

Request for Information on Promoting Equity in Global Health Research



Issued by:

Fogarty International Center (FIC)
National Heart, Lung, and Blood Institute (NHLBI)
National Institute of Allergy and Infectious Diseases (NIAID)
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
National Institute of Environmental Health Sciences (NIEHS)
National Institute of Mental Health (NIMH)
National Institute of Neurological Disorders and Stroke (NINDS)
National Cancer Institute (NCI)

Comment Period: May 20, 2022 – August 01, 2022

This report was drafted by staff at the Fogarty International Center, U.S. National Institutes of Health.
Publication date: June 2023

Executive Summary

The U.S. National Institutes of Health (NIH) recognizes the importance of promoting equity in global health research to advance the best science and achieve the greatest health impact. It has therefore undertaken efforts to understand current barriers and challenges to achieving more equitable research collaborations. In May 2022, the NIH Working Group on Promoting Equity in Global Health Research issued a Request for Information (RFI) to gather input on approaches that could promote greater equity in health research, particularly in engaging scientists from low- and middle-income countries (LMICs). This report provides a summary of the responses received and highlights key findings and recommendations.

The RFI received 186 responses from a diverse range of organizations, including academic institutions, government agencies, non-governmental organizations, professional associations, and health care systems. The respondents represented 46 different countries, with a majority based at academic institutions. The information collected in the responses was analyzed and categorized into three main areas: barriers and challenges, key thematic areas, and recommended strategies and solutions.

The barriers and challenges identified in the responses include limited funding opportunities for LMIC investigators, NIH grant requirements that require significant administrative capacity, differences in research priorities between funders and LMIC institutions, inequities in research processes and in roles and responsibilities of HIC and LMIC partners, lack of fair data sharing and ownership practices, and cultural differences.

Six key thematic areas emerged from the RFI responses: equitable partnerships, funding limitations and structures, scientific and administrative capacity needs, research priority setting, data access and ownership, and peer review. Respondents emphasized the importance of joint participation and shared leadership in research partnerships, involving LMIC partners in all aspects of the research process, and ensuring parity and equity in roles and responsibilities. They highlighted the need for addressing funding disparities, providing more funding opportunities for LMIC investigators, and supporting capacity strengthening in research methods and scientific writing. The responses also highlighted the lack of grants management and administrative capacity in LMICs, the need to align research priorities with local needs, promotion of equitable data sharing and ownership practices, and increasing LMIC representation in the peer review process.

The report concludes with a wide range of recommended strategies and solutions for NIH to consider. The recommendations target different funding mechanisms, components of existing FOAs, priorities for capacity strengthening, the grant review process, data and research sample practices, mentorship, and authorship and publication norms. The suggested strategies include fostering fair partnerships through requiring written agreements, addressing funding disparities and administrative burdens, supporting more institutional capacity building, strengthening grants management and administrative capacity, identifying ways in which to elevate local voices when setting research priorities, improving data governance practices, and ensuring local expertise in the peer review process.

The views and ideas presented in this report reflect those of the respondents and not necessarily those of the NIH, the Department of Health and Human Services (HHS), or the U.S. government. The recommendations will inform NIH's efforts to promote greater equity in global health research.

Table of Contents

Summary of Responses to the Request for Information on Promoting Equity in Global Health

I. Overview	1
II. Methods	2
III. Data	3
IV. Barriers and Challenges to Equitable Research	5
V. Key Thematic Areas	8
VI. Recommended Strategies and Solutions	12
VII. Next Steps	17
VIII. Appendices	18

I. Overview

The U.S. National Institutes of Health (NIH) is committed to supporting collaborative global research that harnesses the rich diversity of the biomedical workforce to advance timely solutions to global health challenges. To the extent possible given its mission, NIH seeks to address the challenges and barriers to equitable research, which for the purposes of this report is defined as research collaboration that is inclusive, elevates underrepresented voices and groups, and demonstrates fairness of opportunity and fair process. This interest builds on NIH's long-standing practice of funding highly meritorious research throughout the world, both through direct awards to U.S. institutions that partner with collaborating foreign institutions as well as direct awards to foreign institutions. NIH has long encouraged international research collaborations and is interested in exploring opportunities to further encourage and facilitate the best possible science through rigorous research that is conducted equitably, in true partnership with collaborators and for the benefit of all participants.

In May 2022, the NIH Working Group on Promoting Equity in Global Health Research issued a Request for Information (RFI) to gather broad input on approaches NIH could take to promote greater equity in global health research, particularly research that engages scientists in low- and middle-income countries (LMICs).

In particular, the RFI encouraged comments on NIH funding mechanisms and approaches, elements of equitable scientific partnerships, inclusive community engagement strategies, practical research capacity building approaches, mutually beneficial data and material sharing approaches, publication access, training and career development, joint leadership strategies, and research priority setting. The RFI included eight framing questions (Appendix A) that were not intended to be prescriptive, but rather a starting point for input.

This RFI is intended to improve NIH's understanding of potential research funding, priority setting, and administrative practices and strategies that could encourage or facilitate equitable global health research.

In the interest of transparency and public dissemination, the following is a broad summary of the responses, which will also be used by NIH to identify possible next steps and actions for consideration. **The content of this report reflects the views and ideas of the respondents to the RFI, and does not represent the views of the NIH, the Department of Health and Human Services (HHS), or the U.S. government.**

Of note, the terms LMICs (low- and middle-income countries) and HICs (high-income countries) are used throughout this report to reference countries that are classified by the World Bank into categories based on gross national income per capita. We recognize that this terminology is not ideal and fails to account for many of the nuanced differences between nations. For consistency however, this language matches the current general NIH terminology used in NIH program announcements and funding opportunities. It is not intended to promote a hierarchy between different countries based on economic status.

