

REQUEST FOR



CLEAN
COOKING
ALLIANCE

PROPOSALS (RFP)

UNDERSTANDING THE POTENTIAL INTERACTION BETWEEN CHRONIC HOUSEHOLD AIR POLLUTION EXPOSURE AND COVID-19 IN LMICs

Summary

The United Nations Foundation's Clean Cooking Alliance (Alliance) is accepting proposals for Understanding the Potential Interaction Between Chronic Household Air Pollution Exposure and COVID-19 in LMICs.

A variety of hypotheses linking air pollution and COVID-19 incidence and outcomes have been postulated. Exposure to high levels of household air pollution (HAP) is widespread in low- and middle-income countries (LMICs). These same populations may be highly vulnerable to this pandemic. This Request for Proposals (RFP) solicits research proposals to assess the potential interaction between chronic HAP exposure and COVID-19 in LMICs. Proposals may focus on (1) the effect of chronic HAP exposure on transmission, infection risk, and course of COVID-19 disease or (2) the potential effect of interventions to control COVID-19 on HAP exposure and related human health outcomes.

Background of Organization

The Clean Cooking Alliance works with a global network of partners to build an inclusive industry that makes clean cooking accessible to the three billion people who live each day without it. Established in 2010, the Alliance is driving consumer demand, mobilizing investment to build a pipeline of scalable businesses, and fostering an enabling environment that allows the sector to thrive. Clean cooking transforms lives by improving health, protecting the climate and the environment, empowering women, and helping families save time and money.

Objective

Researchers have put forward a number of hypotheses linking air pollution and COVID-19. The Alliance is issuing this RFP to solicit proposals to advance research on the interaction between chronic HAP exposure and COVID-19 in the community or clinical settings in LMICs.

Scope of Work and Deliverables

The rapid spread of the SARS-CoV-2 virus and the historic impact of COVID-19 on human welfare across the globe have raised many important questions regarding the socio-environmental contexts that either exacerbate the challenges associated with the disease or facilitate public health. We know that exposure to both ambient and household air pollution affects pulmonary, cardiovascular, and nervous systems. It may

also alter an individual's immune function. Because of this, scientists have begun to ask whether individuals who are chronically exposed to air pollution may be disproportionately affected by the ongoing pandemic.

We know that HAP—especially from cooking, but also from heating and lighting—is a major source of toxic exposures to fine particulate matter (PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), and polycyclic aromatic hydrocarbons (PAHs) in LMICs.¹ There is ample evidence that these pollutants contribute to the global burden of non-communicable diseases (e.g., stroke, lung cancer, heart disease) and to the severity of childhood pneumonia.^{1,2}

Researchers have put forward a number of hypotheses linking air pollution and COVID-19 infection and severity. These include the role of air pollution on viral immune response, Angiotensin-Converting Enzyme 2 (ACE-2) receptor expression, and respiratory system impairment. Research has also explored how air pollution contributes to comorbidities associated with severe cases of COVID-19. Higher exposure to air pollution among racial minorities and other vulnerable populations may also contribute to disparities in COVID-19 disease outcomes.^{3,4} Observational studies suggesting positive associations between ambient air pollution and COVID-19 disease severity are beginning to emerge in the peer-reviewed literature^{5,6} as are analyses of COVID-19 hospitalization outcomes. Despite these early observational studies, however, knowledge on the impact of air pollution on COVID-19 disease is still limited.

Because high levels of HAP exposure are so widespread in LMICs that are also highly vulnerable to this pandemic, improving population health by reducing HAP could be an important means of identifying high risk communities today and mitigating future respiratory pandemics.

The Alliance hosted a two-day workshop in August 2020 to bring together relevant experts in the fields of household air pollution, epidemiology, immunology, virology, infectious disease, and other relevant fields to:

- Identify the potential value of studying the association between chronic HAP exposure and COVID-19 in the community or clinical settings;
- Explore key researchable questions;

¹ WHO | WHO Guidelines for indoor air quality: household fuel combustion. WHO. Accessed August 11, 2020. <http://www.who.int/airpollution/guidelines/household-fuel-combustion/en/>

² Lim SS, Vos T, Flaxman AD, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet*. 2012;380(9859):2224–2260. doi:10.1016/S0140-6736(12)61766-8

³ Brandt EB, Beck AF, Mersha TB. Air pollution, racial disparities, and COVID-19 mortality. *J Allergy Clin Immunol*. 2020;146(1):61–63. doi:10.1016/j.jaci.2020.04.035

⁴ Thakur M, Boudewijns EA, Babu GR, van Schayck OCP. Biomass use and COVID-19: A novel concern. *Environ Res*. 2020;186:109586. doi:10.1016/j.envres.2020.109586

