



United States Association of Cider Makers
Cider Research Request for Proposals

December 26, 2016

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United States Association of Cider Makers
Cider Research Request for Proposals

The USACM seeks to support innovative research projects under three major subject areas:

- Apple and pear production for the cider industry
- Cellar activities
- Cider industry economics and marketing

Please see “**RESEARCH PRIORITIES**” section for further information on these subject areas.

SCOPE & PURPOSE: The United States Association of Cider Makers seeks to fund research projects that address gaps of knowledge limiting the growth and success of the U.S. cider industry. Funds are designed to support one year of research, but if a case is made for a multi-year project, the grant committee will consider such proposals. One-year projects are strongly encouraged.

USACM may distribute up to \$50,000 in total funding for the 2017 year. We reserve the right to fund one or several projects, depending on the applications received. The committee may ask applicants for further clarification if needed.

DATES: Completed proposals are due by midnight Pacific Standard Time on February 17, 2017. Grantees will be announced on March 17, 2017. Proposals must be submitted electronically (in .pdf format) to USACM at: research@ciderassociation.org. Subject lines of the email used to submit proposals must follow this format:

USACM 2017 RESEARCH PROPOSAL FOR LEAD_PI's_LAST_NAME

QUALIFICATIONS: Grantees must be affiliated with an institution or organization with considerable background supporting and conducting research. Examples include academic institutions and non-profit organizations. Partnerships with for profit organizations are permitted.

New or continuing projects are welcome. Previous applicants and awardees are welcome to apply.

PROPOSAL GUIDELINES

A full proposal is necessary for both new and continuing proposals. The proposal should be no more than five double-sided pages as outlined below, plus an attached cover sheet and budget. Please see appendix for proposal checklist and a sample coversheet. Proposals must be a single merged PDF. Font must be Times New Roman size 12, paragraphs must be double spaced, and 1” margins are required.

All proposals must contain a budget narrative on every line item in the budget. No exceptions will be allowed. Any proposals without a budget narrative will be denied review.

Applications should clearly explain the research category it intends to address.

PROPOSAL REVIEW AND PRESENTATIONS

The USACM Research Committee will review proposals and make funding recommendations. USACM will meet in February 2017 to discuss the recommendations and make final decisions on funding of projects. **Researchers may be asked to make a brief presentation to the Research Committee or answer follow up questions.**

The following criteria will be used to judge the merit of the proposals:

- Relevancy to USACM research priorities (25%)
- Scientific soundness; appropriateness of methodology to meet the objectives (25%)
- Potential impact on the cider industry (25%)
- Appropriateness of budget (15%)
- Expertise/Experience of researcher (s) to accomplish objectives (10%)

FUNDING CONDITIONS

Grantees agree to the following conditions. Anyone who does not abide by the conditions will be disqualified from applying for funding in the following year.

- Grantees will share the results of their research with our membership. It is highly preferred that grantees present in person at CiderCon 2018. If an in-person presentation is not possible, arrangements can be made to deliver a webinar to the membership.
- Grantees will provide a PDF summarizing their research results that may be made available to our membership. Posters or reports are both acceptable.
- Grantees will provide a progress report on August 1, 2017. Grantees will be provided a progress report template to do so.
- Grantees will submit a final report on March 1, 2018. Early submissions are allowed.
- No-cost extensions are allowed with justification. A no-cost extension prohibits grantees from applying for USACM funding in the 2018 cycle.
- USACM expects researchers and/or their collaborators to participate in USACM public events, webinars and radio programs that highlight research activities when requested.
- Multiple year projects are funded one year at a time and are subject to annual evaluations. Researchers must submit a new proposal each year. Continued funding is not guaranteed.
- Indirect costs are limited to 10% of the direct costs of the project.

The USACM is a member-funded organization. **As such, it is imperative the United States Association of Cider Makers be recognized as a funding source on all publications, presentations and outreach materials related to the funded project.**

RESEARCH PRIORITIES

USACM prioritizes applications that address issues specific to the U.S. cider industry. We encourage applications that address more than one of our research priorities.

The following information provides further details of USACM's research priorities. All categories will be equally weighted in the evaluation process.

Apple and Pear Production for the Cider Industry

Proposals in this category may be designed to do the following:

>Examine possible improvements to cider fruit production.

Under this priority, researchers are encouraged to investigate:

- Pest, weed, groundcover, and disease management specific to cider apple production and harvest to maximize fruit quality and economic returns
- Horticultural techniques for cider apples (e.g. plant growth regulators, thinning, pruning and training systems, fertility and water management)
- Planting systems for cider apples designed to achieve high apple and juice quality, and cost effectiveness

>Examine possible technological advances to improve efficiency and efficacy of cider fruit production.

Under this priority, researchers are encouraged to investigate:

- Techniques for reducing labor inputs and improving harvest efficiency in cider apple production
- Pest and horticultural management tools (e.g. apps, web-based tools, automated trapping systems) that would reduce inputs into cider apple production
- Exploration of other on-farm mechanization that would reduce input and labor costs for cider fruit

>Examine economics of cider fruit production. (Note: the following questions also address the economic and marketing research priority.)

