

# *THIS* IS AGRICULTURE

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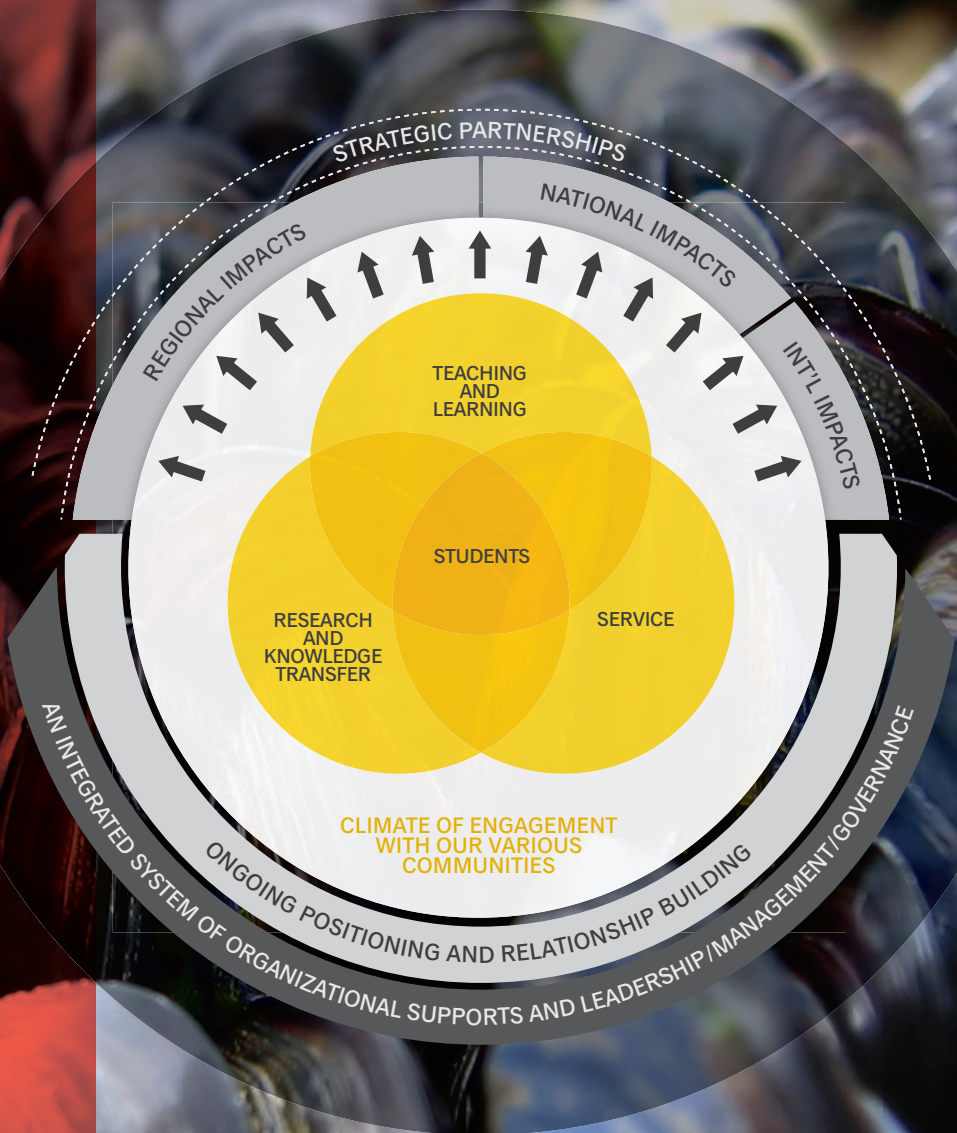
2014–2015 ANNUAL REPORT  
TO THE COMMUNITY

