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THE CENTER FOR CONSTRUCTION  
RESEARCH AND TRAINING

## Small Study Program Guidelines

*Instructions for Applying & Reporting Requirements for  
Funded Studies*

**Currently Accepting Applications**

**September 2024\***

8484 Georgia Avenue  
Suite 1000  
Silver Spring, MD 20910

PHONE: 301.578.8500

FAX: 301.578.8572



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**For more information contact:**

Patricia Quinn, CPWR, Small Study Program Coordinator

Phone: 301-578-8500, [pquinn@cpwr.com](mailto:pquinn@cpwr.com)

Visit the [CPWR Small Study webpage](#).

**\* This version of the Small Study Program Guidelines replaces all previous versions.**

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## **Background**

### **The Need for Research**

U.S. construction workers face one of the country’s highest risks for injury, illness, or fatality due to workplace hazards. The complex nature of the construction industry—particularly the predominance of small, often isolated, and under-resourced employers—creates challenges for reaching and influencing employers’ and their employees. Dangers to the lives and health of workers are immediate, and health effects can be cumulative, disabling, and even fatal. The types of hazards facing construction workers include, for example, falls, electrocution, being struck by or caught in between equipment, and exposure to chemicals, fumes, and dust. These occupational injuries, illnesses, and fatalities create a significant human and financial burden for workers, their families, industry, and society. Workers employed by construction employers with fewer than 20 employees are at a disproportionate risk compared to those working for larger employers.

To reduce the risks, there is a critical need to accelerate research on emerging and persistent hazards and implementation of evidence-based work practices and interventions shown to improve occupational safety and health outcomes. In addition, since contractors who do not understand relevant hazards or choose to ignore them put workers’ lives at risk, there is an ongoing need to increase dissemination and adoption of research results to groups that can affect positive change ([research to practice or r2p](#)) and to understand [“safety culture”](#) and [“safety climate”](#) on construction sites.

For information on the leading causes and current rates of injuries, illnesses, and fatalities—and other data on construction health and safety and the industry as a whole—see CPWR’s [Construction Chart Book](#), [Data Reports](#), [Data Dashboards](#), and other research developed by CPWR’s [Data Center](#).

### **About CPWR**

[CPWR – The Center for Construction Research and Training](#) is a 501(c)(3) nonprofit organization created by North America’s Building Trades Unions (NABTU). Its mission is to:

- Encourage the elimination or reduction of conditions constituting hazards to the safety or health of U.S. construction workers, and to promote the maintenance and improvement of safe and healthy working conditions for workers in the U.S. construction industry;
- Publicize the results of research findings, and to make them widely available to construction industry owners/users, employers, associations, unions, workers, academia, government, and others with an interest in construction industry safety and health;
- Provide training resources and technical services to apply research findings at the work site and to direct research to define and address issues of importance to workers; and
- Conduct research assessing the quality of working conditions; the social, economic, and psychological factors influencing work organization; the impacts on workers and working conditions of new technologies and industry change; and analyses of corporate and government policies and consensus standards that affect the worksite.

CPWR has partnered with the National Institute for Occupational Safety and Health (NIOSH) since it first established its construction research initiative in 1990 and currently serves as the NIOSH sponsored/funded [National Construction Center](#). In this role, CPWR has created a direct link to the diverse construction community and built a multidisciplinary, productive team of internal and external researchers focused on advancing [NIOSH Strategic Goals](#). CPWR conducts research to identify causes of and solutions for safety and health risks and explores emerging hazards in order to prevent injuries, illnesses, and deaths in the construction industry. Through partnerships with industry stakeholders and its extensive network of safety and health trainers, CPWR bridges the gap between research and what happens on construction sites. Today, CPWR is recognized worldwide as a preeminent institution in this field.

CPWR competes every five years for a Center for Disease Control and Prevention/NIOSH cooperative agreement to serve as the National Construction Center. The NIOSH cooperative agreement funds the work of CPWR's in-house researchers and a consortium of university-based researchers, as well as the Small Study Program.

## **Small Study Program Background & Requirements**

### **About the Small Study Program**

In 1993, CPWR established the Small Study Program to conduct and pilot hypothesis-generating research and attract new investigators into the field of construction safety and health research. Since then, this innovative program has provided successful applicants with seed money of up to \$30,000 and the flexibility to initiate short-term studies (up to 12 months) to:

- Investigate and assess the potential risks from emerging hazards and changes taking place in the construction industry.
- Explore new approaches for addressing persistent hazards.
- Create and test promising methods and interventions to improve construction worker health and safety.