II. Methods

Staff at the NIH Fogarty International Center's Center for Global Health Studies (CGHS) created a Promoting Equity in Global Health Research RFI portfolio using the online RFI Tool provided by the NIH Office of Portfolio Analysis. The text of the RFI was further developed and refined in collaboration with the NIH Working Group on Promoting Equity in Global Health Research.

The responses to the RFI were loaded into an Excel spreadsheet. Specific information extracted from the responses included: respondent name, respondent country of origin, respondent organization type, response type (group vs. individual), and the text of the response. All respondents had the option to submit their response anonymously.

CGHS staff initially screened all submissions for completion and relevance. Then staff individually reviewed each response and conducted the initial extraction of information. Information was organized around the eight framing questions from the RFI text and coded to reflect whether the respondent was from an LMIC or HIC. The extracted information was carefully consolidated and organized into three main categories. The first identified and briefly explored the main barriers and challenges specific to the conduct of equitable health research. The second category summarized the main thematic areas that emerged from the responses, including key components of equitable research, how equitable research could be better achieved in practice, and the gaps between the current and optimal roles and responsibilities of both HIC and LMIC partners. Finally, the third category specified strategies and recommended solutions NIH can pursue to change current practices and promote greater equity in health research.

If a submission included an attachment like a report or a journal article, the attachments were also extracted and compiled into one resource document.

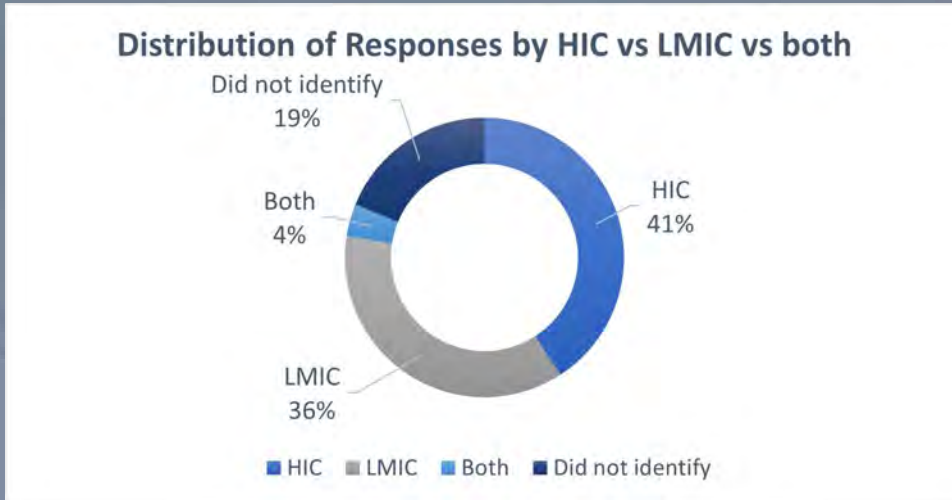


III. Data

General information

A total of 186 responses were received from respondents from a range of organizations, including academic institutions, government agencies, non-governmental organizations, professional associations, and health care systems. Most respondents represented an academic institution (see Figure 3).

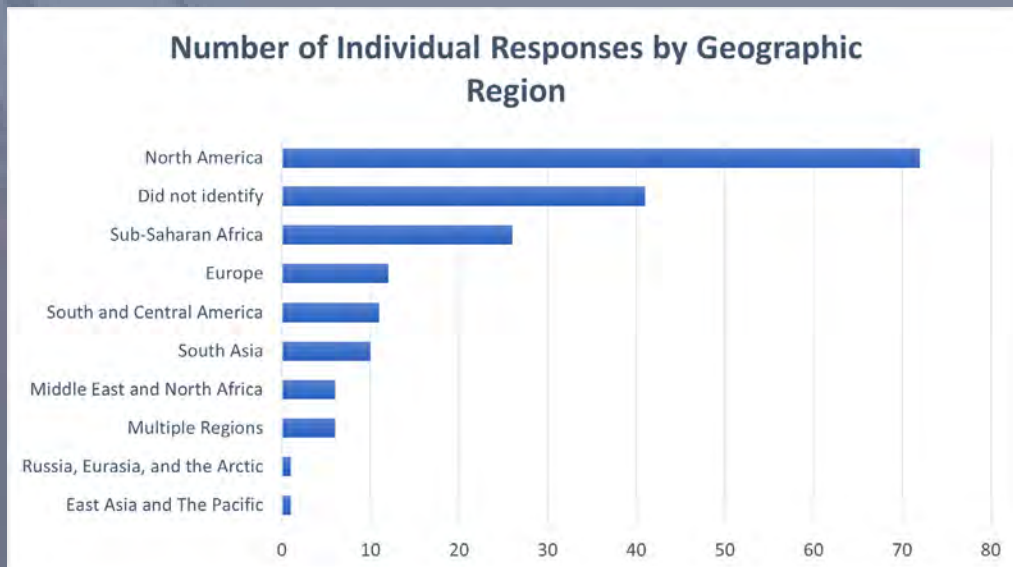
Figure 1



The total number of responses to the RFI included submissions from individuals and submissions on behalf of an institution or a group of individuals. Respondent institutions and organizations are included in Appendix B.

