Summary of Invitation
The Clean Cooking Implementation Science Network invites proposals to support: a) targeted workshops, or b) targeted research, related to adoption and sustained use of clean cooking technologies in low and middle-income countries (LMICs). Eligibility is limited to ISN members, ISN case study developers, and current clean cooking research grantees of participating agencies (NIH, USAID, CDC, EPA, and the Global Alliance for Clean Cookstoves). Proposals must build on existing efforts and employ Implementation Science approaches to clean cooking research or evaluation. Proposals pertinent to the list of high-priority topics named below in this announcement are particularly welcomed. The deadline for receipt of proposals is **March 30, 2018**.

Background on the ISN
The NIH, in partnership with USAID, the CDC, the EPA and the Global Alliance for Clean Cookstoves (GACC) has launched a Clean Cooking Implementation Science Network (ISN), hosted by the Center for Global Health Studies at the Fogarty International Center (FIC), and supported by the NIH Common Fund. The Clean Cooking ISN aims to advance the science of uptake and scale-up of clean cooking technology in the developing world and to foster collaborative efforts and understanding among researchers and implementers toward this end.

A significant challenge to the clean cooking agenda for both researchers and implementers is achieving sustained and near exclusive use of appropriate technologies that reduce household air pollution (HAP) exposures sufficiently to achieve health and environmental benefits. Challenges relevant to scaling up these technologies include affordability issues, lack of access to clean stoves and fuels, a relatively poor understanding of critical household behaviors and the role of environmental context, and inadequate attention to these in program planning, design, and evaluation.

In its initial meetings the ISN developed a general conceptual approach (Rosenthal et al 2017) and identified useful implementation science frameworks (Damschroder, Aron et al. 2009, Tabak, Khoong et al. 2012, Milat, Bauman et al. 2015) for potential applicability and utility to the planning, execution and evaluation of clean cooking interventions. Subsequently, we launched four research projects focused primarily on household
technology adoption and use behaviors in different contexts, and are currently developing eleven case studies on historic and ongoing clean fuel distribution and uptake programs around the world.

In that context we are now inviting proposals for focused workshops or limited research projects linked to existing funded and active clean cooking research and/or implementation programs. All funded workshops and research activities must be designed to deliver concrete outcomes by March 1, 2019. Outcomes of interest are those that will accelerate well-informed clean cooking interventions, programs and policies.

**Eligibility**

Applications will be accepted from current members of the Implementation Science Network (https://www.fic.nih.gov/About/Staff/Policy-Planning-Evaluation/Pages/clean-cooking-implementation-science-network.aspx) or other grantees of the NIH, USAID, CDC, EPA or the GACC that have currently active funded projects on clean cooking adoption or distribution. Applications must involve at least one ISN member and at least one LMIC scientific collaborator or implementing partner. You may only submit one application (workshop or research) but you may lead one and be a collaborator on a second. All applications must indicate the team’s commitment to share any data and tools associated with this funded work freely with other ISN members to maximize the learning capabilities of the network as a whole.

Work funded through the Clean Cooking ISN must focus on efforts to maximize the use of clean cooking technology, defined as those stove/fuel combinations certified as Tier 4 for indoor emissions using the IWA performance standards (http://cleancookstoves.org/technology-and-fuels/standards/iwa-tiers-of-performance.html.) Proposals focused primarily on 1) the initial uptake of clean cooking technologies, without emphasis on usage, or 2) “improved” biomass stoves rated lower than Tier 4 will not be considered. However, combinations of a Tier 4 technology with others may be eligible depending on the project. Check with the contact below before submitting a proposal.

**Types of proposals**

1) This year we are especially interested in supporting topic–specific workshops organized by investigators; see the highest priority topics listed below. These may be symposium panels or multi-day workshops. Each event should lead directly to a capstone paper and/or other concrete resource that will advance the field of clean cooking and household energy implementation science. The panel or workshop and a draft of the paper or other outcome must be completed by March 1, 2019. Substantial participation of LMIC scientists, policymakers or practitioners is strongly encouraged. Leveraging other sources of support to broaden participation and
impact is encouraged. Maximum allowable direct costs from the ISN is $45,000. Indirect costs are capped at 8%.

