Concept Clearance

**Branch:** Office of the Director, DERT

**Council Period:** 201805

**Concept Title:** International Collaborations in Environmental Health Research

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### Introduction

The National Institutes of Health and other agencies within the Department of Health and Human Services hold Memorandums of Understanding with many countries in the developing world for the purposes of supporting research and training in areas of biomedical sciences of common interest. As the NIEHS Global Environmental Health program grows in terms of scientific support and the conduct of high impact translation activities, we are receiving recognition and attaining increased visibility for our program. As such, other ICs at NIH have approached DERT leadership to participate in extant collaborative funding announcements as they develop their next round of FOAs with the partner agencies in specific countries. Through our own efforts, we have also developed meaningful partnerships with environmental health leaders in several developing countries to build capacity. At this juncture it is timely to present these ideas to the NAEHSC to get input and approval for participation in the trans-NIH FOAs as well as guidance for building research programs which could lead to targeting support for future work in environmental health sciences in Lower and Middle Income Countries (LMICs) around the world.

### Research Goals and Scope

Currently NIEHS has research programs with the Fogerty International Center and other ICs which support research in LMICs. Current examples of collaborative projects include the GEOHealth Hubs and decade long participation in the FIC PAR Brain Disorders in the Developing World. Currently, trans-NIH efforts in infectious disease and cancer research are preparing to undergo recompetition in Brazil and China. NIEHS has also been working to build capacity in environmental health sciences in India through support of the GEOHealth Hub, workshops, and other engagements on topics such as air pollution, climate change, and most recently community based participatory research and community engagement. Each of these three countries have Memorandums of Understanding between key science agencies and the NIH or other Federal agencies. Other NIH ICs including NIAID, NICHD, NINDS, and FIC have collaborated in designing and executing funding programs on shared areas of research and have been successful over the past 10 years in funding research that involves US scientists and in-country researchers. NIEHS is a member of the Joint Working Group of the MOU between CDC and Indian Council of Medical Research and have participated in numerous bi-national working meetings. This concept presentation will expand on the history of these partnerships, opportunities for NIEHS to participate going forward, and discuss the pros and cons of expanding our global environmental health portfolio through these types of targeted initiatives.

### Mechanism and Justification

Most of the funding announcements to date have a similar structure. Each call is designed for collaborative research studies on topics of interest, these FOAs are developed and administered as joint funding opportunities. The grant applications submitted in response to FOAs go through peer review either at NIH or in each country, and then NIH funds the US institution and the foreign funding source funds their in-country researchers for applications that are chosen to be highly meritorious. Sometimes funds for scientific exchanges and travel are included. NIEHS has been invited to join two new/renewing FOAs with Brazil and China. There is also an opportunity to hold a workshop on Environmental Health with the Chinese funding partner, the National Natural Science Foundation of China, to set a joint research agenda. We have also had conversations and interest in creating a FOA with the Indian Council of Medical Research and Indian Council of Scientific and Industrial Research.

Expanding our working relationship in Global Health with other Institutes of the NIH and other agencies in the Federal
Government is an important strategy for building our global environmental portfolio. All our new partners have recognized the importance of tackling environmental public health issues on the global stage. These new opportunities will help to solidify our place at NIH and with other agencies as leaders in global environmental health. Supporting research in LMICs is needed to understand and educate on the relationship between poor environmental conditions and public health burden. The scope of these FOAs will include exposure measurements, disease risks, interventions, and prevention research that will increase the knowledge and capacity in these countries to manage these devastating problems.

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