⁵ Zhu Y, Xie J, Huang F, Cao L. Association between short-term exposure to air pollution and COVID-19 infection: Evidence from China. *Sci Total Environ*. 2020;727:138704. doi:10.1016/j.scitotenv.2020.138704

⁶ Fattorini D, Regoli F. Role of the chronic air pollution levels in the Covid-19 outbreak risk in Italy. *Environ Pollut*. 2020;264:114732. doi:10.1016/j.envpol.2020.114732

- Determine the feasibility of conducting HAP-COVID studies given the current constrained mobility and public health considerations in LMICs (e.g., feasible study designs, optimal population, sample size, data access problems, etc.).*

The Alliance is now issuing this RFP to support research that advances knowledge regarding the interaction between chronic HAP exposure and COVID-19 in the community or clinical settings in LMICs. The Alliance is particularly interested in proposals that focus on one of the following themes:

1. Effect of chronic HAP exposure on COVID-19

The Alliance is interested in addressing the following questions about the potential effect of chronic HAP exposure on COVID-19 in LMICs. This list is not exhaustive, and applicants are encouraged to consider areas of focus outside this list in their proposals.

- Does HAP exposure affect the course of COVID-19 disease (e.g., disease severity, mortality)?
- Does HAP exposure play a role in infection risk for COVID-19?
- Does HAP affect the transmission of COVID-19?
- What mechanisms underlie the effects of HAP on the risk of infection and/or outcomes of COVID-19?
- Does HAP exposure have an impact on mid-term health consequences (e.g., respiratory illness during the first year of recovery) following recovery from COVID-19 disease?

2. Impact of interventions to control COVID-19 on HAP exposure and related human health outcomes

The Alliance is interested in addressing the following questions about the potential effect of interventions to control COVID-19 (e.g., shelter in place, restrictions on business, increased telework) on HAP exposure and related human health outcomes in LMICs. This list is not exhaustive, and applicants are encouraged to consider areas of focus outside this list in their proposals.

- How has COVID-19 influenced migration (e.g., urban to rural areas) and daily activity patterns (e.g., increased time spent indoors)? What does this mean for exposure to polluting cooking methods and the associated human health burden?
- How have interventions intended to control the spread of COVID-19, and their economic consequences, impacted individual and household behaviors and choices with respect to household energy use (e.g., forced to return to polluting cooking methods, increased stove stacking)? What have been the subsequent results on HAP exposure due to these changes?
- How has COVID-19 impacted access to and the use of clean cooking, and what is the subsequent impact on HAP exposure and related human health outcomes?

* Applicants for the RFP may contact the Alliance to receive recordings from the workshop.

The proposal should include a) a clearly defined research objective, b) study location(s) in LMICs, c) description of robust methods, population(s) studied, data collection plan (primary and/or secondary data), and well-designed analyses, d) anticipated challenges associated with conducting research during the pandemic, along with alternative strategies and necessary risk management, and e) an explanation of the significance of the proposed research.

The proposal must justify the study area(s) selected. The Alliance strongly prefers proposals with access to and experience working in the study area with proven ability to facilitate timely completion of the research in the current pandemic environment (within the study period of 15 months). Opportunities to leverage existing or ongoing data collection efforts relevant to the study are strongly recommended. The Alliance is also open to studies that require initiation of efforts in a new area, assuming that evidence is provided to show the study can be established and completed within the budget and time limit defined. If the proposed research requires official approvals (e.g., approval from institutional review board, consent of participants), applicants must provide a written statement indicating that they will be able to obtain the required permissions to conduct the study. The Alliance has a strong preference for proposals that include partnerships with in-country researchers and/or government entities.

The proposal should include a clear plan to accomplish the research objective(s) that acknowledges current circumstances on the ground. The study design described in the proposal should present clear strategies to ensure a robust and unbiased approach. The proposal should explain alternative research strategies that could be employed if normal research procedures are impacted by the pandemic. The proposal must explicitly define any weaknesses of the proposed approach and outline plans to address those weaknesses. The proposal should clearly show that the study design is adequately powered to answer the research question(s). An overview of the current and projected COVID-19 incidence for the study area should be presented to ensure a sufficient sample size for the study.

Project Period of Performance

This research is planned to begin in Q4 of 2020 and could take up to 15 months to complete. The following deliverables are expected throughout and at the end of the research period:

- Detailed work plan including methodologies, safety protocols, a clear timeline of activities, and a budget to be delivered within ten business days of the start of the grant;
- Interim report;
- Final executive summary of the report;
- Final technical report including detailed objectives, data collection method, analysis, results, and significance;
- Final results in a PowerPoint presentation;
- Two-page summary of the study intended for a lay audience;
- Webinar on the study results for relevant stakeholders; and
- Submission of a publication to a peer-reviewed journal.