RFI respondents represented 46 different countries. A slight majority of the respondents identified as from an HIC. Overall, 39% of the respondents were from North America. While 19% of respondents did not identify their country of origin, the next largest region represented was Sub-Saharan Africa at 14%, followed by South and Central America and Europe both at approximately 6% (See Figure 2).

Figure 2

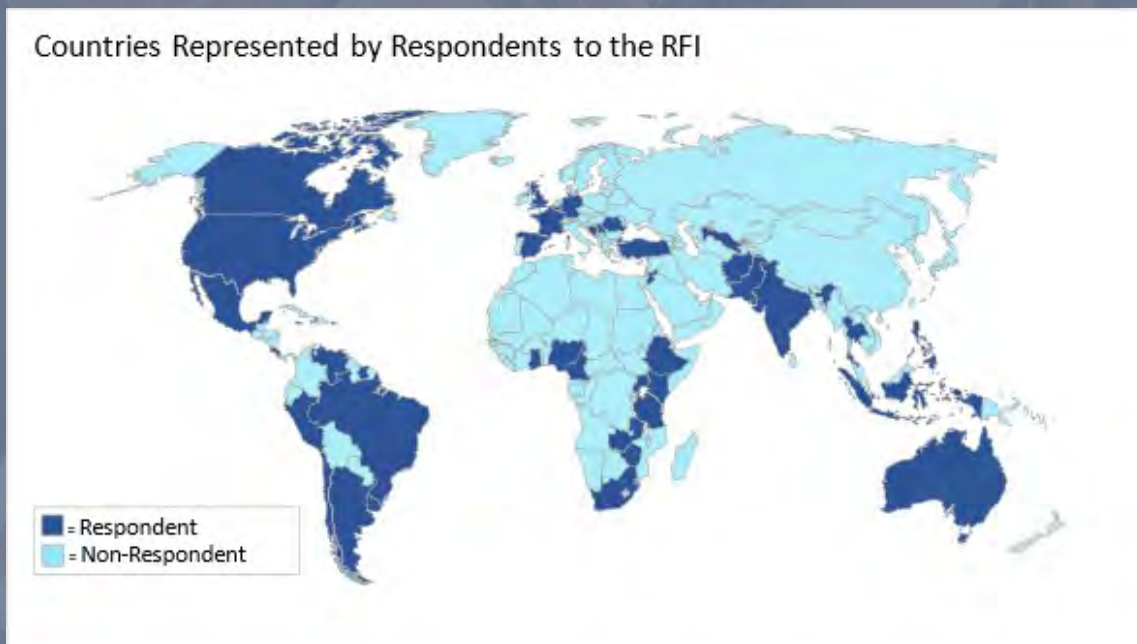


The countries represented by the respondents to the RFI span most regions of the world and are listed in Appendix C and represented visually in Figure 4.

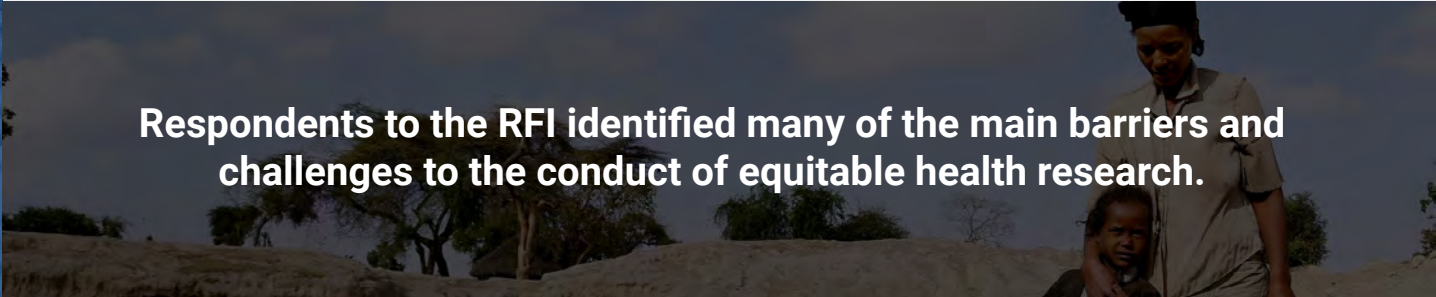
Figure 3



Figure 4



IV. Barriers and Challenges to Equitable Research



Respondents to the RFI identified many of the main barriers and challenges to the conduct of equitable health research.

A. Access to Funding by LMIC Researchers

Most global health research funds are awarded to institutions in the funding country, as many HIC funders require that the lead organization on a grant be an HIC institution. This results in imbalanced budget allocations and most indirect costs being allocated to HIC institutions. There is a general lack of funding calls specifically geared towards LMIC investigators and little funding for LMIC researchers to present their findings at international conferences and disseminate their research, resulting in reduced visibility.

LMIC investigators are also at a disadvantage when competing with HIC investigators with access to more administrative and grants management infrastructure and personnel. In addition, it is difficult for LMIC researchers to obtain the necessary early investigator funding that many HIC researchers rely on to jump start their career and provide the protected time needed to gain the research experience that enable them to eventually apply for larger independent investigator awards. Overall, there is a lack of significant funding opportunities for early career development for LMIC researchers such as PhD funding, post-doc fellowships, and early career development awards.

Finally, funding decisions still reflect the seniority principle and who has held HIC funding before or has the most high-impact papers, which systematically disadvantages LMIC investigators.