Over the years, [funded small studies](#) have encompassed diverse scientific aims, investigators, and applicant organizations.

The Program operates on a rolling admission—a study can be proposed at any time, pending the availability of funds. For a study to be considered, the topics must be related to CPWR's mission and address at least one of the research goals, priorities, and areas of emphasis listed in this guidance. Applicants must follow the instructions in this document.

### **Who Should Apply?**

CPWR encourages investigators with an interest in improving construction worker health and safety from a wide range of disciplines (applied computer sciences, communication sciences, construction management, consumer marketing, economics, engineering, psychology, and work organization) to apply. Innovative proposals from occupational safety and health researchers, ergonomists, epidemiologists, researchers partnering with industry practitioners, and others are welcome.

## **Scope**

The scope of the research should include one or more of the following: basic or applied science; development or exploratory methodologies; prevention effectiveness or intervention; research to practice (r2p); technology transfer; or feasibility and policy research. Specific objectives of proposed research might test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop a new technology. Research may aim to investigate causes of fatal and nonfatal construction injuries and illnesses or to seek solutions to reduce or eliminate the associated hazards.

## **Research Goals and Areas of Emphasis**

Studies must address at least one of the [NIOSH Strategic Goals](#), [National Occupational Research Agenda for Construction](#) objectives, or the [2018 NIOSH Construction Program Expert Panel Review](#) recommendations.

CPWR's Small Study Program is committed to advancing construction safety and health by supporting promising research and practical initiatives. We prioritize funding for initiatives that:

- **Reach high-risk groups**, including small employers (those with 19 or fewer employees), vulnerable workers, and those in residential and light commercial construction.
- **Apply actionable interventions** that can be immediately applied on the job.
- **Engage stakeholders** through partnerships to identify and overcome barriers to adopting good practices.
- **Tackle old or emerging issues** and leverage new technologies to enhance worker safety, health, and well-being.
- **Translate research into practice** and ensure widespread dissemination.
- **Promote proven safety practices** to small employers for immediate impact.

Applicants are encouraged to review CPWR's [current research program](#) and [previously funded Small Study projects](#) before making a decision on a study topic.

## **Proposals Not Eligible for Small Study Program Funding**

CPWR will not consider proposals that could lead to opportunities for employers to discriminate against workers. International organizations are not eligible to apply.

## **How to Apply for Funding**

A study may be proposed at any time. Instructions for submitting a proposal are in this section. Submissions that do not comply with requirements will not be reviewed.

## **Letter of Intent (LOI) Instructions**

|                             |   |
|-----------------------------|---|
| <b>Deadline</b>             | <p>A study may be proposed at any time by submitting an LOI.</p> <p><i>Note:</i> A researcher serving as Principal Investigator (PI) of a proposed study is limited to two LOI submissions per CPWR funding cycle.</p>  |
| <b>Length of LOI</b>        | No more than four (4) pages.  |
| <b>Required LOI Content</b> | In this order:  |
|                             | Applicant Organization’s Legal Name, Employer Identification Number, and DUNS Number.   |
|                             | PI’s legal name, credentials, and contact information (phone and email).  |
|                             | Study title.  |
|                             | Statement of the health or safety problem the proposed study will address.  |
|                             | Studies must address at least one of the <a href="#">NIOSH Strategic Goals</a> , <a href="#">National Occupational Research Agenda for Construction</a> objectives, or the <a href="#">2018 NIOSH Construction Program Expert Panel Review</a> recommendations.   |
|                             | <p>Summary of the proposed study—including aims and objectives, methods, research/design, human subject plans, and selected references showing how this study contributes to knowledge in the field.</p> <p>A proposed timeline (by month or quarter).<br/>An estimated budget.</p> <p>The following are suggested questions to consider when preparing the LOI:</p> <ul style="list-style-type: none"> <li>✓ What are the expected outcomes/products?</li> <li>✓ How will the outcomes be measured?</li> <li>✓ What does the investigator expect to find? What might be next?</li> <li>✓ What partnerships and plans will help obtain access to workers/worksites?</li> <li>✓ What is the dissemination plan?</li> </ul> |
| <b>Submission</b>           | Submit LOI to Patricia Quinn, CPWR, <a href="mailto:pquinn@cpwr.com">pquinn@cpwr.com</a>  |

## **Letter of Intent Review Process**

The LOI will be reviewed by an internal CPWR review panel appointed by CPWR’s Executive Director. Each reviewer will use a form and uniform scoring system to review the LOI. CPWR’s Executive Director will use the reviewers’ scores/comments to determine whether to proceed with a request for a proposal. There is no opportunity to revise and resubmit a LOI. CPWR will notify the PI of its decision within 45 business days of its submission.

