

SHARE:

[Join Our Email List](#)

March 2020



A collaboration between OMAFRA and the University of Guelph

Alliance Innovations

Stories of the Alliance people, places and programs generating impact in the agri-food sector in Ontario and around the world.

Subscribe
here >

In this issue:

- Go #BehindtheNumbers to see:
 - how data from dairy and beef research centres is sent to U of G; and
 - what it means for the Laboratory Services Division to be accredited
- See what's happening at the Ontario Beef Research Centre in Elora
- Register for a free webinar about the Ontario Aquaculture Research Centre
- Sign up for one of four Skills for Research Impact workshops running in March
- Get news, media/publications and more

What's New?



U of G appoints inaugural assistant vice-president to oversee research innovation and knowledge mobilization

Jessica Bowes will oversee the Research Innovation



U of G awards Research Leadership Chairs to Alliance-funded researchers

The Research Leadership Chairs program promotes and sustains ground-



Professor to be inducted into Ontario Agricultural Hall of Fame

Dr. Peter Sikkema, professor in the Department of Plant Agriculture, is among seven inductees to the Ontario

Office, which is critical in supporting commercialization, new venture creation, R&D partnerships, tech transfer, and industry liaison for the Alliance. Bowes began her role as assistant vice-president on February 1, 2021.

breaking research at U of G. Among recent recipients are Dr. Tina Widowski, Department of Animal Biosciences, and Dr. Claudia Wagner-Riddle, School of Environmental Sciences, both in the Ontario Agricultural College; and Dr. Dorothee Bienzle, Department of Pathobiology, and Dr. Jan Sargeant, Department of Population Medicine, both in the Ontario Veterinary College.

Agricultural Hall of Fame (OAHF) in 2021. The OAHF said that through his contributions to Ontario agriculture as a researcher, teacher and extension agronomist, Sikkema has “made a major impact on the sustainability of crop production in Ontario, Canada, North America and around the globe.”

[Read more >](#)

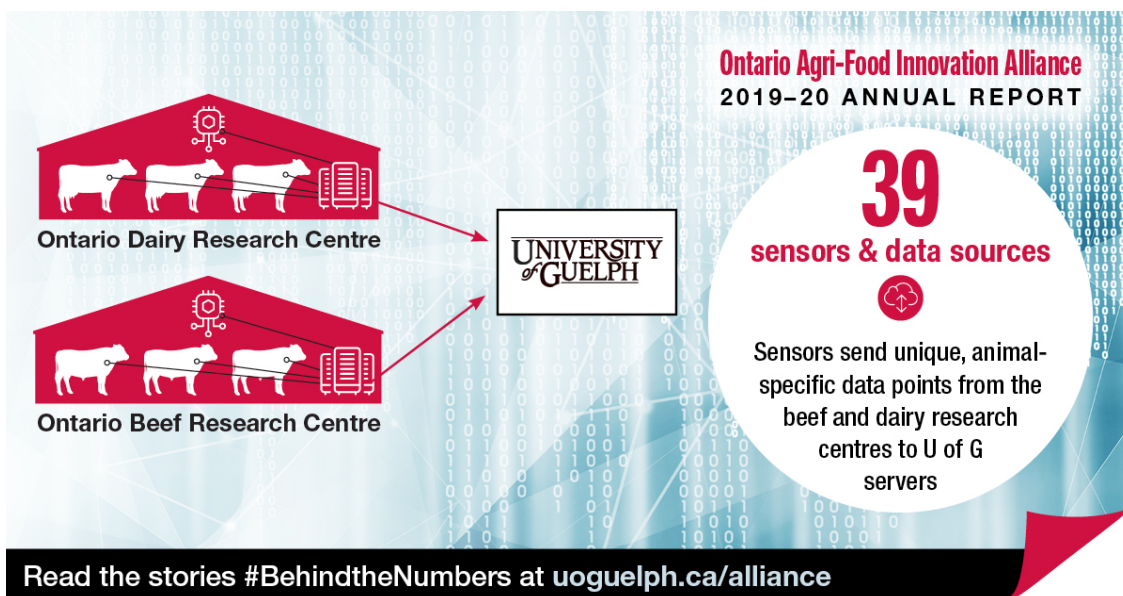
[Read more >](#)

[Read more >](#)

Growing Ontario Solutions: #BehindtheNumbers

#BehindtheNumbers is a series of stories from the Ontario Agri-Food Innovation Alliance 2019-20 Annual Report, [Growing Ontario Solutions](#), about how the Alliance drives impact in Ontario.