B. Funding Limitations

Respondents noted that NIH caps the indirect rate for non-US institutions at 8%, which places a significant and unfair financial burden on LMIC institutions and does not cover their true indirect costs. In addition, when funding is awarded directly to LMIC institutions, it is usually to the same high profile LMIC institutions and senior investigators. A lack of funding for small grants as well as lack of financial support for mentors and mentorship, especially long-term mentoring relationships, was also highlighted as a barrier to more equitable research. Many respondents noted the lack of investment and capacity strengthening by LMIC governments as a contributor to inequitable research norms.

C. NIH Grant Requirements

LMIC research settings often have minimal administrative infrastructure to support grant application preparation and submission, and certain NIH grants submission requirements are particularly burdensome to LMIC investigators and institutions. For example, sub-awardees on grants applying the cost reimbursement method are required to finance

all project operations upfront and be reimbursed later. This practice can be extremely taxing for LMIC partners or prevent them from collaborating at all. NIH has also increased the data security requirements for applying for funding without increasing technical support for compliance, which has also placed an undue burden on LMIC institutions. Finally, LMIC partners face significant administrative hurdles to be listed as a Co-PI on an NIH grant including setting up an eRA Commons account, having an institution registered, setting up a SAM.gov account, and the voluminous paperwork required.

D. Research Topics

Global health research funding and agendas primarily originate in HICs and often do not correlate with the burden of disease in LMICs or local priorities. Therefore, there is a general misalignment of research priorities between funders and LMIC institutions and researchers. In fact, many grants to US institutions that involve LMIC scientists support studying the effectiveness of interventions developed in the US for use in LMICs. It is challenging for LMIC researchers to produce robust funding applications that are both relevant to local practice and favorably reviewed by funding agencies.

E. Research Processes

There is a pervasive lack of equity with respect to the roles and responsibilities of HIC and LMIC research partners. HIC partners generally lead the research team, while LMIC researchers do not occupy the role of Principal Investigator or Co-PI. Too few LMIC researchers are engaged in the entirety of the research process, from study conception through academic publications and dissemination. Inequities in negotiating capacity and the management of contracts for collaborative research put LMIC institutions at a systemic disadvantage.

Research conducted in LMICs is not published locally or regionally and is often inaccessible to local populations, while LMIC researchers end up as co-authors on manuscripts, but rarely as first or senior authors.

LMIC researchers face a lack of protected research time, especially if involved in clinical duties with significantly less research infrastructure. LMIC researchers also face limited access to conferences to share research findings.

F. Data

There is a lack of fair data sharing and ownership practices when data has been collected in LMIC settings. Open data policies that require immediate sharing of data collected by LMIC researchers can further privilege HIC researchers who can use the data for rapid secondary analysis of primary data. Not all data platforms are equally accessible to LMICs, which disadvantages LMIC researchers in terms of research and relevant advances. There is also a lack of data on diseases that are of high public health importance in LMICs and the data that does exist is often low-quality due to poor health management information systems.

G. Misaligned Incentives

U.S. academic institutions do not incentivize or reward equitable partnerships or mentoring and relationship-building with LMIC researchers or institutions. There is a pervasive “publish or perish” culture in HICs, where little credit is given to faculty who seek

international collaboration, mentor LMIC colleagues, or agree to fairer co-author practices. Equity in publishing is further complicated by the HIC emphasis on publishing in high-impact journals and the use of journals with paywalls. Additionally, the payment of full indirect costs to HIC institutions disincentivizes researchers to turn leadership over to LMIC partners.

H. Cultural Differences

HIC institutions and researchers can lack an understanding of national and local health research environments in LMICs. Different ways of communicating needs and priorities can lead to well-meaning HIC research partners inadvertently undervaluing the priorities and needs of LMIC partners. Lack of cultural sensitivities to culture and context can also impede effective research implementation and the uptake of findings.



V. Key Thematic Areas

Responses to the RFI offered an extensive range of ideas and recommendations for promoting equity in global health research.

Six distinct thematic areas emerged from our review (in no particular order):

- **Partnerships**

- **Funding limitations and structures**

- **Capacity needs (both scientific and administrative)**

- **Priority setting**

- **Data access and ownership**

- **Peer review**

A. Equitable Partnerships

Responses emphasized that partnerships are more equitable when there is joint participation by both LMIC and HIC partners in all aspects of the research. Respondents to the RFI indicated that LMIC partners should be involved throughout the research cycle, from the development of research questions and study design to data analysis and dissemination. Shared leadership and equitable decision-making power are critical and fair partnerships should reflect parity and equity in roles and responsibilities. RFI respondents stressed that LMIC partners are often relegated to secondary roles such as responsibility for providing local approvals, study recruitment, operations management, and supporting data collection, but not scientific and conceptual contributions like study design, analysis, interpretation, writing, or dissemination and use of findings.

The unequal distribution of financial resources in partnership agreements further contributes to inequitable power dynamics and decision-making. LMIC partners should be represented in outputs including authorship, fellowships, conference presentations, and softer outputs such as panels convened for international meetings. Responses emphasized the need for reciprocity in partnerships and ensuring all partners mutually benefit from deliverables and the knowledge generated by collaboration.

Respondents highlighted the value of written agreements or memoranda of understanding and the clear articulation of roles and relevant research milestones at the onset of any research collaboration. These types of agreements can work to correct power imbalances in research collaborations and cover organizational structure within a partnership, roles and responsibilities, processes for implementing the research proposal, institutional commitments to the partnership, data management and

ownership, or authorship expectations. The existence of these types of agreements also makes it easier to adjudicate or settle any disputes or disagreements that may arise during the research process.

Additionally, respect and cultural sensitivity are key to equitable partnerships and enhance bidirectional learning.

