

## FY 2024 Request for Beef Research

The National Cattlemen's Beef Association (NCBA), a contractor to the Beef Checkoff, is soliciting research proposals in the technical research areas of human nutrition, pre-harvest beef safety, sustainability, and product quality:

**Existing Research Assessment: *Gap analysis, scoping reviews, narrative reviews, existing data analysis/modeling encouraged.* Project proposals are limited to \$10,000\*.**

### *Human Nutrition:*

- Review literature on health impacts of popular meat-centric diets (e.g., keto diet, carnivore diet, etc). Where possible, describe the details of the meat source and, in particular, beef used in the studies (e.g., cuts, amounts, frequency, cooking methods, etc).
- Assessment of the impact of inclusion of beef in school meals (e.g., plate waste, acceptability, etc)
- Assessment of the contribution of beef to at-home food waste.
- Summary of available evidence assessing the sustainability impact of consuming various meat containing (and, in particular, beef-containing) dietary patterns.
- Identification and characterization of sustainable diet indices/scores, including identification/characterization of how beef intake was assessed.
- Identification of ultra processed diet classification systems and a summarization of how beef cuts and beef products were categorized.

### *Pre-harvest Beef Safety:*

- Assess antibiotic or alternatives use and cattle microbiome impacts on potential pathogens of public health interest.
- Assess the relationship between cattle disease and circulating pathogens of public health interest within/on the animal, carcass or end product. Can also include potential vectors for disease transmission that may be under researched.
- Assess the literature on emerging pathogens of public health interest that have potential to be associated with beef (beyond *Salmonella* and 7 regulated STECs).
- Assess the impact of *Salmonella* infection in cattle at various life stages and long-term likelihood of *Salmonella* carriage at harvest and final product safety, including different breeds of cattle and beef-on-dairy cross animals.
- Assess the relationship between *Salmonella* and other organisms in cattle that can impact survivability of *Salmonella* within the animal, carcass or on/in final product, with a focus on serovars of public health interest.
- Assess pre-harvest methods of detection for *Salmonella* or other pathogens of public health interest via unique sampling methods beyond fecal or lymph node samples at harvest.

### *Sustainability:*

- Holistic understanding of the relationship between beef production and grassland systems.
- Barriers to producer adoption of advanced management and benchmarking tools in the cow-calf and stocker sectors for demonstration of farm/ranch-level progress in sustainability.
- Summary of literature assessing the terms “use” and “loss” as it relates to water and land.
- Assessment of grazing practices and their measurable environmental impacts (air, land, water, etc...)
- Assessment of urban encroachment impacts on sustainable working landscapes:
  - Estimation of acreage removed from beef production systems and subsequent socio-economic impacts from loss of biodiversity, rural community cohesion, and ecosystem services.

### *Product Quality:*

- Understand the fresh beef management factors and their implication on food waste.
- Assessment of alternative cut consistency and identification of areas for improvement and industry feasibility.
- Characterize the practices across the beef supply chain that are currently in place or are needed to ensure consistency (production, product management, end user).
- Assessment of the available information around dark cutters, identification of key knowledge gaps, and evaluation of impact to the industry.
- Articulate the interrelationship of beef plant processes operation and impact on product quality. Identification of system improvements/adaptations to increase product consistency.

\*Budgets above \$10,000 may be considered if justified.

### **Important Dates for Existing Research Assessment:**

- Proposal Submission Date: **October 13, 2023**
- Project timeline should be 12 months or less.

### **Submission Instructions:**

Proposals must meet the submission deadline and follow the guidelines in this RFP to be considered. Accepted projects will be funded (or funded in part) by the Beef Checkoff.

Research objectives should be clearly defined, and proposals should clearly state their relevance and potential benefit to the beef industry. In addition, collaboration with additional researchers or institutions is encouraged where appropriate.

PIs may submit more than one proposal. PIs can submit proposals as an institution representative or independent contractor. A CV featuring two pages of relevant work is required.

**Questions related to this RFP should be directed to the appropriate program staff listed below:**

- Human Nutrition: Shalene McNeill (smcneill@beef.org)
- Pre-harvest Beef Safety: Mandy Carr (mcarr@beef.org)
- Sustainability: TJ Carlisle (tcarlisle@beef.org)
- Product Quality: Jessica Lancaster (jlancaster@beef.org)

PROPOSALS MUST BE SUBMITTED BY **October 13<sup>th</sup>** at 11:59 pm EST via the BeefGrants system.

National Cattlemen's Beef Association, a contractor to the Beef Checkoff, has moved to an online portal, BeefGrants, for managing the grants process and to facilitate the submission and review of grant materials. All portal users will need to set up an account. Please visit [https://ncba.BeefGrants.com/s\\_Login.jsp](https://ncba.BeefGrants.com/s_Login.jsp) to register and apply for a grant.

**Proposal Outline**

The following fields will be required in BeefGrants. Word counts apply for some fields.

- Applicant Information (Applicant will be required to select if applying as an independent contractor [consulting services] or via their institution).
  - Organization information
  - CV
- Application Summary
  - Project title
  - Area proposal addresses
  - Consideration addressed in proposal
- Project Estimates
  - Estimated total cost of research
  - Proposed start and end date
- Project Details
  - Project background (*maximum of 500 words*)
  - Objectives & hypothesis
  - Proposed methodology
  - Proposed benefit to the beef industry
- Detailed Budget Table
- Other Sources of Support/Co-funding (optional)
- Supporting Documents (optional)

**Publication Costs**

Publication of all research is expected regardless of outcome, however financial support for manuscript publication is considered separate from research contracts. Once your project is

completed and final report is submitted, please reach out to NCBA staff to receive more information on the new publishing guidance.

### **Additional Detail**

PIs should review completed projects to avoid submitting an idea that already has been covered. Completed project summaries are available at [beefresearch.org](http://beefresearch.org).

### **Project Deliverables**

Project deliverables will include, at minimum, a final technical report with a full listing of research results and implications, and an abbreviated executive summary highlighting key points from the full technical report. Final technical reports must follow a standard outline and be thorough and interpretive in nature. Deliverables will also include a final statement outlining all project expenditures from the institution's business office. Funds cannot be spent beyond the project end date established in the project contract. Deliverables will be due on or before the project end date established in the contract.

### **Review Criteria**

Proposals will be reviewed by a panel of independent industry experts and applicants will be notified of funding decisions listed above. Proposals will be evaluated for: clearly defined hypothesis and objectives, experimental design/methods and convincing evidence that the proposed research will change the concepts, methods, or technologies that drive this field.

### **Disclaimer**

We are aware that academic institutions have financial obligations for administering the research grants awarded to their faculty members. However, overhead costs, principal investigator salaries, tuition and equipment purchases will not be considered as part of the funds made available for this research.

**Please share this RFP with interested colleagues.**

Visit [www.beefresearch.org](http://www.beefresearch.org) for additional information on the checkoff-funded Beef Research program.