

2022 M-AAA Grants Program Industry Priorities

As MSU faculty and staff work to develop the latest scientific information that will enhance agriculture, the M-AAA urges you to engage and be diligent in advocacy efforts. This will not only enhance collaborative relationships with our agricultural industry, but also lead to better informed and educated consumers. Many of the technologies and management practices commonplace on farms throughout Michigan, the U.S. and the world were developed at land grant universities, including MSU. Together we share a responsibility to promote and educate the public about the modern, science-based production and management tools used in today's complex and very advanced animal and food production systems.

Members

Michigan Allied Poultry Industries

- Overarching Priorities
 - Avian Diseases: causes, treatment, prevention.
 - Avian Nutrition: all species, throughout life cycle.*
- Egg Layer Priorities
 - Cage-free/aviary management: vaccine improvement, bird health, bacterial and parasitic challenges, floor eggs.
- Turkey & Broiler Priorities
 - Antibiotic management and NAE alternatives.
 - Skin and tissue issues: clostridia dermatitis, woody breast syndrome, etc.

Michigan Cattleman's Association

- Disease Prevention and Control
 - o Bovine TB-Improved prevention methods, improved testing.
 - Bovine Respiratory Disease Improved detection methods, control and preventative protocols, antibiotic alternatives
- Beef Industry Environmental Sustainability
 - Producer and processor waste and resource management
 - Maximizing beef's role in carbon sequestration
 - Effects of cattle on soil and ecosystem health
- Beef Production & Efficiencies
 - Methods to create value from MI's traceability program
 - o Methods to improve feed efficiency
 - o Utilization of cover crops as feed resources
 - o Incorporating technology to improve beef production and producer decision making
 - o Improving the efficiency of beef production contributed from the dairy sector
 - Updated recommendations for improved cattle welfare
- Industry Outreach
 - Creation of or improvements to resources available to the industry including increased collaborations with outside sources (e.g., other land grant universities)

- Establish and enhance recurring outreach programs
- Marketing strategies that capture additional value from Michigan beef
- Meat Research and Processor Assistance
 - Employee training (slaughter, meat cutter, food safety, etc.)
 - o Improving food safety of fresh and/or processed beef
 - Improving beef quality

Michigan Farm Bureau

- Development of new animal health protection tools and expanded role of vaccines in disease protection.
- Workforce development and education: Training for jobs and careers in animal agriculture.
- Effective tools and preparedness to deal with current and emerging diseases.
- Development of new tools to enhance food safety.
- Enhancement and growth of the Michigan meat packing and dairy processing industries
- Development of new automated tools to address labor issues in the livestock and dairy industries

Michigan Horse Industry

- Youth and adult outreach/education in horse health/management and promotion of the industry.
- Land-use and environmental management as it relates to horse facilities and equine recreational use.
- Research in the areas of preventative health management, gastrointestinal disease, and nutrition.

Michigan Meat Association

- Workforce development
 - Training and resources for entry level and current employees with credit and non-credit programs with hands-on and lecture sessions (e.g. meat cutter training, animal welfare and humane handling, humane harvesting, operational processing techniques)
- Emerging issues
 - Investigations (research and extension) in identification, controls or prevention of issues or topics that affect meat, poultry, and game animal food safety (e.g. chronic wasting disease and bovine tuberculosis, pathogenic microbial identification and control, parasite, prions, diseases, genetic and muscle abnormalities)
- Operational processing, wastewater disposal options, and food safety controls
 - Investigations of practices or product characteristics for food safety control involving biological, chemical, or physical hazards (e.g. extended shelf life, reduced oxygen packaging, fermented meat products, antimicrobial agents, chemical residues, foreign and natural objects).
 - Investigations into the best available technology for wastewater treatment prior to discharge to meet updated EGLE standards (e.g. nutrient uptake from crops receiving slaughterhouse or meat processor wastewaters)
- State licensing for inspected meat facilities or assistance for USDA-inspection upgrades of current facilities
 - Strengthen existing procedures to provide technical assistance to existing firms wishing to become federally inspected and/or investigate procedures to develop a state-approved food safety system for custom slaughterhouses (e.g. checklist for custom slaughterhouses to evaluate current facility vs. what is required for USDA approved license, technical design service and funding for plant improvements, evaluate options for process wastewater disposal to satisfy current EGLE requirements)

Michigan Milk Producers Association

• Alternative uses of milk

- Tar spot effects on corn silage
- Assistance with the dairy industry's sustainability's efforts, including research on both feed and reproductive efficiency as it relates to sustainability*.
- Workforce development

Michigan Pork Producers

- Emerging/Foreign diseases (e.g. porcine epidemic diarrhea virus, African Swine Fever) and implications for a secure pork supply.
- Consumer acceptance of production practices (research on alternative housing methods, castration/pain mitigation and animal care and handling) and strategies for enhancement of consumer image of swine industry.
- Environmental Issues (manure management, air quality, water availability, mortality management (large scale in relation to a disease or marketing challenge).
- Farm innovation to compensate for limited labor.

Michigan Sheep Producers Association

- Improving sheep production efficiencies including these focal areas: forage utilization, nutritional management, reproductive management, health programs and development of new and refinement of existing production systems. *
- Producer education programs focused on flock expansion and improvement of production efficiencies including involvement of producers in on-farm trials and demonstrations.
- Producer education programs and applied research on the use of sheep in vegetation management of solar arrays.
- o Identification of methods to improve product quality (meat, milk, wool)

Michigan Department of Agriculture & Rural Development (MDARD)

- MI reportable animal diseases (including but not limited to the economics, biosecurity, pathogenesis, control, treatment, and prevention)
- Animal welfare (including but not limited to species standards, impact on health, and public perception)
- Environmental sustainability (including but not limited to nutrient management, water conservation, and climate change)

Associate Members

Associate members do not contribute directly to the determination of research priorities for the M-AAA grants programs, review of proposals or initial funding decisions. Priorities exclusive to associate members are not directly supported by the M-AAA grants program, but proposals addressing shared priorities are encouraged.

Michigan Soybean Committee

- Maximize the value (biological and financial) of soybean meal in livestock nutrition and health including, but not limited to, bypass protein and amino acids.
- Utilization of livestock manure as a crop nutrient source specifically, the effect of protein sources on nutrient composition of animal waste.
- Effect of protein sources in animal diets on meat quality, rate of gain, overall animal health and milk production.

*Shared priorities of the Michigan Soybean Committee