B. Funding Limitations and Structures

Respondents asserted that disparities in institutional support pose a major impediment to global health research equity. The example most cited was the NIH 8% cap on indirect cost rates for foreign institutions, which respondents argued does not cover the true indirect costs of LMIC partners and imposes an unfair financial and administrative burden.

Promoting equity in global health research involves creating meaningful opportunities for LMIC researchers to compete for and succeed in securing research funding. Responses suggested that there is a general lack of funding for small grants that might be more accessible and direct funding for LMIC investigators. They highlighted funding opportunities like D43 and K43 awards as positive examples, which support research capacity strengthening and promote career development. Current grant cycles also are disadvantageous for LMIC partners, who may take longer to complete administrative components of applications due to a lack of administrative capacity and human resources. The administrative requirements for grant applications and management are extensive and onerous, especially for LMIC partners, and eligibility requirements for non-US citizens can be exclusive and limiting.

The respondents advocated for building training opportunities into research grants and highlighted the importance of institutional capacity strengthening. They also argued that grant application requirements should explicitly encourage equity and co-design.

Specific recommendations regarding changes to grant mechanisms can be found in Section 7.

C. Capacity (Scientific and Administrative)

Capacity as it relates to research equity was framed in three categories: scientific, administrative, and infrastructure.

1. Scientific Capacity

Respondents highlighted certain skill sets that require particular attention for capacity strengthening, including research methods, study design, data collection, data science and analysis, and epidemiology. Scientific writing and language skills, especially in English, were also identified as constraints, as LMIC researchers face pressure to publish in high impact journals and must interact, negotiate, collect data, and present results, sometimes in a secondary language.

Equitable global health research promotes sustained career development at all levels of research staff, no matter their country of origin. High-quality education and training opportunities for LMIC researchers can help level the playing field. Respondents argued that HIC researchers at all career stages can benefit from

global health research partnerships, while generally LMIC researchers are given fewer opportunities for sustained growth. Responses suggested that metrics should be developed to measure and capture capacity strengthening outputs in the research process.

LMIC scientific research capacity is impacted by a lack of continuity in scientific training or a clear pathway from graduate researcher/post doc positions to primary investigator positions. Responses noted the lack of sufficient mentorship for early career researchers. The time constraints and clinical duties senior LMIC researchers often face limit their bandwidth for mentorship and the training of students. This is compounded by a lack of support for LMIC researchers and students to attend international meetings and network.

Responses also emphasized the great need for cultural sensitivity and equity training for HIC researchers that focus on bidirectional partnership. Finally, respondents highlighted the need for greater research ethics training to meet the rigorous ethical standards for research set by NIH.

2. Administrative Capacity

Respondents expressed significant concern about the lack of research administration and grants management capacity in LMICs. In addition, in many LMICs there is no professional track for grants administrators and the lack of research management support diminishes the negotiating capacity of LMIC researchers as they enter partnerships. The responses reflected a large need for strengthened administrative infrastructure to manage research programs and grantsmanship to write and submit funding proposals.

3. Research Infrastructure

Many LMIC institutions lack the research infrastructure to handle, process, and analyze biological samples or lead clinical or immunological studies. The responses noted a lack of consistent long-term investments by LMIC governments in their own research and development (R&D) capabilities and systems, which has been compounded by aging research infrastructure and a lack of labs and wet lab supplies and facilities. Inequities are perpetuated by a lack of laboratory capacity in LMICs, particularly in genetics, sequencing, and bioinformatics.

D. Priority Setting

Responses emphasized that the funding priorities of HIC funders do not always align with the research priorities of LMIC researchers and institutions or reflect the local burden of disease. The RFI respondents suggested greater financial and intellectual support can be given to local agenda setting to help local researchers and institutions better identify and elevate local issues and research questions. When research addresses local needs and disease priorities in LMICs, outcomes are more likely to translate to tangible, effective, and sustainable programs or services for the study population and region involved.

The responses promoted the use of meaningful community and stakeholder engagement to better understand the needs of local communities and to disseminate results with local communities, in addition to relevant stakeholders like Ministries of

Health. They encouraged NIH to reflect on how to support the generation of research priorities with input from local communities, governments, researchers, and institutions.

E. Data Access and Ownership

Respondents called for the development and enforcement of equitable frameworks to govern data access and ownership for LMIC researchers. Many respondents asserted that data collected in a LMIC should be returned and owned by the host country and available to local communities and stakeholders at multiple levels (study participants, municipalities, and country agencies). The responses reflected on open data policies that require immediate sharing of data and how those policies can privilege HIC partners who often don't collect the data but can use it for rapid secondary analysis and publications. Responses suggested that evidence of data governance plans be required for grant applications and highlighted the need to strengthen LMIC capacity to conduct local data analysis. Funders and governments could also support local management of data systems in LMICs by investing in secure data storage infrastructure.

F. Peer Review

There was consensus in the responses that LMIC investigators should be better represented in the peer review process and study sections. For global health research funding opportunities, study sections should increase the number of LMIC reviewers and reviewers with expertise and experience in global health and global contexts. Respondents questioned the practice and efficacy of reviewing LMIC-focused research without LMIC reviewers or reviewers with experience in the country in which the research is taking place. Responses suggested that scoring criteria be added to help ensure higher quality and greater equity in international collaborations, such as:

- Involvement of local scientific leadership
- Evidence of addressing local health priorities
- Fairness in authorship plans
- Evidence of community engagement and local input on research questions
- Planned and fair data plans
- Contributions to research capacity
- Potential health impact in-country



VI. Recommended Strategies and Solutions

Respondents to the RFI proposed specific strategies or steps that NIH could take to promote greater equity in global health research. The recommendations included in this section are illustrative examples and do not reflect the entire body of recommendations captured in the responses to the RFI nor do they reflect any prioritization on the part of NIH. We also note that not all proposed solutions fall within the purview of the NIH as a U.S government agency and funder of biomedical research.

