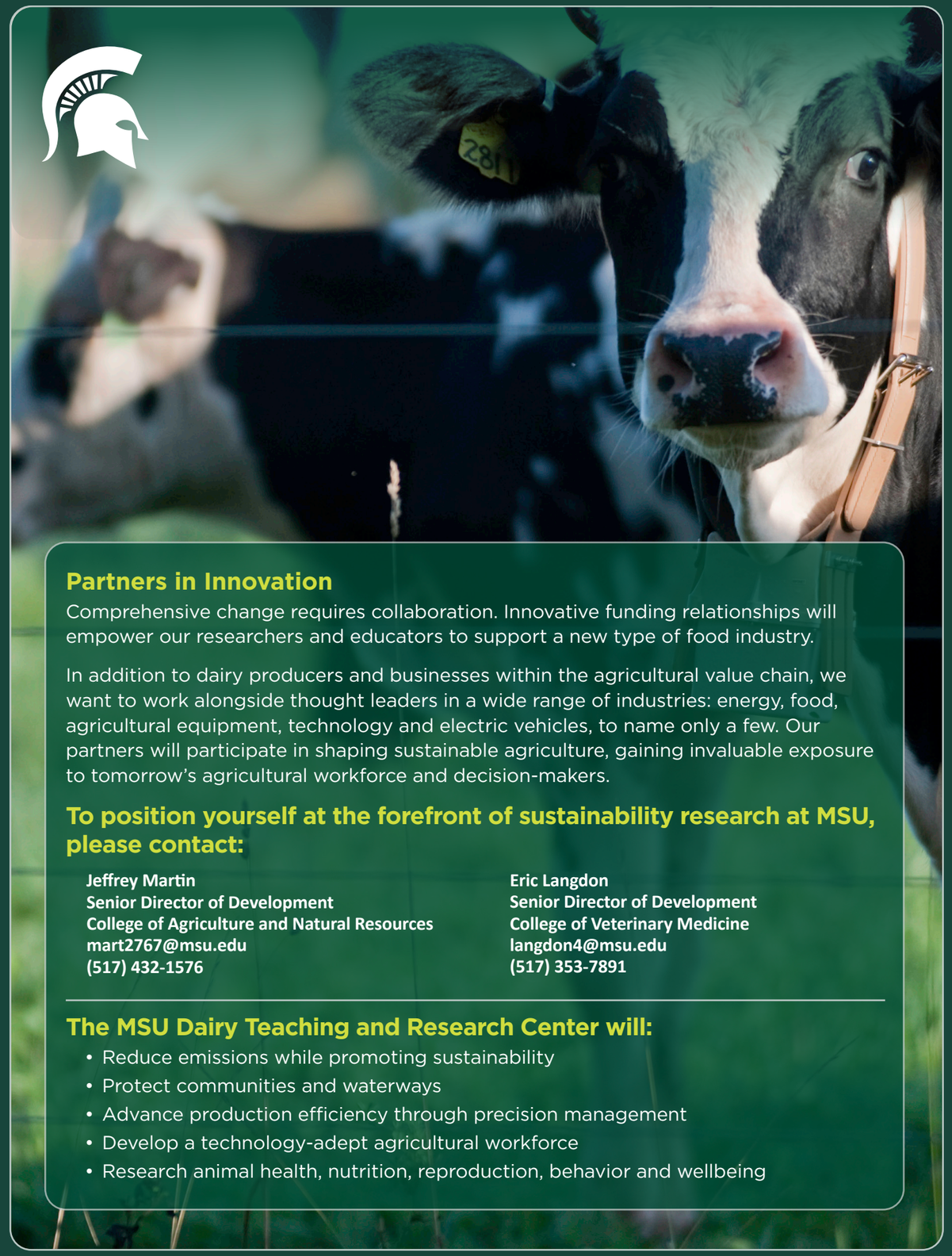


Partners in Innovation

Comprehensive change requires collaboration. Innovative funding relationships will empower our researchers and educators to support a new type of food industry.

In addition to dairy producers and businesses within the agricultural value chain, we want to work alongside thought leaders in a wide range of industries: energy, food, agricultural equipment, technology and electric vehicles, to name only a few. Our partners will participate in shaping sustainable agriculture, gaining invaluable exposure to tomorrow's agricultural workforce and decision-makers.

To position yourself at the forefront of sustainability research at MSU, please contact:

Jeffrey Martin
Senior Director of Development
College of Agriculture and Natural Resources
mart2767@msu.edu
(517) 432-1576

Eric Langdon
Senior Director of Development
College of Veterinary Medicine
langdon4@msu.edu
(517) 353-7891