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**DALHOUSIE  
UNIVERSITY**

FACULTY OF AGRICULTURE



# ***THIS IS*** AGRICULTURE ***THIS IS OUR*** ***FIRST YEAR***

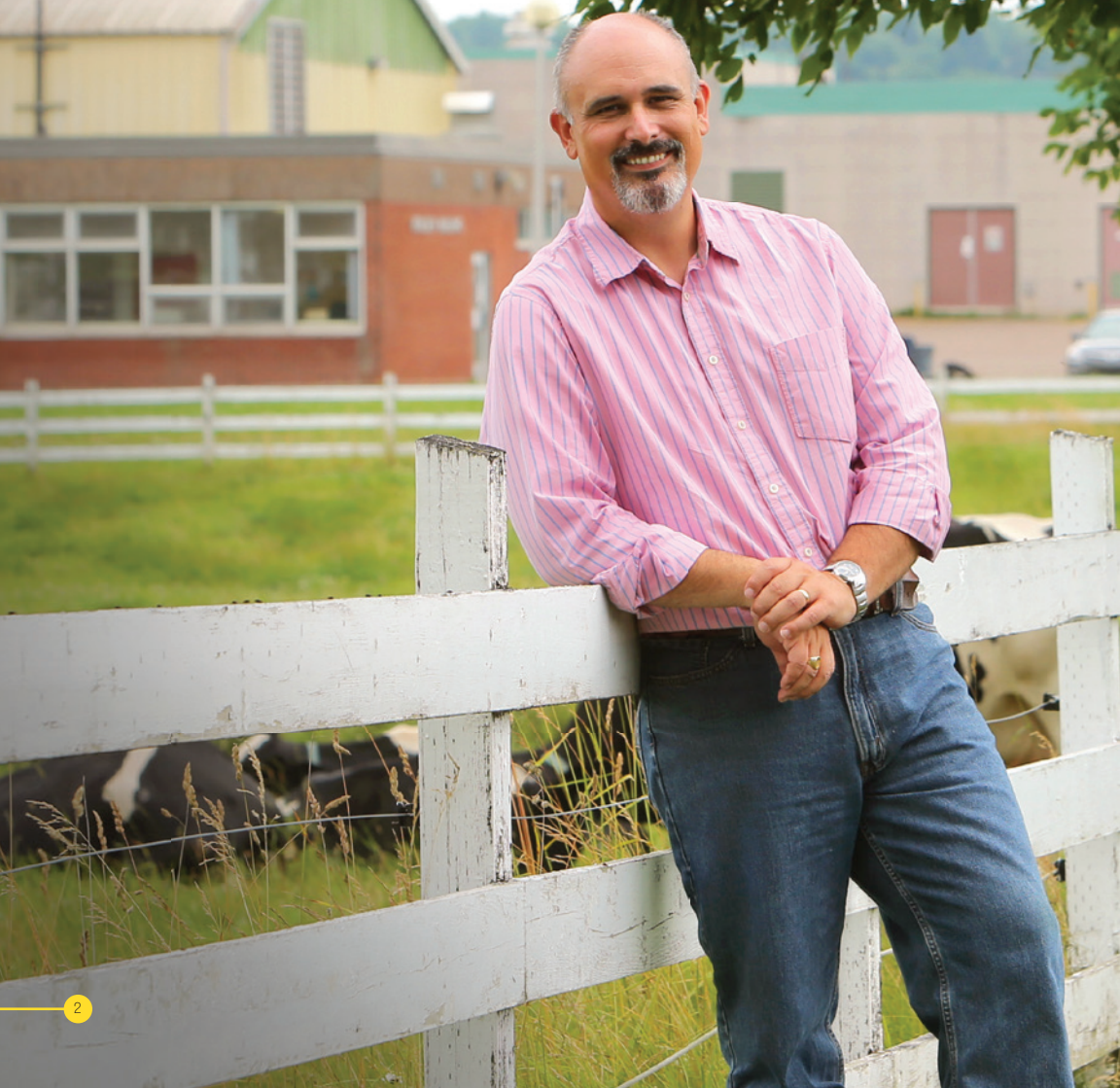
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# MESSAGE FROM THE DEAN



***This is our first year!*** And what an incredible first year it has been. After launching our first Strategic Plan for Dalhousie University as its newest Faculty in September of 2014, I am so pleased to be able to share with you a snapshot of some of our proudest moments over the 2014 – 2015 year.