Again, this section represents solely views and suggestions included in the responses and does not reflect any planned action by NIH or by specific Institutes or Centers.

A. Priority Setting

- Scrutinize research proposals for use of local data to develop research questions focused on LMICs.
- Support consultations with regional/local research communities on key challenges and priorities to ensure locally relevant research.
- Conduct needs assessments in collaboration with recipient countries to identify research priorities and funding gaps.

B. Grant Writing, Management, and Review

1. Grant Writing

- Increase opportunities for global scientific writing workshops and NIH grant writing workshops to help LMIC researchers compete fairly with U.S.-based applicants.
- Provide grant application administrative support in the form of free, easily accessible online guides available in multiple languages.
- Support a cohort of “administrative hubs” at the regional level that can support LMIC individuals and institutions putting a grant application together.
- Include and compensate more LMIC researchers to participate in study sections where global research collaborations are being reviewed.

2. Grant Review

- Develop scorable criteria to measure equity and require applicants to articulate the equitable elements of their partnerships.
- Require evidence of commitment to equitable research partnerships, demonstrated through metrics like a researcher’s existing capacity strengthening programs, funding for research training, or list of mentored LMIC researchers.
- Instruct study section reviewers to value positive aspects of equitable research in reviews and to look for inclusion of local partners, evidence of co-design, and budget for capacity building.
- Include and compensate more LMIC researchers to participate in study sections where global research collaborations are being reviewed.
- Prioritize scientific merit and impact of the research proposal over the education and publication pedigree of an applicant.

- Require inclusion of Co-Investigators and Co-Principal Investigators based in countries in which research is being conducted in grant applications.

3. Grants Management

- Allocate more funding to strengthen research administration and grants management capacity.
- Develop budget management and compliance training for LMIC institutions and grants administrators and provide mentorship for administrative staff by NIH grant officers.
- Support collaborations between U.S. universities and LMIC institutions to establish common research governance norms to manage collaborative research.
 - Include a solid administrative core, like U19 grants, with robust governance support to manage projects and the exchange of samples, personnel, and funds.
- Develop a Notice of Funding Opportunities (NOFO) aimed at developing a research administrator professional track in LMIC settings, ideally offering regional training.

C. Funding

1. Funding Opportunities

- Increase direct funding of LMIC investigators and the number of training grants open to LMIC researchers and non-US citizens.
- Develop robust small, entry-level grant programs that simplify applications and administrative requirements and are focused on local research priorities.
- Increase R01 funding opportunities focused on LMICs and global research collaboration and encourage LMIC R award applicants.
- Support LMIC-LMIC collaboration and organize cross-regional networks.
- Increase calls for applications with multiple PIs representing U.S. and LMIC institutions.
- Provide more opportunities for LMIC scientists to lead or co-lead research relevant to their communities as PIs or Co-PIs.
- Fund programs that support research exchange, mutual capacity strengthening, and reciprocal innovation.
- Provide pilot funding opportunities for co-design of research, with potential for follow-up funding.
- For clinical researchers, establish a funding opportunity that pairs HIC and LMIC scientists and requires the HIC researcher to assign a proportion of the clinical or educational responsibilities to their LMIC partners.
- Support research specifically on equity in global health research (e.g., research that develops metrics for equity and evaluates mechanisms for promoting it).
- Establish research training programs for nurses, pharmacists, community-health workers, and others who carry extensive responsibilities for clinical care and innovation due to task-shifting, task-sharing.

2. Additional Grant Components

- Include funding for collaboration between researchers and local partners (e.g., Community Advisory Boards) to guide research questions, encourage participation in meetings, and provide airfare to send key members to conferences.

- Encourage partnership with “non-academic” partners including local civil society organizations, NGOs, UN agencies, media agencies, etc.
- Support LMIC access to global resources and scientific publications.
- Provide financial support for researchers to share their findings in conferences globally.
- Add a component for strengthening the capacity of research administrators.
- Dedicate funding to support collaborative co-writing workshops to encourage article production.
- Fund publication-writing beyond the life cycle of a research study if necessary.
- Require memoranda of understanding between institutions that document organizational structure within the partnership, roles and responsibilities of leaders, processes for determining and implementing a research agenda, research capacity-building activities, authorship guidelines, and institutional commitments to the partnership.
 - o Keep institutions accountable for the memoranda of understanding when grants are up for renewal by receiving direct input from HIC and LMIC partners.
 - o Establish continuous review processes for successful and equitable research partnerships so practices can be refined over time.

3. Funding Mechanisms

- Adjust citizenship requirements for Fellowship Grants that support the training of graduate students and postdoctoral fellows (F awards) to include LMIC researchers.
- Remove the minimum number of U.S. trainees required for D43 awards under the LAUNCH program.
- Fund more mentored K-like career development programs that also involve collaborative research (research paid via a US investigator R01, but trainee development paid via a K-award).
- Expand K24 eligibility to include LMIC mentors.
- Build training mechanisms into R34 or R01 research grants.
- Revise budget ceilings for trainee research funds to increase support for doctoral research trainees.
- Create a mechanism for transitioning an existing award from an HIC PI to a LMIC PI.
- Limit the number of years an HIC organization can hold or renew a training grant.
- Renew grants that initially went to U.S.-based institution as the prime awardee with LMIC-based institutions as sub-awardees, to the LMIC-based institution as the prime awardee and the U.S.-based institution as the sub-awardee.