Sensors and data sources send animal-specific data from the beef and dairy research centres to U of G servers



The Research Station Data Access Portal makes it easier for researchers to access data generated at the Ontario Dairy Research Centre and Ontario Beef Research Centre. This project not only facilitates researcher access to relevant data but also ensures that data is consolidated, archived and made available for future research.

Here is how it works:

1. Thirty-nine sensors and data sources, including those that track feed consumption and milk yield, send data to on-site servers at the research centres.
2. Every night, data is sent from these servers to secure servers at the University of Guelph.
3. Sensor data is combined with data from other sources, including Dairy Farmers of Ontario, which tracks milk quality and composition through its bulk tank sampling program.
4. Data is cleaned, organized and made available to researchers through a secure online portal. Data is available by cow ID. Researchers see only data related to their projects.

Read more about the enhanced system for research data access and storage on [page 20 of Growing Ontario Solutions](#).

Accredited tests for food quality and safety

The Alliance invests in laboratory testing and emergency planning to make Ontario's food system one of the safest in the world.



Ontario Agri-Food Innovation Alliance
2019-20 ANNUAL REPORT

93
accredited tests


Laboratory Services Division
received accreditation for
93 tests by the Standards
Council of Canada

Read the stories #BehindtheNumbers at uoguelph.ca/alliance

The [Laboratory Services Division](#) is accredited by the Standards Council of Canada (SCC) and the Canadian Association of Laboratory Accreditation to the International Organization of Standardization standard 17025 (ISO/IEC 17025:2017).

Accreditation means that a third party audits laboratory tests and methods for consistent, quality-controlled application. The audited lab must also accurately test samples that contain contaminants unknown to the lab. These samples are provided by the accreditor, and successful identification of the contaminant is another indicator that the lab is producing high-quality, accurate results — the foundation of a safe and transparent food supply.

Among the 93 tests accredited by the SCC in 2019-20 are milk composition testing and antibiotic and bacteria testing for fluid milk. The [Agriculture and Food Laboratory](#) uses these accredited tests to process about 800,000 samples of fluid milk every year, from every bulk tank on every dairy farm in Ontario. The sampling and testing of fluid milk

continued even after Ontario declared a state of emergency in March 2020. The AFL also tests tens of thousands of other food and environmental samples.

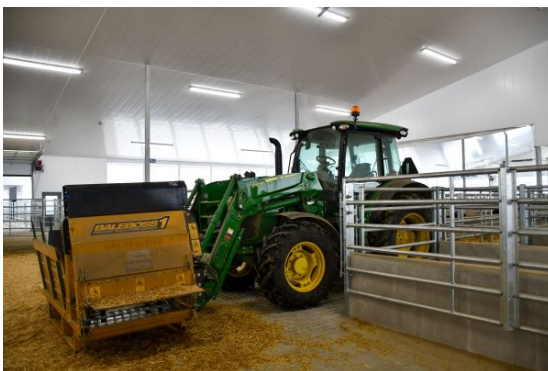
Frontline workers in the Laboratory Services Division helped keep food staples — including milk, eggs and meat— on grocery store shelves. With the AFL open for business, meat inspectors were able to send samples for analysis, egg producers were able to monitor salmonella levels in their barns, and processors could wash vegetables confident in the quality of their water.

Dig deeper

- Learn more about the [ISO/IEC 17025 standard](#) for testing and calibration laboratories.
- The [Standards Council of Canada](#) is a Crown corporation that reports to Parliament through Innovation, Science and Economic Development Canada.

Focus ON: Ontario's Agricultural Research Centres

Ontario Beef Research Centre – Elora



The Ontario Beef Research Centre – Elora is a unique, state-of-the-art, 165,000-square-foot research centre that provides a world-class platform for discovery, learning and outreach. It is the result of a vibrant collaboration among the Agricultural Research Institute of Ontario, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), the University of Guelph and the Ontario beef industry.

Did you know?

The Ontario Beef Research Centre has another site in [New Liskeard](#).

The Ontario Beef Research Centre – Elora builds on the success of the previous beef research facility located at the Elora Research Station from 1973 to 2017. The new facility was completed on the same site in September 2019. It consists of two connected barns, plus laboratories (including a sample storage lab and clean lab for genomic research), a meeting room and offices. The site contains 300 acres of pasture, and a feedlot is under construction.

A new Precision Feed Facility was built next to the Ontario Beef Research Centre – Elora. The facility serves both the beef research centre and the Ontario Dairy Research Centre, and will allow staff to mix standardized feed rations and manage ingredient and stored commodity inventories in real time. Feed mixing, now done under a roof, will ensure precise measurement of each ingredient. More information about the Precision Feed Facility will be included in future newsletters.