Although it has been a period of change for the Faculty of Agriculture as we continue to transition to Dalhousie University, I am so proud of our faculty, staff and students as we collectively work to dispel the myths of agriculture and continue to move forward this amazing industry that impacts each and every one of us.

It is essential for universities to play a greater role as innovation hubs and connect with surrounding communities to strengthen opportunities for our students to benefit from experiential learning. This past year we were proud to launch and host the only Agricultural Sandbox in the province on our campus in collaboration with Acadia University.

The Faculty of Agriculture is now home to one of only two Canadian undergraduate programs in landscape architecture. Landscape architecture is increasingly important as populations grow and we look for new and often sustainable means to design, plan, manage and care for the built environment.

The introduction of our new Bioveterinary Science program was no less exciting with an opportunity for students to spend three weeks in a tented camp in The Amakhala Game Reserve in South Africa through the African Wildlife Ecology Course. The Faculty of Agriculture truly believes in applying theory to practice, real 'hands on learning' and this is a fantastic example of that approach.

The Faculty also embarked on a master campus planning process to lead and inform the growth of the Faculty and campus over the next 10 years. These are but a few highlights of the work accomplished over the past year. Please take a moment to learn more about the fabulous work of our faculty, our staff and our students. We are a proud member of the Bible Hill/Truro community and we welcome your comments and feedback.

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.*

David Gray  
Dean, Faculty of Agriculture

# TEACHING AND LEARNING



**ALTHOUGH SHE STARTED** her degree with no agricultural background, Shelby Jamieson has been proudly selected as the Faculty of Agriculture's first Queen Elizabeth Scholar. The Queen Elizabeth II Diamond Jubilee Scholarship Program offers global experiences for students that will benefit them throughout their careers. Through the program, Shelby will complete a summer internship in Kampala, Uganda. She will work with the Southern and Eastern African Trade, Information and Negotiations Institute on issues around food security. Shelby grew up in the small, rural community of Tatamagouche, NS "It really means a lot to me and my family to have been chosen for this prestigious scholarship," Shelby explains. "I'm both honored and excited to begin my journey."



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*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.*

**HIGHLIGHTS:**

- 2 new programs launched
- Landscape architecture and Bioveterinary science
- 6 new faculty
- Heather Braiden, Lord Abbey, Scott White, Svetlana Yurgel, Simon Somogyi and Bruce Rathgeber
- 1 Master Campus plan undertaken to lead and inform the growth of the Faculty and campus over the next 10 years.
- 25 courses, 525 students, \$272,900 in revenue through Extended Learning. Courses included Beekeeping, Farm Technician Apprenticeship, Tractor Safety, Pesticide Training and more.
- Development of First Young Farmers training program for Atlantic Canada.
- Dalhousie University's Faculty of Agriculture has proudly welcomed students from the Fujian Agricultural and Forestry University in China to campus since 2005 and celebrated this 10-year partnership in September.
- The Faculty of Agriculture helped to develop new Occupation Standards for Agri-Business Entrepreneurship and Agri-Business Management. Both are completely new standards for the entire Caribbean region through the CARICOM Education for Employment projects in Dominica and St. Kitts and Nevis. As well, students along with our partner colleges participated in social media projects in an exchange opportunity to develop videos and Facebook pages to encourage youth into agriculture.

# RESEARCH AND KNOWLEDGE



**SOPHIA HE** is looking at new ways to change how fuels are produced using environmentally sustainable and readily available methods. Dr. He is focusing on making fuels and bio-products from non-conventional crops and bio-waste such as agricultural and forestry residues, animal manure, agri-food processing waste and solid municipal waste. One area of her research looks at the development of on-farm biodiesel production from spent coffee grounds. Through her research, Dr. He hopes to have a significant impact on the local community and agriculture industry. She wants to reduce the reliance on petroleum fuels, decrease energy costs on farms and provide an alternative option for waste treatment.