## **Full Proposal - PHS 398 Application Instructions**

If a full proposal is requested, applicants must follow the instructions in this section. Applications not following these instructions will not be reviewed.

|  |  |
|--|--|
| <b>Deadlines</b>   | <p>A PHS 398 application is due no later than <b>45 business days</b> from the date of the request.</p> <p>After CPWR has reviewed the application, a one-time revision may be requested. The applicant has <b>30 business days</b> to address any questions/comments and to resubmit the proposal.</p>  |
| <b>Required Application Format</b>   | <p>The current version of the <b>U.S. Public Health Service (PHS) 398 grant application.</b><br/> <a href="https://grants.nih.gov/grants/funding/phs398/phs398.html">https://grants.nih.gov/grants/funding/phs398/phs398.html</a>.</p> <ul style="list-style-type: none"> <li>• Instructions for Grant Applications using PHS 398 can be found at<br/> <a href="https://grants.nih.gov/grants/funding/phs398/phs398.pdf">https://grants.nih.gov/grants/funding/phs398/phs398.pdf</a>.</li> <li>• Do not include blank pages.</li> <li>• Proposal must be page numbered consecutively.</li> </ul> |
| <b>Small Study PHS 398 Specific Requirements:</b>  | <p>Read and follow these instructions. Applications that do not follow these instructions will not be reviewed. See the section below titled <i>Forms/TOC sections forms not required</i> for additional guidance.</p>   |
| <input type="checkbox"/> <b>Face Page</b>  | <p>All sections require a response unless otherwise noted.</p> <ul style="list-style-type: none"> <li>• For Box 2. <i>Response to Specific Request for Applications or Program Announcement</i>, select “Yes,” title “CPWR Small Study Program.”</li> </ul>  |
| <input type="checkbox"/> <b>Summary, Relevance, Project/Performance Site, Senior/Key Personnel, Other Significant Contributors</b> | <p>Studies must address at least one of the <a href="#">NIOSH Strategic Goals</a>, <a href="#">National Occupational Research Agenda for Construction</a> objectives, or the <a href="#">2018 NIOSH Construction Program Expert Panel Review</a> recommendations.</p> <p>Research output must be identified in the Abstract and Research Strategy sections.</p>  |
| <input type="checkbox"/> <b>Research Grant Table of Contents</b>   | <p>All pages, forms, and sections are required, unless otherwise noted. See the section below titled <i>Forms/TOC sections not required</i> for additional guidance.</p>   |



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| <input type="checkbox"/> <b>Research Plan</b>               | <p>Consists of items 1-12 (use Table of Contents as reference). It must be self-contained and include sufficient information to evaluate the project, independent of any other document. Two identical CDs are not required.</p>   |
| <input type="checkbox"/> <b>Page Limits</b>                 | <p>Specific Aims, 1 page<br/> Research Strategy, 12 pages<br/> Bio sketch (per person), 4 pages<br/> Appendix/Attachments, No page limit</p>   |
| <input type="checkbox"/> <b>Budget Requirements</b>         | <p>Funding is capped at \$30,000, including any indirect costs. A detailed and justified budget on PHS 398 form pages is required. If an award is made, no changes to the submitted budget can be made without prior written approval from CPWR.</p> <ul style="list-style-type: none"> <li>• <b>Facilities and Administration.</b> Indirect costs are limited to 25% of the personnel (salary and fringe benefit) costs only.</li> <li>• <b>Travel.</b> Travel costs must be detailed, justified, and included in the budget. No travel expenses in excess of what the federal government would reimburse its own employees will be reimbursable. International travel is not an allowable expense.</li> <li>• <b>Equipment.</b> No equipment with a per unit price of more than \$1,000 is allowable.</li> </ul>   |
| <input type="checkbox"/> <b>Human Subjects Requirements</b> | <p>If the study involves human subjects or uses data that includes personal identifiable information—whether in a laboratory or worksite setting—the PI is required to obtain approval from an Institutional Review Board (IRB) recognized by the Office of Human Research Protections, U.S. Department of Health and Human Services.</p> <ul style="list-style-type: none"> <li>• While some studies may be exempt, that exemption is to be determined by the IRB, and the IRB letter must be included in the submission.</li> <li>• CPWR’s IRB chair will conduct a secondary review of the human subjects plan as well.</li> </ul> <p>The researcher must address the handling of human subjects in the narrative of the proposal under the heading “Human Subjects.” This section replaces <i>Human Subjects and Clinical Trials Form</i> (TOC #12).</p> <p>This section should address the following items: identify the IRB of record and the plans for the study review, a description of the risks to subjects, sources of materials collected, plans for collecting and storing data, as well as plans for the protections against risk and opportunities for employers to discriminate against workers for</p> |

