Overview: The National Institute for Occupational Safety and Health (NIOSH) Mountain and Plains Education and Research Center (MAP ERC) has grant funding to support short-term pilot research projects in occupational and environmental health and safety. The mission of the MAP ERC is to improve occupational and environmental health and safety through education, research, and community partnerships. It is anticipated that 3 to 5 research projects will be funded in this cycle at a level of $10,000 per year (including indirect costs) for 1 or 2 years.

Areas of occupational and environmental health and safety include occupational medicine, occupational health nursing, industrial hygiene, occupational and environmental safety, ergonomics, toxicology, occupational and environmental epidemiology, health physics, and occupational health psychology.

Projects may include research addressing occupational health and safety needs in the MAP ERC region (Arizona, Colorado, Montana, New Mexico, North Dakota, South Dakota and Wyoming). Projects may be:

- Innovative research in prevention, intervention, education, and outreach in occupational and environmental health and safety.
- Research to Practice (r2p) proposals. Information on r2p can be found at [http://www.cdc.gov/niosh/r2p/](http://www.cdc.gov/niosh/r2p/).
- Exploratory, interventional or investigational projects.
- Collaborative and interdisciplinary projects.

By way of example, previous awardees have studied:

- Development of a GIS accident risk map for truck drivers
- Musculoskeletal disorders in Dairy Parlor Workers
- Childhood asthma and risk factors in a Latino population
- Indoor air quality
- Methods for measuring lung deposition of aerosols
- Metabolomic approach to assessing asbestos related cancer risk
Priority will be given to projects that address industry and occupational regional needs and underserved populations. Studies proposed at foreign sites will not be accepted.

**Eligibility:** Eligible pilot research project investigators are:
- Junior investigators with research interests in occupational health and safety
- Graduate research trainees, occupational medicine residents, or postdoctoral fellows in an occupational and environmental health and safety related discipline.
- Faculty new to the field of occupational and environmental health and safety.
- Staff from health departments/state agencies and non-academic public health institutions in the field of occupational and environmental health.

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

**University Partnerships:** University Partnerships with core ERC faculty from the University of Colorado Denver, National Jewish Health, Denver Health and Hospital Authority, Colorado State University, and the University of New Mexico Health Sciences Center are available to provide guidance to eligible student investigators. These partnerships are mandatory for those student investigators who do not have a mentor or faculty sponsor at their institution.

**Important Application Dates:** The application deadline is May 1, 2010. Letters confirming the funding status of your project will be sent by July 1, 2010 and awards will be disbursed as quickly as possible. The dates of funding will be July 1, 2010 through June 30, 2011. If you requested a two year project, the second year of funding will be awarded following receipt of a satisfactory one-year progress report. No funds will be disbursed without proof of IRB approval (if applicable).

**Application Instructions**

Please use PHS398 forms (Revised 6/2009), which can be found at [http://grants.nih.gov/grants/funding/phs398/phs398.html](http://grants.nih.gov/grants/funding/phs398/phs398.html)

1. Face Page (PHS398 Form Page 1) (Note: if you are currently at Univ. of Colorado, this application does not require internal routing for Pre-Award signature)
2. Abstract (PHS398 Form Page 2)
3. Detailed Budget and Budget Justification including travel to Denver to present the results at an annual research day (PHS398 Form Pages 4 and 5)
4. A short biographical sketch or resume for each person involved in the research (2 page maximum for each person)
5. A proposal, outlining the proposed research project, (5 page maximum, single-spaced, 12 point font, 1-inch margins) including:
   a. Project overview, introduction
   b. Specific Aims and Objectives
      i. Hypothesis (if appropriate) or research question
   c. Background and Significance
   d. Research Design and Methods
i. Population to be studied
ii. Research methods
iii. Data collection methods and plan
iv. Data analysis methods and plan
v. Expected results and implications of research findings

e. Future Directions
f. Timetable

6. References

7. IRB approval or copy of submitted application and NIH Certification. Projects involving human subjects are required to obtain IRB approval. Alternatively, a copy of animal care committee approval is required if animal research is being proposed.