4. Administrative Changes

- Increase the indirect cost rate for LMIC institutions.
- Increase the direct cost “cap”.
- Reduce the application burden for small grant opportunities like R03s.
- Simplify NIH applicant procedures and institutional infrastructure requirements, while maintaining rigor of fiscal accountability (e.g., simplify SAM registration for LMICs).

- Provide eRA Commons registration assistance that is accessible globally.
- Lengthen the grant application period to account for: 1) the lengthy approvals and the additional time required for the grant application process in LMICs and 2) global collaborative proposal development and community inclusion in research proposals.

5. Application Requirements

- Mandate that applications for global research projects include:
 - o A section on cultural competency explaining whether cultural differences exist, how they are relevant to the research project, and how they will be addressed.
 - o A research capacity/training component for early career researchers.
 - o section demonstrating engagement in co-design of research.
 - o Equitable representation on the research team.

D. Data and Research Samples

- Ensure that data and other resources generated by NIH-funded research are returned to the country in which the resources were generated.
- Require that datasets collected as part of NIH-funded research be available for further reuse by local communities.
- Incentivize analysis of research specimens and data in the country in which they were collected and discourage shipping samples abroad unless impossible to store and analyze locally.
- Invest in infrastructure for data storage and storage of biological samples at LMIC institutions.
- Fund assessments to identify country- or region-specific data needs, including information on data access and capacity to utilize databases and other resources.
- Require data governance plans as a component of grant applications.
- Develop standardized frameworks for how to distribute or share data and samples from LMICs.

E. Capacity Building and Training

- Train researchers from LMICs to navigate the NIH application system.
- Support more training in data management and analysis skills, data science, statistics, and bioinformatics.
- Encourage better funded LMIC research institutions to partner and collaborate with developing institutions to help build regional and local research capacity through LMIC-LMIC collaborations.
- Expand capacity of ethics review committees in LMICs and establish new ones especially equipped to handle social and behavioral, economic, and public health research.
- Invest in research infrastructure in LMICs (e.g., labs, internet access, EMRs).

F. Authorship and Publications

- Incentivize the appropriate inclusion of LMIC collaborators in authorship, emphasizing first and senior author opportunities for LMIC principal and co-investigators.
- Require a minimum percentage of publications from a NIH-funded international study in an LMIC to have either a LMIC first author or a LMIC senior author.
- Include funds in NIH grants to enable time for LMIC authors to prepare drafts of manuscripts and ensure they can afford to publish in high-impact journals.
- Dialogue with publishers on ethical policies and guidance to steer authors toward inclusive and equitable research conduct and international collaborations.
- Promote open-access publishing that is accessible to all LMIC partners.

G. Research Topics

- Develop H3Africa-like projects for other geographic regions to detect risk variants inside the environments where they develop, including in Latin America.
- Focus on climate change health research and empowering LMICs with tools and resources needed to mitigate and adapt to climate change.
- Expand topical areas available for D43 funding opportunities.
- Support more implementation science.
- Support health research focused on social determinants of health.
- Support health research focused on health issues that disproportionately affect marginalized populations.

H. Frameworks and Guidance

- Develop strategic frameworks for the conduct of equitable global health research and research partnership.
- Support an organized effort to develop benchmarking tools and metrics to assess and measure “equity in global health research”.
- Identify successful models of equitable research partnerships and widely disseminate these examples and shared learnings.
- Promote expert dialogue to articulate the benefits that equity in global health research brings to research quality and impact.
- Organize a consensus conference on research equity.

I. Dissemination of Results

- Build additional time and resources into grants to ensure research findings are disseminated in accessible and culturally appropriate formats to meet the needs of local partners.
- Incentivize grantees to disseminate study findings in LMIC forums and journals where other LMIC researchers have access to the data and conclusions.
- Require grantees to produce a minimum number of publications to disseminate findings in indexed journals prior to receiving additional grant funds.

J. Mentorship

- Support mentorship programs between researchers in the U.S. and LMICs.
- Develop LMIC-specific institutional mentoring programs and models.
 - Norms for successful mentoring are not fit to LMICs but instead are highly biased toward the environments and resources of HICs.
- Provide more protected time for mentorship through funding opportunities, similar to K24s for U.S. citizens.
- Include mentorship as a review criterion in funding calls.
- Each research grant should provide mentorship in areas articulated by LMIC partners as areas of need, e.g., lab skills, grant writing, conducting complex data analysis, manuscript writing.



VII. Next Steps

Respondents to the RFI helped illuminate key challenges and barriers to the conduct of equitable global health research. The responses highlighted key thematic areas for further consideration and expounded upon what equitable research looks like in practice with specific examples. Respondents also recommended specific strategies and solutions for NIH's consideration to promote greater equity in global health research and evaluate its current policies and practices. The NIH Working Group is very appreciative of all respondents who took the time to provide such comprehensive and thoughtful input.

RFI responses and proposed strategies will be shared with the current NIH Working Group on Promoting Equity in Global Health Research and will inform next steps and action items to be considered by the Working Group and when relevant, by NIH as a whole.