|   |   |
|---|---|
|   | <p>participating. Survey, outreach scripts, consents, and other material should be included as an Attachment.</p> <ul style="list-style-type: none"> <li>• Human Subjects Protection Training certificates are required for all key staff (exempt and non-exempt). The certificates should be included as an Attachment.</li> </ul>   |
| <b>Forms/TOC sections NOT required:</b> | <ul style="list-style-type: none"> <li>• Introduction to Resubmission, 5. Vertebrate Animals, 6. Select Agent Research, 11. Authentication of Key Biological and/or Chemical Resources. 12. PHS Human Subjects and Clinical Trials Form, Inclusion Enrollment.</li> <li>• Indicate N/A on the Table of Contents.</li> </ul>   |
| <b>Audit request</b>                    | <p>The applicant organization must provide CPWR with a copy of its annual federal audit or an electronic link to it (preferred). The audit must have been performed in accordance with 2 CFR 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.</p>   |
| <b>Submission</b>                       | <p>Submit to Patricia Quinn, CPWR Small Study Program Coordinator, at <a href="mailto:pquinn@cpwr.com">pquinn@cpwr.com</a>.</p> <ul style="list-style-type: none"> <li>• Only electronic submissions will be accepted.</li> <li>• The application must be sent as <u>one PDF file</u> that includes the entire application in the correct order based on the table of contents. The application must be page numbered consecutively. Do not include unnecessary forms (such as the All Personnel Report, blank pages, agency mailing label, etc.).</li> </ul> |

**Full Proposal Review Process and Criteria**

Proposals are reviewed by scientists and experts from CPWR, including members of its Technical Advisory Board and, if warranted, external subject matter experts. NIOSH will also review the proposal. Proposals are generally reviewed within 45 business days of receipt.

The following review criteria are considered:

1. Significance/need:
  - a. Does the proposed study address an important problem?
  - b. Are one or more of the NIOSH Strategic Goals, National Occupational Research Agenda for Construction objectives, or 2018 NIOSH Construction Program Expert Panel Review recommendations addressed, and are they relevant to CPWR's overall mission and areas of emphasis?
  - c. Have any stakeholders, such as labor-management organizations, expressed

- a need for research on the proposed topic? How/where is this need documented?
  - d. Are the proposed core component functions clearly defined and essential for achieving the study goals and supporting individual research projects?
  - e. If the proposed study's aims are achieved, how will the aims advance scientific knowledge?
  - f. What are the expected impacts on occupational injury or illness risks?
  - g. Could the findings or future tools/products generated by the research be used to discriminate against or impact individual worker's employment opportunities?
2. Approach:
- a. To what extent are the conceptual framework or theory of change, design, methods, and analyses adequately developed, well-integrated, well-reasoned, and appropriate to achieve the proposed study's aims?
  - b. If a data set is to be analyzed, is it likely to produce the information sought? Is it the best source for the questions posed? Does the applicant identify and discuss potential data limitations?
  - c. Does the applicant acknowledge potential problem areas and consider alternative tactics?
3. Innovation:
- a. Does the proposal challenge existing thinking, offer a new approach, or technology to solve the stated problems?
  - b. Is the proposal original and innovative?
4. Investigators:
- a. Is the applicant well-qualified through academic and practical experience to examine the topic?
  - b. Is it likely the study will be completed in a timely manner?
  - c. Does the research team bring complementary and integrated expertise to the project?
5. Environment:
- a. How well does the physical/scientific environment in which the work will be performed contribute to the probability of success?
  - b. Is the commitment of the applicant's institution evident and adequate to support the study in terms of space, resources, or administrative authority?
  - c. Does the location of the study within the applicant organization provide the authority to facilitate multidisciplinary work for investigators across departmental lines or across schools in the university environment?
  - d. Are partners from public and private organizations engaged? Did these organizations provide letters of support that describe their role and the extent of their participation?