Take a virtual tour



Pasture

Typically, cows spend from mid-May to mid-October on pasture unless they are required to stay indoors for research trials.



Cow-calf housing

The cow-calf housing section has 24 pens and can accommodate six cow-calf pairs each, for up to 144 cattle per barn or 288 animals across both barns.



Handling area

The handling area is designed to follow recommended best-practices for cattle transport.



Maternity area

The maternity section includes 20 maternity and special needs pens.

Facilitating research

The Ontario Beef Research Centre facilitates research relevant to the province's climate and beef industry. Research focuses on feed, nutrition, reproduction and performance. Researchers have access to data collected from sensors and equipment at the Ontario Beef Research Centre — Elora, including technologically advanced feed intake monitoring bins (Insentec feeders). These feeders are crucial for beef nutrition research, and that's why the research centre has 184 of them — the most in one facility in the world (with the second-highest number located at the Ontario Dairy Research Centre on the same premises).



The Ontario Beef Research Centre connects the province to international and national networks of researchers and research and keeps Ontario beef research relevant.

Current studies

Evaluation of the High Immune Response Technology in beef cattle in the context of climate change, calf health and the development of a genomics test for immunity

- The development of a HIR genomics test that can be successfully used for beef cattle could help producers select cattle that are more disease-resistant to bovine respiratory disease (BRD), which is the most common and costly disease affecting the North American beef industry. This technological advancement would improve the health and welfare of beef cattle and benefit producers in terms of reducing losses and treatment costs.

The impact of biochar supplementation on enteric methane emissions and the relationship between methane emissions and feed efficiency in forage-fed beef cows

- This project will investigate a novel feed additive to reduce enteric methane emissions in forage fed cows in an applied setting.

Learn more

On Feb. 2, the Alliance hosted a webinar about research at the Ontario Beef Research Centre with Dr. Katie Wood, professor in the Department of Animal Biosciences, and Matt Bowman, research committee chair from the Beef Farmers of Ontario. [Watch the recording here](#):



Media

A selection of Alliance people, places and programs cited in popular and trade media

[A lasting impact: Two University of Guelph researchers retire](#)

Dr. Bill Deen and Dr. Art Schaafsma, both professors in the Department of Plant Agriculture, were profiled in *Ontario Grain Farmer* magazine.

[OSCIA announces 2021 Soil Champion award recipients](#)

Dr. Laura Van Eerd, professor in the School of Environmental Sciences at Ridgetown

Campus, received the research and extension award from the Ontario Soil and Crop Improvement Association. The annual award recognizes leaders and advocates in sustainable soil management.

[Seven to be inducted into the Ontario Agricultural Hall of Fame](#) (Farmtario, Feb. 2)
[Ridgetown professor to enter the Ontario Ag Hall of Fame](#) (BlackburnNews.com, Feb. 9)

Read more about Dr. Peter Sikkema's upcoming induction into the Ontario Agricultural Hall of Fame.

Events



Skills for Research Impact workshop series offers sessions this month

[Advanced Session: Data Visualization](#)

This advanced workshop on March 2, 1-2:30 p.m., will introduce data visualization to non-technical users.

[KTT Strategies and Dissemination](#)

This session on March 9, 1-2:30 p.m., will discuss knowledge mobilization tips, including social media, research summaries, infographics and media.

[Evaluating KTT Activities](#)

When all is said and done, how do you know it worked? On March 23, 1-2:30 p.m., learn evaluation techniques to assess the impact of your knowledge mobilization efforts.

[Advanced Session: Infographic Development and Design](#)

Go beyond the academic poster: Learn about best practices for designing engaging and visually appealing infographics in this advanced session on March 25, 1-2:30 p.m.



Explore research at the Ontario Aquaculture Research Centre in Alma

In this final webinar of the "Exploring Research at Ontario's Agricultural Research Stations" series, hear from Dr. David Huyben, Department of Animal Biosciences, and R.J. Taylor, co-owner of Cedar Crest Trout Farms. Register now to join us on March 30 from 1:30-2:30 p.m. for this free event.

[Read more >](#)

Make an Alliance Connection



Twitter
[@AgInnovationOn](https://twitter.com/AgInnovationOn)



LinkedIn
[@ontario-agri-food-innovation-alliance](https://www.linkedin.com/company/@ontario-agri-food-innovation-alliance)



Website
uoguelph.ca/alliance

Comments? Feedback? Events or content to include? Email kttadmin@uoguelph.ca.



IMPROVE LIFE.

