

2021-22 Request for Applications HICAHS Pilot/Feasibility Research Projects Deadline: October 1, 2021



High Plains Intermountain Center
for Agricultural Health and Safety

Overview

In accordance with its mission, the [High Plains Intermountain Center for Agricultural Health and Safety \(HICAHS\)](#) offers funding to support projects in agricultural and forestry health and safety research. As one of several [Centers for Agricultural Safety and Health](#) funded by the [National Institute for Occupational Safety and Health \(NIOSH\)](#), HICAHS has established a program to support pilot/feasibility projects. The goals of the HICAHS Pilot/Feasibility Project program are: (1) Develop new and creative research (basic, applied, translational) related to human health and safety in agriculture and forestry within the HICAHS Region (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming); (2) Build research capacity related to human health and safety in agriculture and forestry; (3) Foster new, collaborative partnerships among the HICAHS researchers, private industry, and regional and federal government agencies with stakeholder interests in human health and safety in agriculture and forestry.

Projects in this cycle will be funded at a level up to \$25,000 for a ~9-month project duration (including 8% indirect costs), with an estimated project start date of **November 15, 2021**. The requirements and criteria for pilot/feasibility projects are described below.

Pilot/Feasibility Research Projects

Pilot research funding enables investigators to establish preliminary success and experience in agricultural and forestry health research, meanwhile increasing the likelihood of future funding. We encourage applications from student investigators or any investigator who is new to the field of *agricultural and forestry occupational health and safety research*. Specific eligibility requirements are listed below. Examples of past funded pilot/feasibility projects include (but are not limited to):

- Effects of herbicides on human reproductive health
- Musculoskeletal disorders in dairy parlor workers
- Exposures to fine particulate matter during animal feeding operations
- Evaluating the prevalence of drug-resistant bacteria in dairies
- Effects of human exposure to Gram-positive and Gram-negative bacteria in agricultural dusts on inflammatory and immune responses
- Interventions and education to promote machine safety during grain handling
- Effects of mountain bark beetle infestations on the safety of forestry workers

However, any areas of research related to occupational health and safety in agriculture or forestry will be considered.

This application may also be found at <https://vetmedbiosci.colostate.edu/hicahs/pilot-grants/>.

Applicant Eligibility

Eligible pilot research project investigators are:

- Junior investigators
- Graduate research trainees, occupational medicine residents, or postdoctoral fellows
- Faculty members of any rank who are new to the field
- Staff from health departments/state agencies and public health institutions
- Previous engagement/history with HICAHS is not required

Investigators from minority and underrepresented populations are strongly encouraged to apply.

Application Instructions

Disqualifiers

In addition to assessing the strengths and weaknesses of applications according to the criteria listed below, the Review Committee reserves the right to **withdraw** an application from consideration if:

- The application is incomplete
- The application is submitted after the deadline
- The applicant does not follow the application instructions outlined below
- The project aims and objectives do not relate to the mission and goals of the HICAHS
- The application refers to participating organizations or collaborators that have not submitted letters of support for the application

Important Application Dates

The application deadline is **October 1, 2021**. Awardees will be notified by October 31st. Projects can begin as soon as all paperwork is submitted and approved (anticipated November 15, 2021). All project monies must be spent by August 14, 2022.

No funds will be disbursed without proof of Human Subjects (or Animal Care) Institutional Review Board approval (if applicable). (These approvals do not need to be obtained before the application due date; however, if the project is awarded, approvals will be required prior to the release of funds.)

Application Instructions

Applicants from Colorado State University (including Extension Services and Satellite locations) requires full OSP review for all proposals from CSU Principal Investigators prior to submitting an application and must be entered into the Kual Research Proposal Development system.

Applicants from affiliate organizations are strongly encouraged to work with their sponsored programs office at their institution to meet all pre-application requirements specific to their organization.

Please use PHS398 forms, which can be found at:

<https://grants.nih.gov/grants/funding/phs398/phs398.html>.