2) We will also entertain proposals for one year of research support to advance an existing ISN linked project. Eligible existing projects might include: an ISN funded research project, case study or synthesis paper; a HAP related GEOHealth project; an ancillary study leveraging the HAPIN trial; or other HAP related projects supported by the participating agencies listed above for which base funding has covered primary data collection needs. Concrete outcomes distinct from the aims of the primary project are expected from this research and should be described; these might include peer reviewed papers but also new methods, tools for modeling, analysis or management of data, or standards to guide program development. Allowable costs include stipends, travel, and limited materials. Significant costs for primary data collection are not eligible. Research and analyses must be completed, and a draft of the paper or tool must be submitted to FIC by March 1, 2019. Maximum allowable from the ISN is $120,000 in direct costs. Indirect costs are capped at 8%.

High priority topics for workshops and research projects

- Systems modeling approaches to clean cooking policy and program development (e.g. using systems dynamics, network modeling, or agent-based models to elucidate emergent systemic behavior and/or to model factors influencing uptake and sustained use of clean technology);
- Adaptive designs for trials and programs (how to deal with dynamic changes on the ground);
- Analysis of natural experiments and program rollouts (e.g. using methods such as difference in differences, regression discontinuity, stepped wedge designs etc.);
- Modeling and predicting personal HAP exposure using environmental and behavioral (including stove use) data resources;
- Design and analysis of clean cooking interventions at scale across multiple settings and programs;
- Design and/or analysis of integrated cooking, heating and lighting interventions that maximize adoption and minimize exposures to household air pollutants;
- Training specifically for LMIC researchers and practitioners in field and/or analytical methods pertinent to clean cooking Implementation Science research; (e.g. mixed qualitative and quantitative data collection and analysis; stove use monitoring and data analysis; exposure assessment; etc.).
Other topics are possible, but check with the Fogarty team before submitting a proposal. In all proposals, the use of mixed methods, including quantitative and qualitative data analysis, is strongly encouraged.

**Budget (1 year)**
For this competition, the ISN has budgeted approximately $1 Million total. All budget requests should include funding for travel for a lead investigator to the NIH for one meeting to present project and findings with other members of the ISN.

**Format**
Proposals should comprise a project narrative of up to five pages (inclusive of any graphics or tables), a Gantt type chart showing timeline of project development and completion, and an additional one-page spreadsheet with budget details and justification.

**Review and Decisions**
Applications will be reviewed by the ISN Steering Committee that represents the participating funding organizations. The Steering Committee may seek additional outside expertise for certain applications, as needed. If a member of the steering committee is a named collaborator on the project the committee member will be recused from the review to avoid a conflict of interest.

Criteria for review will include: 1) responsiveness to the topics and modalities outlined in this invitation letter; 2) scientific quality of the proposed project plan; 3) cost-effectiveness of the proposal; 4) strength of pre-existing program and expertise underlying the proposal; 5) likelihood of impact on questions of local import; 6) likelihood of contributing to more generalized understanding that will accelerate uptake and scale-up of clean cooking technologies across settings; 7) willingness to collaborate with the ISN on this and subsequent projects. We will also weigh cost-effectiveness and topical balance across the portfolio of workshop and research projects in final funding decisions.

While significant primary data collection is not anticipated, use of existing data human subjects in the research project may require additional review and IRB approvals. These will be addressed prior to award in consultation with NIH staff.

**Awards**
Awards will be fee for service contracts, in most cases, made through a master contract for program development and event management with Fed Point Systems as a service to the Fogarty International Center. We intend to announce awards by June 1, 2018.

**Post-award obligations**
Successful grantees will agree to participate in the ISN, including sharing findings and primary data with the network, where appropriate. Additional responsibilities include
attendance at least one ISN meeting at the Fogarty International Center, National Institutes of Health, in Bethesda, MD during the year. A final report on the project including draft of the major outcome product will be due March 1, 2019.

**Deadline** for receipt is March 30, 2018.

Please **transmit** the application by email to Dr. Ashlinn Quinn (ashlinn.quinn@nih.gov).

**Questions** should be directed to Joshua Rosenthal ([joshua.rosenthal@nih.gov](mailto:joshua.rosenthal@nih.gov), 301-496-3288) or Ashlinn Quinn ([ashlinn.quinn@nih.gov](mailto:ashlinn.quinn@nih.gov), 301-827-7858).

**References**


