



2023 Request for Proposals

Introduction

The Michigan Alliance for Animal Agriculture (M-AAA) announces a request for proposals for funding for research and extension projects to enhance Michigan Animal Agriculture. The M-AAA is a partnership between Michigan animal agriculture and allied industries, the Michigan State University (MSU) College of Agriculture and Natural Resources, MSU College of Veterinary Medicine, MSU AgBioResearch, MSU Extension and the Michigan Department of Agriculture and Rural Development focused on advancement of the Michigan animal agriculture economy.

All proposals must address critical needs relevant to Michigan's Animal Agriculture Industries and are requested in the following funding categories: 1) Applied Research, 2) Extension and 3) Seed Grants.

Eligibility

Principal Investigator(s) must be employed by Michigan State University. There are no restrictions on employment status of other team members. When additional Co-PIs and Co-Is are included on Cover Page of application, please identify correctly under appropriate categorization and only include those who will be providing substantial contribution to overall project objectives. It is recommended that investigators limit Co-PIs and Co-Is to no more than a total of two.

Beginning in 2023, individuals who fail to provide required progress reports in accordance with designated due dates or who are unable to provide justification for inability to significantly address objectives of award during previous two funding cycles will be ineligible to submit proposals to the current funding cycle

Proposal Resubmission

Researchers who submitted proposals in the previous funding cycle but were not selected for funding are eligible to resubmit, but the revised proposal must include a brief response to reviewer concerns and description of corresponding changes to the proposal.

Proposals that were funded in previous funding cycle are not eligible for renewal.

Timeline:

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|----------------------------|--|
| • January 9, 2023 | Call for proposals |
| • February 13, 2023 | Proposals due by 5:00 pm |
| • May 16, 2023 | Notification of awards |
| • June 1, 2023 | Project funds available |
| • May 31, 2024 | Termination date for one-year projects |
| • May 31, 2025 | Termination date for two-year projects |

Industry Priorities:

The primary audience for M-AAA is stakeholders and the goal of the program is to facilitate applied research and Extension projects directly tied to immediate priorities of industry partners. Proposals should not be written for an academic audience and must *be written in clear concise language that is understandable by agriculture and industry stakeholders.*

All proposals must clearly note how proposed activities will benefit Michigan Animal Agriculture and Michigan's economy, with particular emphasis on projects consistent with stated annual priorities of Michigan Animal Agriculture Commodity and Allied Groups that follow. All proposals must deliver tangible results within the defined time frame. Applicants are encouraged to contact M-AAA industry stakeholder representatives



denoted below to discuss proposed activities, relationship to stated priorities and potential sources of support for the proposal.

MI Allied Poultry Industries: Nancy Barr nancy@mipoultry.com

MI Cattlemen's Association: Sara Horton Sara@mibeef.org

MI Farm Bureau: Ernie Birchmeier ebirchm@michfb.com

MI Horse Industry: Jean Ligon jean.ligon@gmail.com

MI Meat Association: Matt Germane matt.germane@ergrp.net

MI Milk Producers Association: Bruce Lewis bruce.lewis@mimilk.com; Sheila Burkhardt burkhardt@mimilk.com

MI Pork Producers Association: Mary Kelpinski kelpinski@mipork.org

MI Sheep Producers Association: Samantha Ludlam samaludl@gmail.com

MI Department of Agriculture and Rural Development: Nora Wineland winelandn@michigan.gov

INDUSTRY PRIORITIES

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 Cattlemen's Association

- Disease Prevention and Control
 - 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 (including beef from dairy) Production & Efficiencies
 - Methods to create value from MI's traceability program.
 - Methodology and technology to improve beef production through feed efficiency and meat quality.*
 - Utilization of cover crops as feed resources.
 - Incorporating technology to improve beef production and producer decision making.
 - 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).



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 emphasizing these focal areas: forage utilization, nutritional management, reproductive management, health programs, and development of new and refinement of existing production systems.*
- Development of tools to allow producers to track and improve production and sustainability metrics
- Producer education programs focused on flock expansion and improvement of production efficiencies including the involvement of producers in on-farm research.
- Producer education programs and applied research on the use of sheep in vegetation management of solar arrays.
- 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)
- Emerging contaminants and diseases (including but not limited to evaluation of impact and risk to agriculture)

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



Funding Categories:

In previous funding cycles, there has been a lack of attention (in numerous proposals) placed on clear description of industry relevance of research proposed. Proposals must clearly state the potential benefits (economic or societal) of proposed research to targeted commodity group(s) and or animal agriculture industries in general. Sample sizes should be clear in proposal, where applicable and supported by power calculations. There has also been insufficient attention given to plans for dissemination of project results to relevant commodity groups. Communication of results to the scientific community via traditional journal articles alone is insufficient. Failure to communicate (in the proposal) specific plans for dissemination of results to the larger industry audience in Michigan will result in disqualification of proposal from funding consideration.