- (1) Face Page (PHS398 Form Page 1)
- (2) Abstract (PHS398 Form Page 2)
- (3) Detailed Budget and Budget Justification (PHS398 Form Page 4)

- (4) A short biographical sketch (NIH format) for each person involved in the research (2 pages maximum for each biosketch)
- (5) Checklist. *Optional*. (The worksheet on the checklist page is useful for calculating F&A but is not required.)
- (6) Specific Aims and Objectives Page (**1-page limit**)
- (7) Research Plan (**6-page** limit for items a through (f) below)
 - (a) *Significance* of the research
 - (b) *Innovation* and novelty
 - (c) *Approach*, including, but not limited to:
 - (i) Population, process, or phenomenon to be studied
 - (ii) Methods of data collection
 - (iii) Methods of data analysis
 - (iv) Evaluation methods and plan (as applicable to education, outreach, interventions)
 - (v) Quality assurance measures
 - (d) Expected implications of research findings or feasibility project
 - (e) Future directions (i.e., long-term goals, plan for additional funding, etc.)
 - (f) Timeline for proposed research
- (8) References (not included in the page limit)
- (9) Letter of Support from a mentor or faculty sponsor is required for all students. This letter should indicate the student investigator's ability to complete the proposed study in the timeline given the student investigator's potential as a researcher and the potential for future funding. Letters can be emailed directly to Morgan Valley at hicaahs@colostate.edu separate from the application packet. Letters sent separately must still be received by the application deadline, October 1, 2021.
- (10) Letters of Support from a statistician, if applicable. All applications requiring extensive data analysis should either include a statistician co-investigator on their research team or the applicant should provide a letter of support from someone qualified to conduct or give guidance on the proposed analysis.
- (11) Letters of support from collaborators, if applicable. Any co-investigators and collaborators must provide a letter of support that should indicate their agreement to collaborate and their role(s) in the project.
- (12) Appendix. *Optional*. Appendices may contain published or approved materials related to the proposed research (e.g., survey materials, publications not in the public domain, questionnaires, etc.). However, appendices may not be used to circumvent the 6-page limit for the research plan (applications doing so will be rejected). Questions on permissible appendix materials should be sent to the program contact below.
- (13) If necessary, human/animal subject research approvals. Approvals are not required at the time of submission but will be required prior to the release of funds. Research that involves people *may* be subject to the federal regulations that pertain to human subjects research (see: <https://www.hhs.gov/ohrp/humansubjects>). If you will be including people in your research (e.g., surveys, interviews, specimen collection, etc.), please contact your institution's Institutional Review Board (IRB). The IRB staff will work with you to determine (1) if your study meets the regulatory definition of "research," (2) if this research is considered to be with "human subjects," and (3) how to submit your research plan to the IRB. Additionally, each institution that engages in federally sponsored research must provide the government with a written assurance (i.e., Federal Wide Assurance - FWA) attesting that the institution will adhere to the applicable federal regulations. As part of this FWA,

all researchers at the institution who are conducting human subjects research must complete human subjects protection training. Guidance on research involving human subjects and access to the required online human subjects protection training can be found here: <https://humansubjects.nih.gov> (human subjects training from CITI is also acceptable). Note that projects involving human subjects are required to obtain IRB approval before funding is released by HICAHS. Alternatively, a copy of animal care committee approval is required if animal research is being proposed.

Successful applications are those that address each of the Evaluation Criteria listed below. Examples of previously funded applications are available upon request. Applications must conform to page limits referenced in the Application Instructions. **Please use 11- or 12-point font. Page margins must be no less than 0.5" on any side.**

Submission Process

Submit your application electronically in a single PDF file to Morgan Valley: hicahs@colostate.edu on or before **October 1, 2021**.

Review Committee

Complete applications will be evaluated by a review panel. Meritorious applications will be assigned a priority score based on the applicable criteria (see evaluation criteria below).

Awards

- 1) Pilot project funds are awarded on a competitive basis.
- 2) All awards are contingent upon receipt of funding to the HICAHS from the National Institute for Occupational Safety and Health.
- 3) The budget period is less than one year.
- 4) The maximum award is \$25,000 for ~9 months including indirect costs (limited to 8%).
- 5) Applicants cannot receive more than a cumulative total of 2 pilot research awards as a Principal Investigator.
- 5) Carryover is not allowed.
- 6) **Allowable expenses** include all relevant project expenses including:
 - Salary for key personnel, graduate students, and other support staff is allowed. Salary payment to faculty mentors is limited to 5% of a 12-month equivalent salary plus fringe benefits.
 - In-state tuition for graduate and undergraduate personnel.
 - Supplies and small specialized equipment (defined as < \$5K).
 - Domestic travel necessary to conduct the research.
 - Indirect costs up to 8%.
 - Equipment purchased (< \$5K) for the project becomes the property of the university sponsoring the principal investigator.
- 7) **Disallowed expenses**
 - Indirect cost >8%, faculty mentor salary >5% of a 12-month equivalent salary plus fringe benefits.
 - Technical conference travel.
 - Routine clerical assistance.
 - Capital equipment > \$5K