Technical Requirements

The applying team must showcase relevant expertise, experience, and capacity (e.g., existing infrastructure and network in the study area) to accomplish the defined research objective(s) in a timely manner under the current situation. The proposal should specifically address how uncertainties relating to the pandemic will impact the implementation of this work and how those uncertainties can be mitigated.

The proposal should include information about how the research will be conducted in a way that ensures the safety of field staff and study participants, given the unique challenges posed by COVID-19. Specifically, the selected team should clearly define what risk management and PPE protocols will be used while conducting research in a community setting, a clinical setting, or both if applicable.

The selected team should thoroughly consider overall feasibility concerns of conducting research during a pandemic and define optimal methods for doing so. Specific issues to consider are current constrained mobility and public health considerations in LMICs.

Timeline

Date	Deliverable
10/14/2020	Proposals due
11/2/2020	As applicable, calls with applicants and follow up questions
11/9/2020	Grantee(s) selected and notified via email
11/21/2020	Kickoff meeting with selected Grantees(s)

Budget

A total budget of up to \$500,000 is available to support research related to this RFP. The Alliance prefers to fund two or three smaller studies or a larger multi-country study.

A detailed budget in US Dollars must be submitted with the proposal. Budget should include both pre-tax and net of tax values. The budget should include direct costs (Personnel, Fringe Benefits, Travel, Sub-Agreements, Equipment, Supplies, etc.), as well as indirect costs (overhead). Overhead costs must be reasonable and appropriate, not exceeding 20%. For indirect costs, please indicate a list of expenses covered by the indirect rate. For all direct costs, please include assumptions that were made to arrive at line item costs (e.g., 2 trips @ \$1,500/trip = \$3,000 or 20 staff hours @ \$40/hour = \$800).

If a bid has a mathematical discrepancy, the Alliance may correct the discrepancy and notify the Grantee of the adjustment. In such circumstances, the Grantee may choose to withdraw their bid.

Evaluation process

The Clean Cooking Alliance will review all written proposals and may request a phone or in-person interview and/or updated submission to address questions or provide clarification. The Alliance will use the following criteria in our evaluation.

Evaluation criteria	Score (1-5)
Approach: the analytical framework and methodology answering the project's key questions and deliverables	
Relevance: Scientific merit of the proposed research	
Subject matter expertise: relevant experience in the fields of household air pollution, epidemiology, immunology, virology, infectious disease, or other relevant fields	
Project management: achievable action plan that will deliver the project on time and on budget	
Capabilities and experience: demonstrated relevant expertise; experience working with local partners and capacity (e.g., infrastructure and network) in the study area	
Cost: the proposed pricing is within budget	
Value: the proposed pricing demonstrates a competitive price and good value for the money	

Intent and disclaimer

This RFP is made with the intent to identify a Grantee to deliver results as described in this RFP. UNF/the Clean Cooking Alliance will rely on the Grantee's representations to be truthful and as described. The Clean Cooking Alliance assumes it can be confident in the Grantee's ability to deliver the product(s) and/or service(s) proposed in response to this RFP.

If the Clean Cooking Alliance amends the RFP, copies of any such amendments will be sent to all respondents to the proposal.

Proposal Guidelines and Requirements

- The proposal should be no longer than 20 pages in length and include the following sections:
 - Section A. Background and Objectives (1-2 pages)
 - Section B. Significance of Research (1-2 pages)
 - Section C. Description of Investigative Team (1-2 pages); Include Organizational Qualifications as Relevant
 - Section D. Related Previous Studies (1 page)
 - Section E. Research Plan and Methods (not to exceed 10 pages)
 - Section F. Literature Cited
 - Section G. Detailed Budget
 - Section H. Detailed Gantt Chart
- This RFP is open to multiple partners and is a competitive process.
- Proposals received after **October 14th, 2020 by 11:59PM EDT** will not be considered.

- The price provided should be in US dollars and should contain both pre-tax and net of tax values. If the process excludes certain fees or charges, the applicant must provide a detailed list of excluded fees with a complete explanation of the nature of those fees.
- The Alliance prefers a single point of contact who manages deliverables. If the execution of work to be performed by the Grantee requires the hiring of sub-contractors, the Grantee must clearly state this in the proposal. Sub-contractors must be identified and the work they will perform must be defined. Subcontractors are subject to vetting and approval by UNF/the Alliance.
- The Alliance will not refuse a proposal based upon the use of subcontractors; however, we retain the right to refuse the sub-contractors you have selected.
- Provisions of this RFP and the contents of the successful responses are considered available for inclusion in final contractual obligations.