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

**HIGHLIGHTS:**

- Total research funding; \$9,424,489—up 27% from last year
- 18% increase in Tri Council funding
- 70 graduate students, 157 funding awards, 21 research grant awards 11 categories
- 8% - Faculty percentage of total university research funding
- Dr. Zaman, a pioneer in the field of Precision Agriculture, has invented cost-effective Variable Rate (VR) technology for spot application of agrochemicals receiving a US Patent and Canadian Patent for the invention of his VR Sprayer System.
- 29% – Faculty percentage of University research contracts
- 75% success rate in NSERC Discovery grants
- 100% success rate with accelerate research contracts, 83% NSERC Engage grants
- 4 Undergraduate Student Research Awards
- 2 Canada Research Chairs, Fruit Bioactives and Bioproudcts and Agriculture Genetic Diversity
- 1 Industry Research Chair in Beef Cattle Production
- 206 peer reviewed publications, 115 peer reviewed conference proceeding and 196 workshops and industry meetings.
- 16 PhD students
- Launch of the Organic Science Cluster II which focuses on innovation, competitiveness and market development to ensure Canadian organic producers and processors have the tools and resources they need to continue to innovate and capitalize on emerging market opportunities.
- Introduced a Faculty Visiting Speaker Series, with Dr. Chris Cutler as Coordinator. The speaker series has resulted in nine distinguished lectures between January and March 2015.

# COMMUNITY ENGAGEMENT



**IN 2009**, a student in environmental science developed the Community Garden as a fourth year project. Now, six years later, the 500 square foot community garden is thriving as an essential part of the campus and the surrounding community. Consisting of 50 plots and approximately 75 gardeners, the garden acts as a place for community members, faculty, staff and students to experiment and share gardening ideas. For \$15, members of the community can rent a plot to plant their own personal garden. With garden tools, compost, mulch and some seeds and transplants available, gardeners are only responsible for providing their own organic seeds and enthusiasm.



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

**HIGHLIGHTS:**

- First Community Education officer hired to raise the profile of the science of agriculture in schools and communities.
- Developed partnerships with 4-H Nova Scotia leading to more on-campus events and programming
- International partnerships and programs expanded in Ethiopia, 3+1 program developed with the Fujian Agricultural and Forestry University in China
- The Alumni family bursary awarded close to \$70,000 to more than 86 students with familial connections to the Agricultural Campus. Bursaries are awarded to students who are related to a former graduate of the NSAC or the Faculty of Agriculture. In 2014-15, 11 awards were presented totaling \$8,500.
- The Zhuhui Ye Memorial Award was established to further the understanding of culture and relationship between Chinese and Canadian students. A number of students from China's Fujian Agriculture and Forestry University (FAFU) study on the Ag Campus each year as part of the FAFU 2+2 program.
- Kathleen Kevany co-chairs the Engage Colchester Truro group that is facilitating activities and conversations in response to the One Nova Scotia Report
- The second annual Dal AC Power breakfast was held on campus engaging close to 120 municipal, industry and business leaders with four of our rising stars in research.
- The Faculty of Ag hosted the Truro and Colchester Chamber of Commerce for their Annual General Meeting with guest speaker President Richard Florizone.
- Working with our partners in the international community, we continue to build their capacity to create and support sustainable bio-resources, food security, management and rural development systems through Post Harvest Management to Improve Livelihoods technologies.
- Extended Learning developed a Green Diamond Ag Training series using an online curriculum of agriculture production modules for their sales managers valued at \$35,000.



# REGIONAL LEADERSHIP AND IMPACT



**“IT WAS SOMETHING** we always dreamed of — access to new equipment, but never thought possible,” says Jean Lynds, manager, Ruminant Animal Centre, Dalhousie Agricultural Campus.

What started five years ago as an informal agreement, with the delivery of two machines, has now become a formal partnership valued at \$1.7 million, annually. On May 6, 2015, global leader in agricultural equipment, CASE IH and Dalhousie’s Agricultural Campus entered a nine-year agreement which will provide the Agricultural Campus with advanced farm machinery, each year.

