
Dalhousie University and its
identified **Strategic Priorities**,
which are to:

- ▶ Enhance the transformative power of teaching and learning
- ▶ Expand the opportunities for research, scholarly and artistic work
- ▶ Catalyze the intellectual, social and economic development of our communities
- ▶ Take our place nationally and internationally
- ▶ Build our institutional capacities

The above strategic priorities are taken from Dalhousie University's 2014-2018 Strategic Direction plan.

Our Strategic Goals

TEACHING AND TRAINING

To develop a dynamic portfolio of programs, courses, support systems and continuing professional development activities that anticipate and meet the needs of the agricultural and food industries, inform and implement government priorities, and engage our learners in a distinctive experience that exceeds expectations.

RESEARCH AND KNOWLEDGE

To undertake innovative research, to implement the Faculty of Agriculture's Strategic Research Plan and provide counsel that sustains communities.

COMMUNITY ENGAGEMENT

To engage actively and responsively with our local community and the agricultural communities of the Atlantic Provinces, Canada and beyond.

REGIONAL LEADERSHIP & IMPACT

Through education, training and research, be recognized and valued by key agricultural communities across the Atlantic Provinces as the leading provider of world-class education, training and research in the field of agriculture.

MANAGEMENT AND GOVERNANCE

Ensure best practices are in place by enabling the achievement of strategic aims, value for money, sustainability and operational efficiency within the Faculty.

We want the farm products we enjoy to be healthy and sustainably produced. Preserving these qualities often begins deep within the soil. **DR. DEREK LYNCH**, associate professor and Canada Research Chair in Organic Agriculture, and his team examine how different farming systems and crop management practices affect biological life above and below the soil to help farmers improve the health of their farms. Like most organic farmers, Dr. Lynch's mission hopes to bring consumers closer to understanding not only the science and sweat required to produce healthy crops and farms, but how farming and our food choices can benefit our environment.





Teaching and Training

To develop a dynamic portfolio of programs, courses, support systems and continuing professional development activities that anticipate and meet the needs of the agricultural and food industries, inform and implement government priorities and engage our learners in an experience that exceeds their expectations and finds solutions to global issues.

- Develop expertise in teaching and research in key strategic areas
- Create new opportunities and capitalize on experiential learning opportunities in academic programs and research
- Capitalize on partnership opportunities with other Dalhousie University faculties and other universities and industry to develop relevant academic programs for the agriculture, food and environment-related industries
- Increase student enrolment and retention in our range of programs, including certificate, diploma and extended learning opportunities
- Diversify our student body both domestically and internationally

DR. SEAN MYLES has a big mission ahead of him. Believing that food should always be diversifying, the assistant professor and Canada Research Chair in Agriculture Genetic Diversity is examining trillions of letters that make up part of DNA sequences of apples and grapes. His research is intended to identify new varieties of such fruits. Creating new varieties is critical to preserving and reinventing our food sources, so that foods we consume today - like apples and grapes - will still be available for years to come.



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Research and Knowledge

To implement the Faculty of Agriculture's Strategic Research Plan ensuring innovative discovery research and knowledge that will sustain communities.

- Support prioritized research themes through administrative processes, the infrastructure planning process, and technical capacity in support of research
- Build on our current strength in engaging agri-food industries in our research and thereby enhance the delivery and scope of high-impact outcomes to industry and rural communities
- Broaden the scope and impact of our research by cultivating inter-disciplinary and inter-faculty research collaborations, particularly ones that are aligned with our research priorities
- Build upon the success rate and quality of research grant submissions through enhanced grantsmanship training opportunities and peer review of funding applications, with particular emphasis on Tri-Council opportunities
- Continue to provide recognition for outstanding research accomplishments, and communicate these to our community

DR. CHRIS CUTLER, associate professor of environmental science, and his team are developing ways to improve plant health, better manage insect populations and protect the environment by reducing the amount of chemicals used. In particular, Dr. Cutler and his team are closely examining the effects of pesticides on bees that pollinate crops. As part of their process, they are trying to understand how to increase populations of insects that help, not harm agriculture.





DR. SARAH STEWART-CLARK, assistant professor of shellfish aquaculture is using the most innovative science to support one of Atlantic Canada's most traditional industries: shellfishing. Dr. Stewart-Clark and her team are creating diagnostic tests to identify species of marine weeds that adversely impact our oceans and shellfish. Think of Dr. Stewart-Clark and her team as marine family doctors. As oceans are affected by climate change, new and more invasive species of weeds invade these waters. The team is using leading-edge testing to identify these harmful species. Their work is benefiting the shellfish industry, while also helping to protect the natural beauty of our beaches and waters.

Community Engagement

To engage actively and responsively with our local, regional, national and international communities as an active ambassador of Dalhousie University and the agricultural communities of the Atlantic Provinces, Canada and beyond.

- Recognize and promote faculty, staff and students and their contributions to the local community through volunteer work and program partnerships
- Deliver community outreach and extended learning programs that use the Faculty's specialized expertise to contribute to sustainable and healthy communities
- Work with our partners in the international community to build their capacity to create and support sustainable bio-resources, food security, management and rural development systems



DR. QAMAR ZAMAN and his team of more than a dozen students and post-docs have developed a technology that will help to preserve Nova Scotia's signature berry – the blueberry. Currently, growers are applying agrochemicals uniformly without considering the variation in characteristics of their fields. This leads to unnecessary and excessive use of agrochemicals, which increases production costs and environmental risks. Dr. Zaman's team has developed a cost-effective 45-foot boom sprayer system and variable rate spreader including high-tech cameras and computerized controllers to help pinpoint where specific chemicals are needed in the fields in real-time. For growers, this means they can automate their spraying, which reduces their chemical use, saves costs and resources, and leads to a greater number of blueberries for us to enjoy.

Regional Leadership & Impact

Through education, training and research, be recognized and valued by key agricultural communities across the Atlantic Provinces as the leading provider of world-class education, training and research in the field of agriculture, food and aquaculture.

- Position the Faculty strategically as the leading provider of agricultural, food, environment and aquaculture education, training and research
- Actively collaborate with the agricultural industries within the region to identify and meet their skills, training and development through certificate, diploma, undergraduate and graduate-level programs and extended learning opportunities
- Develop and implement a student recruitment strategy that recognizes the unique target audiences and markets for this area of study while aligning with broad university recruitment efforts

WASUNDARA FERNANDO, a master's science student in agriculture, grabs an apple and rather than biting into its juicy interior, she feels it and examines the natural compounds of the skin. Why? Fernando is studying apple peels and fish oil components to determine their potential as breast cancer treatments. Her supervisor, Dr. Vasantha Rupasinghe, associate professor and Canada Research Chair in fruit bioactives and bioproducts, has been investigating the disease fighting power of cool climate fruits such as apples with the aim of developing natural health products to prevent and treat chronic diseases.

Management and Governance

Employ best practices to enable the achievement of the strategic aims, value for money, sustainability and operational efficiency within the Faculty.

- Maintain a respectful, equitable and safe work and learning environment that fosters motivated and engaged employees and students who have the necessary knowledge, training and tools to fulfill the objectives of their pursuits and positions
- Provide an overall management structure with clearly defined roles and responsibilities that support the stewardship of the Faculty
- Develop effective and efficient administrative systems and policies that integrate with Dalhousie University's operational structures
- Ensure and maintain financial sustainability by establishing consultative and realistic budget processes with regular reviews
- Advance the culture, beauty, safety and sustainability of the agricultural campus





dal.ca/agriculture

AGRICULTURAL CAMPUS

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