All proposals must articulate the following to be considered for funding and be written in clear concise language that is understandable by agriculture and industry stakeholders:

Applied research:

- Relevance to animal agriculture industry priorities
- Technical merit and feasibility
- Means by which proposed activities will enhance commodity specific or overall animal agriculture industry
- Long term benefits to MI animal agriculture
- Plans for dissemination of information to relevant commodity groups

Extension:

- Relevance to animal agriculture industry priorities
- Utilization of a team of campus and field-based personnel, as feasible
- Technical merit and feasibility
- Current/future need for proposed activities
- How proposed programming will enhance commodity specific or overall animal agriculture industries

Partnerships between campus and field-based Extension personnel are critical to maximize the impact of M-AAA supported Extension activities. Demonstration of such partnering in the development and execution of proposed activities is highly encouraged and will be given strong consideration in context of funding decisions.

Seed funding:

- Relevance of research area to animal agriculture
- Technical merit and feasibility
- How proposed activities will advance development of highly competitive extramural grant proposal
- Timeline, target funding agency and program for future extramural proposal submission

Funding Scope and Guidelines:

- Applied research projects may be proposed for a one- or two-year duration with maximum budget of \$75,000 per year or \$150,000 total (two-year project).
- Extension projects can be proposed with a maximum budget of \$30,000.
- Seed grant projects can be proposed with a maximum budget of \$25,000 and are limited to one-year duration.



Proposal Evaluation and Award Criteria:

Evaluation criteria	Applied Research	Extension	Seed Funding
Relevance to animal agriculture industry(s) and annual priorities, potential long-term impact	20	20	30
Technical merit and feasibility;	30	20	50
Investigator qualifications	10	10	
Mechanisms to deliver research information generated to relevant commodity groups	20	30	-
Leverage of external and other funding sources; extent of partnering with Michigan animal agriculture industries	20	20	-
Plans for future extramural funding and importance of seed funding to future success	-	-	20

All proposals will be reviewed by a group of experts composed of MSU and commodity group representatives. Every effort will be made to identify experts to review proposals who are not also seeking funding via the 2023 program. Inclusion as a project team member on a submitted proposal will automatically exclude such individual from review of proposals submitted for consideration in the same funding category. Upon completion of the review process, proposals will be ranked within category based on the above scoring criteria for final funding determination by the M-AAA.

Reporting guidelines for funded projects will be clearly articulated at award notification and upon account establishment. Strict adherence to reporting guidelines throughout and after project termination is required to promote communication of project goals and impacts to stakeholders and promote long-term sustainability of program funding. Lack of attention to reporting deadlines could result in early termination of project funding.

All funds awarded are to be spent by termination date. It is important to review account balances and every effort should be made to spend money and complete project within reasonable timeframe. In previous funding cycles, lack of attention to spending in relation to project timeline has been apparent and resulted in late and/or inability to expend project funds. This puts future of the entire program in jeopardy.

Requests for a single no-cost extension of remaining funding for up to 6 months must provide significant justification for delay in progress on funded Applied Research or Extension projects and explain how remaining funds will be used to address broad goals of the project. No-Cost-Extensions are not automatic and will be evaluated on a case-by-case basis by the Director of MSU AgBioResearch or a designate. Any funds remaining upon final project termination date will be returned to M-AAA. Seed Grants are not eligible for extension beyond initial termination date.



2023 Proposal Guidelines

Proposal Components:

*Note items 2-8 cannot exceed three pages in length.

- 1) Cover page (first page of whole proposal; proposal summary must be in lay terms appropriate for industry audience)
- 2) Problem statement and relevance to industry priorities
- 3) Objectives
- 4) Approach and feasibility
- 5) Anticipated results and impact
- 6) Industry partnering (include cost share) and scope
- 7) Timeline
- 8) Brief response to reviewer concerns and explanation of changes to proposal (revised proposals only)
- 9) Budget (use budget form on website)
- 10) Brief budget justification
- 11) Literature cited
- 12) Team qualifications (one-page vitae for each project member outlining qualifications to complete proposed research or extension activity)

Submission Guidelines

Proposals are to be submitted using the online portal for the M-AAA program. The online portal can be accessed on the M-AAA webpage at <https://www.canr.msu.edu/maaa/index>.

Additionally, a Proposal Development (PD) document must be routed through the MSU Research Administration/Kuali Research system.

For any questions or issues, please contact Courtney Peatross at 517-353-1326 or email winansco@msu.edu.