Under this priority, researchers are encouraged to investigate:

- Cost of production of different cider fruit production systems (e.g. variety selection and planting systems)
- Economic analysis of differences between growing cider fruit for sale to other entities in the cider industry, for an orchard cider operation, for an orchard juice operation, or for other vertical integration

Cellar Activities

Proposals in this category may be designed to do the following:

>Increase knowledge of cider inputs.

Under this priority, researchers are encouraged to investigate:

- Specific apple variety characteristics, in juice and cider

- Sensory and chemical analysis of juice and cider
- Significance of fruit ripeness to cider quality
- Qualitative comparison between the use of fresh juice, and of concentrate in cider production
- Qualitative comparison between cider made from juice pressed at harvest, and juice pressed from storage apples
- The role of phenolics in cider
- Yeast/bacteria selection

>Increase knowledge of cider-making related processes.

Under this priority, researchers are encouraged to investigate:

- Fermentation issues related to temperature, yeast nutrition, spontaneous fermentation, and flavor and aroma development
- Common fermentation problems (sulfide production, stuck fermentations, microbial spoilage, contamination, etc.), and methods of prevention/correction
- Filtration/clarification/fining
- The relationship between yield and juice quality
- Analytical testing
- Novel and traditional approaches to cider-making processes

>Increase knowledge of how storage, stabilization, and packaging choices affect cider made under different conditions.

Under this priority, researchers are encouraged to investigate:

- How cider develops under different storage conditions
- How cider develops under different packaged conditions (e.g., oxygen ingress, color stability, sensory effects)
- Effects of different stabilization techniques

Economics and Marketing

Proposals in this category may be designed to do the following:

>Improve consumer knowledge and appreciation of cider.

Under this priority, researchers are encouraged to investigate:

- Approaches for improving communication with consumers
- Development of promotional and educational materials that help the US cider industry expand US cider consumption
- Using social media and other modern communication strategies to improve cider knowledge and consumption

>Improve understanding of consumer preferences and consumption of cider.

Under this priority, researchers are encouraged to investigate:

- Marketing research that identifies demographics and consumer motivation (e.g. packaging, price points, purchase power) to expand the breadth of cider consumers
- Economics of cider industry-run retail, bars and restaurants, tasting rooms, etc., to enable cider makers to better market and sell cider

>Improve understanding of the economics of cider production.

Under this priority, researchers are encouraged to investigate:

- Economic or social effects of a growing cider industry on local, regional, and statewide communities
- Development of relevant market data that may not have been generated by analyses of the large-scale cider market
- Evaluation of key business decisions, such as opening and/or sustaining a cider production facility (e.g. research-vetted enterprise budgets), sourcing vs. growing fruit, self-distribution vs. contract distribution, and owning vs. leasing production space and equipment

APPENDIX A

Cover Sheet Example

Project Title

Include if this is a one-year or multi-year project

Principal Investigator – Include contact information
Co PI's, Collaborators – Include contact information

Amount Requested \$ _____

Funding cycle – April 1, 2017 – March 31, 2018

APPENDIX B

Proposal Format

A full proposal is necessary for both new and continuing proposals. The proposal should be no more than five double-sided pages as outlined below, plus an attached cover sheet and budget (not included in five-page limit). Please see appendix for proposal checklist and a sample coversheet. Proposals must be a single merged PDF. Font must be Times New Roman size 12, paragraphs must be double spaced, and 1” margins are required.

All proposals must contain a budget narrative on every line item in the budget. No exceptions will be allowed. Any proposals without a budget narrative will be denied review.

Applications should clearly explain which research category their proposals addresses.

1. **Cover sheet**
2. **Table of Contents**
3. **Problem statement:** What is the problem/opportunity? How does your research address the above listed research priorities?
4. **Hypotheses or Research Questions**
5. **Overview of methods and procedures:** How will hypotheses be tested? Describe data collection and analysis procedures.
6. **Potential impact on the US cider industry:** What outcomes and benefits are expected? How will your project improve and help grow the industry/market? Describe metrics that will be used to assess the impact of your project.
7. **Outreach plan:** How will results be communicated to stakeholders?
8. **Deliverables:** What will the USACM receive at the conclusion of the project?
9. **Budget:** Completed Project Budget should be attached to your proposal, including notation of other funding sources from which you have received or applied for funds.

APPENDIX C

Budget Template – Detailed line items must be included. Please include a paragraph bio of each project personnel describing their work history and qualifications. Additionally, **only applications with a budget narrative** (describing the budget for reviewers in paragraph form) will be reviewed. Although a match is not required, we ask that any additional funding for this project be detailed in your budget narrative.

Personnel	\$00.00
Salary 1 description	\$00.00
Salary 2 description	\$00.00
Equipment	\$00.00
Equipment 1 description...and so on.	\$00.00
	\$00.00
Materials & Supplies	\$00.00
	\$00.00
	\$00.00
	\$00.00
Travel	\$00.00
	\$00.00
Misc. Direct Costs	\$00.00
	\$00.00
	\$00.00
Total Direct	\$00.00
Indirect (only up to 10% of Direct costs)	\$00.00
TOTAL	\$00.00