6. Balance:
  - a. How does the proposed study fit with other CPWR research? Does it relate to CPWR mission or emphasis areas?
7. Human Subjects:
  - a. Does the proposed study involve human subjects? Are plans for an IRB review included in the proposal?

Once CPWR reviews the application, a one-time revision may be requested. The applicant will have 30 business days to address any questions or comments and resubmit the proposal. Conditionally approved studies will then be sent to the NIOSH Scientific Program Officer for further review. The applicant will receive an email notification regarding whether the proposal has been recommended for funding or rejected. Proposals will not be accepted if late.

## **Progress Review & Reporting Requirements for funded studies**

After a study is funded, CPWR requires the Principal Investigator (PI) to submit periodic progress reports and a final report. The specific requirements for these reports are outlined below.

### **Progress Reports**

CPWR will use the PI's periodic written reports to monitor the study's progress. If necessary, CPWR staff or consultants may conduct onsite visits or virtual meetings to evaluate progress firsthand. The reporting schedule will be specified in the funding letter, and the release of funding installments will be contingent upon the submission of satisfactory progress reports and the final report.

The progress reports must be written in a language that is understandable to someone who does not specialize in the field of research. Abbreviations and language that may not be known to the broader scientific community should be avoided or, if essential, be clearly defined.

A progress report should be no more than three (3) pages and include (in this order):

- Objectives/specific aims progress
- Changes from the original scope, the reason, and how they are being addressed
- Accomplishments
- Problems that result in deviation from the methods or timeline and how they are being addressed
- Any changes in key staff, plans, or methods
- Interim results, including their relevance and practical application, and any related problem(s) encountered or anticipated
- Any publications or presentations derived from the study (completed or planned)

The progress report and any attachments should be sent electronically to [pquinn@cpwr.com](mailto:pquinn@cpwr.com).

## **The Final Report**

The final report is due 30 days after the end of the study. The report should be succinct and be no more than fifteen (15) pages and include (in this order):

- Abstract (150 words or less)
- Key findings (at least 5), in order of importance
- Table of Contents
- Introduction
- Objectives
- Methods
- Accomplishments and results, including their relevance and practical application
- Changes/problems that resulted in deviation from the methods
- Future funding plans. If the findings appear to justify expansion of the research, the PI should indicate plans for such research and possible sources of additional funding
- List of presentations/publications, completed and/or planned
- Dissemination plan and how it will be carried out

Attachments are allowable and do not count against the page count.

The final report needs to be submitted electronically to [pquinn@cpwr.com](mailto:pquinn@cpwr.com) in both MS Word and PDF formats. CPWR will review the report and may request clarifications or revisions. The investigator is expected to collaborate with CPWR's communications department to prepare the report for posting on its website. Failure to submit an acceptable report may lead to delays in the release of final funding payments and could affect eligibility for future CPWR funding.

## **Dissemination of Findings**

The PI and other investigators involved in the study are encouraged to present the findings at conferences and to submit them for publication in scholarly journals and the trade press. Publications, journal articles, manuals, etc. must include the following acknowledgment/disclaimer:

*This publication was made possible by CPWR – The Center for Construction Research and Training through cooperative agreement number U54OH012761 from the National Institute for Occupational Safety and Health (NIOSH). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CPWR or NIOSH.*

Investigators are also encouraged to pursue other standard academic and industry channels as well as news media for disseminating the results of their research.

If a journal article, news story, or other release of media about the findings is published in print and/or online, we ask that the investigator send a copy to CPWR. Please include links to the journal article/story/posting and any relevant media coverage or reactions from institutions or the public.

CPWR may publish the final report as a CPWR report on its website, produce and post a one-page “Key Findings from Research” document using the investigators’ abstract and key findings, and use

other r2p and communications products and channels to disseminate the research findings. CPWR may also invite the investigator to present the study findings during a CPWR sponsored meeting or webinar. CPWR will not withhold the report or delay posting/publication solely to accommodate a journal's requirement that there be no prior publication of the results.