8. 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. Any co-investigators/collaborators must provide a letter(s) of support which should indicate their agreement to collaborate and what will be their role(s) in the project.

9. Other Letters of Support: 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.

Submission Process: Submit your application electronically (Word or PDF) to: Angela.Wagstaff@ucdenver.edu AND Kaylan.Stinson@ucdenver.edu by May 1, 2010.

Awards:
1. Pilot project funds are rewarded on a competitive basis.
2. The budget period covers a one or two-year period (7/1/10-6/30/11 or 7/1/10-6/30/12).
3. The maximum award is $10,000 per year including indirect costs.
4. Grantees cannot receive more than a cumulative total of 2 pilot research grants as a Project Investigator.
5. Carryover is not allowed unless you are receiving a second year of support. Allowable expenses include all relevant project expenses including:
   - Support personnel including salary (limited to 5% of a 12 month equivalent salary plus fringe benefits) and tuition support for graduate students.
   - Supplies and small specialized equipment.
   - Domestic travel necessary to conduct the research and to scientific meetings to present results.
   - Indirect costs up to 8%.
6. Awards will be announced in late May 2010.

Review Committee: Complete applications will be evaluated by a review panel. The review panel consists of 4-6 members representing institutions collaborating with the MAP ERC:
University of Colorado Denver, Denver Health and Hospital Authority, Colorado State University, National Jewish Health, and University of New Mexico Health Sciences Center. At least two members of the review panel will review each proposal. Meritorious applications will be assigned a priority score based on the following evaluation criteria.

**Evaluation Criteria:** A review committee will evaluate all proposals on their scientific merit as described below:

1. **Significance:**
   - Does the research address an important problem in the MAP ERC region in occupational and environmental safety and health?
   - If the study aims are achieved, how will scientific knowledge be advanced?
   - Does the study involve novel concepts, approaches and methods?

2. **Approach:**
   - 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 occupational and environmental health and safety?
   - Are the conceptual framework, design (including composition of study population), methods, and analyses adequately developed, well integrated, and appropriate to the aims of the project?
   - Does the applicant acknowledge potential problem areas and consider alternative tactics?

3. **Future funding potential:**
   - Does the project have the potential of obtaining pilot data that may increase the probability of developing fundable larger grants or contracts in the future?

4. **Resources and Environment:**
   - Can the project be accomplished in the timeline presented?
   - Does the environment in which the work will be performed contribute to the probability of success?
   - Are the expertise and guidance available suitable for the proposed study?
   - Does the proposed project increase the institutions ability to conduct occupational health and safety research and contribute to regional needs?

5. **Diversity:**
   - Will the research benefit under-served populations or members of minority groups?

6. **Budget:**
   - Is the budget appropriate to complete the scope of the work proposed?

**Final Written Report and Progress Report:**

1. A brief written interim report is due 6 months prior to the end of the proposed budget period. This report should indicate the progress of the study including preliminary results and any problems encountered.
2. A final written report needs to be submitted 3 months after the end of the proposed budget period, with results preferably presented in manuscript form.
a. This report should also document all presentations, publications and extramural funds that have resulted, in part, directly or indirectly from this award.  

3. The investigator must acknowledge support from the NIOSH MAP ERC Pilot Research Training Program in all their related publications, which resulted from the pilot grant award.  

**Annual Research Day:** Investigators will be required to participate and present their research at an Annual Research Day, details to be determined. This year’s Research Day will be in the fall of 2010.  

For more information contact:  
Angela Wagstaff  
303-724-4409  
Angela.Wagstaff@ucdenver.edu  

OR  

Kaylan Stinson  
303-724-4607  
Kaylan.Stinson@ucdenver.edu