Format for Proposals

Proposals must include applicant signature as well as a signed declaration form. Proposals must include the full legal name of applicant, as well as legal formation and ownership structure (e.g. incorporation certification, tax status and ID, etc.).

Contracting and Compliance

The Alliance will negotiate grant terms upon selection. A copy of the grant terms and conditions will be provided upon selection. All grants are subject to review by the UN Foundation's Business Services and Budget Reporting team. The project will start upon the complete execution of the grant. The grant will outline terms and conditions, scope, budget, and applicable flow down terms. Selected recipient(s) must comply with Alliance, United Nations Foundation, and funder compliance requirements. The selected recipient(s) must also undergo detailed legal, financial, and commercial due diligence.

Release

The Grantee understands that the Clean Cooking Alliance has chosen to solicit proposals to understand the potential interaction between chronic household air pollution exposure and COVID-19 in LMICs and that the Grantee's response and proposal submission does not guarantee that the Clean Cooking Alliance will enter into a new grant with the Grantee or continue any current grant(s) with the Grantee.

The Grantee agrees that Clean Cooking Alliance may, at its sole discretion:

- Amend or cancel the RFP, in whole or in part, at any time
- Extend the deadline for submitting responses
- Determine whether a response does or does not substantially comply with the requirements of the RFP
- Waive any minor irregularity, informality or nonconformance with the provisions or procedures of the RFP
- Negotiate with all Grantees what UNF deems acceptable
- Issue multiple awards
- Photocopy the responses for evaluation/review

This RFP is not an offer to contract. The Clean Cooking Alliance assumes no responsibility for Grantee's cost to respond to this RFP. All responses become the property of the Clean Cooking Alliance

The Grantee, by submitting a response to this RFP, waives all right to protest or seek any legal remedies whatsoever regarding any aspect of this RFP.

The Grantee represents that it has responded to the RFP with complete honesty and accuracy. If facts provided in the Grantee's response change, the Grantees agrees to supplement its response in writing with any deletions, additions, or changes within ten (10) days of the changes. The Grantee will do this, as necessary, throughout the selection process.

The Grantee understands it may receive proprietary and confidential information from the Clean Cooking Alliance during the RFP process ("Confidential Information"). The Grantee and the Alliance agree to not use Confidential Information for any purpose other than the Grantee's participation in the RFP process, and to not reveal Confidential Information directly or indirectly to any other person, entity, or organization without the prior written consent of the other party. The Grantee and the Alliance further agree to exercise all reasonable precautions to maintain the proprietary and confidential nature of Confidential Information where it can best demonstrate its value and capacity to delivery ecosystem-wide, meaningful value.

Grounds for Exclusion

Material misrepresentations, including omissions, may disqualify the Grantee from a grant award.

Submissions will be rejected at the Clean Cooking Alliance's sole discretion if it finds that the Grantee has engaged in any illegal or corrupt practices in connection with the award.

The Grantee will be excluded from participation for the reasons below. By submitting a proposal in response to the RFP, the Grantee confirms that none of the below circumstances apply:

- The Grantee is bankrupt or being wound up, is having their affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, is subject of proceedings concerning those matters, or is in any analogous situation arising from a similar procedure provided for in national legislation or regulations.
- The Grantee or persons having powers of representation, decision-making or control over them have been convicted of an offence concerning their professional conduct by a final judgment.
- The Grantee has been found guilty of grave professional misconduct; proven by any means which the Alliance can justify.

- The Grantee has not fulfilled obligations relating to the payment of social security contributions or taxes in accordance with the legal provisions of the country in which they are established, or within the United States of America, or those of the country where the research is to be performed.
- The Grantee or persons having powers of representation, decision-making or control over them have been convicted for fraud, corruption, involvement in a criminal organization or money laundering by a final judgment.
- The Grantee makes use of child labor or forced labor and/or practice discrimination, and/or do not respect the right to freedom of association and the right to organize and engage in collective bargaining pursuant to the core conventions of the International Labour Organization (ILO).

Principal Point of Contact

Questions should be sent by email to info@cleancookingalliance.org and dalexander@cleancookingalliance.org by September 21, 2020. Responses will be posted to <http://cleancookstoves.org/funding-opportunities/> by September 28, 2020.

Submission details

The application should be submitted as a PDF to the Alliance by email with the subject line 'HAP-COVID Assessment RFP Proposal – [Grantee name]' to info@cleancookingalliance.org and dalexander@cleancookingalliance.org no later than October 14, 2020, 11:59 pm EDT.