Final Written Report

- 1) Although a formal interim report will not be required, HICAHS staff may contact awardees to obtain updates on research progress, including products and narratives resulting from the award.
- 2) A final written report must be submitted within 6 months after the end of the budget period, with results preferably presented in manuscript form or in the form of a brief white paper with executive summary. This report should also document all presentations, publications, students/trainees supported, and extramural funds that have resulted, in part, directly or indirectly from this award.
- 3) Awardees will be asked to present research findings as part of future HICAHS research symposia.

Acknowledgment Requirements: All presentations, posters, and publications resulting from HICAHS funding must acknowledge HICAHS and the NIOSH grant and use the HICAHS logo when appropriate (please contact HICAHS for logo files). Please state: "This [presentation/work/research/product] is supported by the High Plains Intermountain Center for Agricultural Health and Safety CDC/NIOSH Grant No. U54OH008085. Its content is solely the responsibility of the authors and does not necessarily represent the official views of CDC/NIOSH."

Evaluation Criteria

Review committee members will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following review criteria:

1. *Significance:*
 - Does the research address an important problem in the HICAHS region in agricultural or forestry health and safety? See [NIOSH's National Occupational Research Agenda for Agriculture, Forestry, and Fishing](#) for details and guidance.
 - Does the research address an important problem or critical barrier to progress in the field of agricultural or forestry health and safety research?
 - Does the research address an important problem in the HICAHS region in occupational and environmental safety and health? ([See the HICAHS "About Us" webpage](#))
 - If the aims are achieved, how will scientific knowledge, technical capability and/or clinical practice be advanced?
 - How will successful completion of the aims change the concepts, methods, technologies, treatments, services or preventive interventions that drive this field?
2. *Innovation:*
 - Does the application challenge and/or seek to shift current research or clinical practice paradigms?
 - Are the concepts, approaches, methods, instrumentation and/or interventions novel to agricultural or forestry health and safety or novel in a broad sense?
 - Does the application refine or improve existing theoretical concepts, approaches, methods, instrumentation or interventions?
3. *Approach:*
 - Are the overall strategy, conceptual framework, design (including composition of study population), methods, and analyses adequately developed, well-integrated, well-reasoned and appropriate to the aims of the project?
 - Does the applicant acknowledge potential problem areas and consider alternative tactics?

4. *Collaboration and Partnerships:*

- Does the study involve multiple stakeholders (employees, employers, and academia)?
- Is there interdisciplinary interaction or potential?
- Does the proposal include graduate students or others who will benefit from training in research methods in agricultural and forestry health safety?

5. *Investigator(s):*

- Are the PIs, collaborators, and other researchers well-suited to the project?
- If early-stage or new investigators, do they have appropriate experience and training? Do they have suitable mentors?
- If established investigators, are they new to the field of agricultural or forestry health and safety research?
- If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; is the leadership approach, governance, and organizational structure appropriate for the project?

6. *Environment:*

- Does the environment in which the work will be performed contribute to the probability of success?
- Are the institutional support, equipment, and other physical resources available to the investigators adequate for the project proposed?
- Can the project be accomplished in the timeline presented?
- Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?
- Does the proposed project increase the institution's ability to conduct agricultural or forestry health and safety research and contribute to regional needs?

7. *Additional Criteria:*

- Does the research project have the potential of obtaining pilot data that may increase the probability of developing fundable larger grants or contracts in the future?
- Will the research benefit underserved populations or members of minority groups?
- Is the budget appropriate to complete the scope of the work proposed?
- Does the proposal contain adequate protections for human subjects or vertebrate animals (if necessary)?
- Does the proposal contain adequate biohazard, radioactive hazard, or physical and chemical hazard protections for the researchers?