The agreement will ensure the delivery of approximately 16 new machines to the Agricultural Campus, each year, for teaching, production and research. The deal represents an annual retail value of approximately \$170,000.




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*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.*

#### **HIGHLIGHTS:**

- Global leader in agricultural equipment, CASE IH and the Faculty of Agriculture entered a nine-year agreement which will provide the Agricultural Campus with new advanced farm machinery, each year.
- One of the largest international development projects ever awarded to a Canadian university, the \$18 million Agricultural Transformation through Stronger Vocational Education program will focus on enhancing current Ethiopian agricultural education programs available at agricultural colleges.
- Cultiv8, the Agricultural Sandbox in partnership with Acadia University is launched at the Faculty of Agriculture. Both campuses are connected to rural communities and focused on supporting and growing the agricultural economy of the province.
- Drs. Sarah Stewart-Clark and David Gray appointed to a committee of scientific experts to provide advice to government on regulating aquaculture development in Nova Scotia.
- A collaboration funded by the Atlantic Lobster Sustainability Foundation between Dr. Sarah Stewart-Clark, Dr. Fraser Clark, AVC Lobster Science Centre and industry partner, Clearwater Seafoods, discovered critical information that prevented disease outbreaks in lobsters in Nova Scotia directly protecting the billion-dollar lobster industry in Canada.
- 8,800 living alumni with 5,000 active and contributing to the agricultural landscape
- In-kind gifts received: \$170,000
- Major gifts (\$25,000+) received: \$333,524
- Gifts (< \$25,000): \$145,604
- Pledges made for future years: \$1,337,250
- 6 new endowments
- 4 new annually funded awards

# MANAGEMENT AND GOVERNANCE



**IN SEPTEMBER 2015** the Annual Appeal vision was realized with the unveiling of Jenkins Patio. Located behind the Riverview Room along the Cobequid Trail, the patio features professional brickwork and landscaping and provides exterior seating for students, staff and community members. It serves as a striking addition to weddings, banquets and graduations. The patio is also home to two beautiful pieces created by local artisans. "Coal Shovel Crane," created by Jackie Ross to honour Dr. Bernie MacDonald's 18 years of service to NSAC, as well as a new bench donated by the Faculty of Agriculture Alumni Association in collaboration with the Students' Union. The bench, crafted by alumnus Shawn Taylor of Brokkr Forge, was commissioned by the Alumni Association to memorialize the legacy of NSAC.

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

**HIGHLIGHTS:**

- As part of the merger with Dalhousie University was the provision for a Faculty of Agriculture Dean's Advisory Council. This Council serves to provide advice to the Campus Principal/Dean on strategy, priorities and responsiveness to the region in relation to the Faculty's academic programs, applied research and service.
- Female Leaders in Academia was formed at the Faculty of Agriculture by Dr. Sarah Stewart-Clark. The group was formed to address the change required to ensure more female academics advance vertically into leadership roles in academia.
- Proposed new EH&S Committee structure and hired new EH&S Manager
- Farm Advisory Committee established to provide input, direction and policy development for the Campus Farm and to ensure it aligns with the teaching, research and outreach goals and requirements of the Faculty of Agriculture. One of the goals is to expand the utilization of the Farm so that every program can benefit from "hands on" learning.
- Reorganized HR structure under the Dean's Office;
- Developed internal budget process and first three-year integrated budget
- Key areas of investment have been identified through the Master Planning process and through consultations with our students, faculty, staff, alumni and industry stakeholders. We are now beginning to engage our extended AC family and industry partners in philanthropic discussions around investing in a \$15 million campaign for the Agricultural Campus in four key areas:
  - Student Centre: enriching the student experience on our campus
  - Farm Renewal: featuring a new dairy, animal housing upgrades, state-of-the-art technology and sustainability projects;
  - Scholarships: increasing support available to students with an emphasis on growing our graduate student funding;
  - Research Chairs: establishing a renewed focus in key areas of agriculture research including dairy, poultry and other emerging priority areas.



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