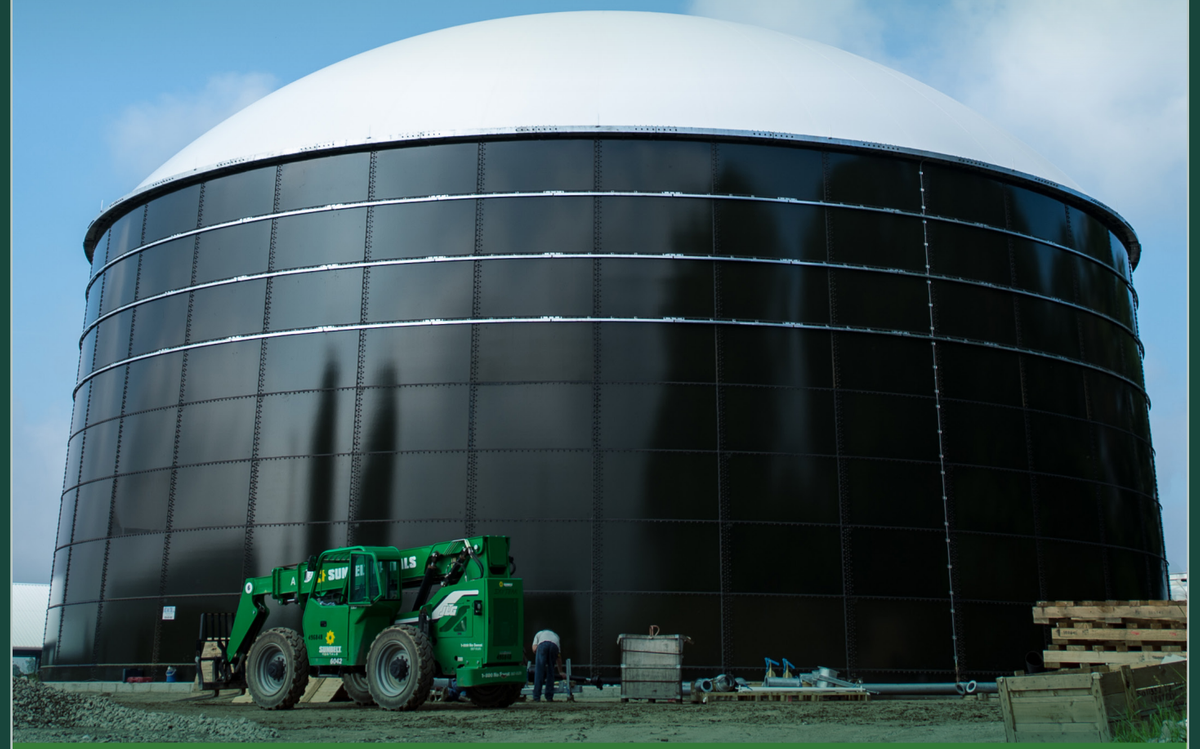
The MSU Dairy Teaching and Research Center will:

- Reduce emissions while promoting sustainability
- Protect communities and waterways
- Advance production efficiency through precision management
- Develop a technology-adept agricultural workforce
- Research animal health, nutrition, reproduction, behavior and wellbeing

ENVISIONING TOMORROW'S

CIRCULAR AGRICULTURAL ECONOMY

EFFECTIVE, HIGH-IMPACT SOLUTIONS FOR NEXT-GENERATION DAIRY OPERATIONS



College of Agriculture and Natural Resources
MICHIGAN STATE UNIVERSITY

Dairy farms provide nutrition and employment to communities worldwide, but the industry's environmental impacts present challenges to producers. To remain viable, it is critical to minimize the environmental footprints of production.

What's NEW

Circular dairy operations can transform manure into renewable sources of fertilizer, water and energy that support the agricultural organization. These farming practices can promote environmental and economic sustainability, while maximizing agricultural output.

What MATTERS

Dairy producers face ongoing financial challenges due to the global price instability of necessary inputs and the high costs of waste byproduct generation. Circular practices can "close the loop" by minimizing the environmental footprints of production while decreasing the reliance on volatile and high-cost inputs, making farms more profitable and independent.

What's NEEDED

Achieving circularity in dairy operations will require actionable research, a highly skilled workforce and collaborative innovation for implementation – areas where Michigan State University is uniquely positioned to lead.

Why Michigan State University?

MSU's founding in 1855 established the field of scientific agriculture in the U.S.

Our innovative, farm-first research and workforce development is respected worldwide.

PROGRAMS + PEOPLE

- Highly ranked programs in agriculture, biosystems engineering and veterinary medicine make MSU the best R-1 institution to develop research to help support the dairy industry and dairy farmers application of sustainable circular practices.
- Faculty members have the cross-disciplinary expertise and long-term research programs required to tackle the complex challenges facing the dairy industry, and the institutional support to accelerate their innovations to practice.

PARTNERS

- Fostering collaborative relationships with dairy stakeholders has positioned MSU as the established leader in dairy cattle research, education and outreach.
- This approach ensures our research (including contributions in the areas of nutrition, health, genetics and reproduction) is credible among producers and will benefit farms and communities in meaningful ways.

Why Michigan?

- Michigan is an emerging leader in the national dairy industry, experiencing remarkable growth in the past twenty years.
- As global temperatures rise, Michigan's moderate climate and abundant water supply create an ideal location for cutting-edge research into optimized and sustainable dairy production.

Why now?

- MSU's outdated dairy infrastructure has constrained its research capacity, but a transformative funding allocation from the state in 2022 lays the foundation for a new era.
- Thanks to advocacy from commodity partners, farm organizations and bipartisan support from state government, we have a once-in-a-generation opportunity to envision the kind of space required to advance the dairy industry for decades to come.

Michigan has one of the nation's **most productive and efficient** dairy industries:

#1 in milk production per cow in the U.S.

109% increase in milk output in MI compared to 34% increase in the U.S. over the past 20 years

42% increase in number of cows in MI compared to 2% increase in the U.S. over the past 20 years

THIS IS THE MOMENT TO INVEST IN VISIONARY AGRICULTURAL METHODS – BUT WE CAN'T DO IT ALONE.