Promoting Equity in Global Health Research

Notice Number: NOT-TW-22-001

Key Dates

Release Date: May 20, 2022

Response Date: August 01, 2022

Related Announcements: None

Issued by:

Fogarty International Center ([FIC](#))

National Heart, Lung, and Blood Institute ([NHLBI](#))

National Institute of Allergy and Infectious Diseases ([NIAID](#))

Eunice Kennedy Shriver National Institute of Child Health and Human Development ([NICHD](#))

National Institute of Environmental Health Sciences ([NIEHS](#))

National Institute of Mental Health ([NIMH](#))

National Institute of Neurological Disorders and Stroke ([NINDS](#))

National Cancer Institute ([NCI](#))

Purpose

This Notice is a Request for Information (RFI) on approaches NIH can take to promote greater equity in global health research, particularly research that engages scientists in low and middle-income countries (LMICs) ([REF](#)).

Background

As a global leader in biomedical and behavioral research, NIH is committed to supporting collaborative international research that harnesses the rich diversity of the biomedical workforce to advance timely solutions to global health challenges. Therefore, NIH has a responsibility to identify and address, to the extent possible given its mission, the challenges and barriers to equitable research, which for the purposes of this RFI is defined as research collaboration that is inclusive, elevates underrepresented voices and groups, and demonstrates fairness of opportunity and fair process ([REF](#)). This interest builds on NIH's long-standing practice of funding highly meritorious research throughout the world, both through direct awards to non-U.S. institutions and indirectly through awards to U.S. institutions that then use those awards to support collaborating foreign institutions. NIH has long encouraged international research collaborations and is interested in exploring opportunities to further encourage and facilitate research that is conducted equitably, in true partnership with collaborators and for the benefit of all participants.

In practice, equity in global research may be achieved through collaborations based on true partnership, shared leadership, joint applications and publications, and the inclusion of previously disadvantaged individuals as research partners. Through this RFI, NIH seeks ideas and specific actions that NIH may consider to encourage the expansion and quality of such global research collaborations, particularly with scientists and institutions in LMICs.

NIH welcomes the global dialogue around increased equity in global health research and seeks to respond with insights and ideas generated through this RFI. In addition to promoting an ever more collaborative research environment, NIH recognizes that equitable research processes, strengthened scientific and research administrative capacity, the inclusion and sustaining of local talent and expertise, and a focus on local health priorities will advance scientific discovery and the development of more effective, appropriate, and sustainable health interventions. This RFI is intended to improve NIH's understanding of potential research funding, priority setting, and administrative practices and strategies that could encourage or facilitate equitable global health research.

Information Requested

Respondents to this RFI are invited to provide input regarding current NIH practices that might be revised or new practices that could be implemented to enhance collaborative

international research equity and the generation of mutual benefits and shared leadership; and to propose practical ideas that could help NIH enhance these practices. NIH acknowledges that thought leaders in this regard are widely distributed throughout the U.S. and the international scientific, academic, and public health communities. NIH looks forward to receiving input from these communities with a special interest in input from scientists in LMICs. Some subjects that may be of particular interest include: NIH funding mechanisms and approaches, elements of equitable scientific partnerships, inclusive community research-engagement strategies, practical research capacity building approaches, mutually beneficial data and material sharing approaches, publication access, training and career development, joint leadership strategies, and research priority setting.

For the purposes of this query, global health research collaboration involving scientists and institutions in LMICs are of particular interest. Of note, it is important to recognize that, as a U.S. research funding agency, while NIH welcomes all suggestions, it may be unable to adopt some options identified as potentially beneficial to achieving more equitable global research collaboration. In addition, issues such as equal access to health interventions, the governance of intellectual property sharing, and the equitable distribution of products of research are not within the scope of this RFI.

The NIH seeks comments on any or all of the subjects listed above, and as a starting point poses the following questions:

1. What are the most important elements of equitable global health research?
2. How is equitable global health research conducted? What does this look like in practice?
3. What are the main challenges or barriers to equitable global health research partnerships and the conduct of equitable research?
4. What are the current roles and responsibilities of LMIC researchers and institutions engaged in global health research partnerships? What are the optimal roles and responsibilities of LMIC researchers and institutions engaged in global health research partnerships?
5. Illustrative examples of equitable research partnerships and the way research is conducted between and across the low-, middle-, and high-income countries. What are the characteristics of these partnerships and approaches that make them exemplary?
6. What are key gaps in research capacity that impede equitable global health research?
7. Through the use of peer review, the NIH system is designed to identify and fund highly meritorious applications that address scientific opportunities. In this context, how can a focus on local health priorities and local talent be better integrated to promote global health research equity?
8. What can NIH as a research funder do to promote equitable global health research and research partnerships? Please share any specific suggestions for solutions and strategies.

NIH seeks input from all interested stakeholders around the world and across all regions and socioeconomic designations, but especially those from LMICs. This includes members of the scientific community, trainees, academic institutions, the private sector, health professionals, professional societies, advocacy groups, as well as other interested members of the public.

How to Submit a Response

Responses to this RFI are entirely voluntary and may be submitted anonymously. If willing, you may indicate your background (e.g., academic institutions, extramural, intramural researchers, private sector, and the public) and/or country of origin. Do not include any personally identifiable information or any information that you do not wish to make public, unless you are interested in participating in a follow up interview, in which case please provide your name and email address. NIH is committed to learning from the responses to this RFI and will share a summary of the information collected to all respondents.

Responses to this RFI are voluntary. This request is for information and planning purposes only and should not be construed as a solicitation or as an obligation on the part of the United States Government.

Responses will be accepted through August 1, 2022. All comments must be submitted electronically on the Web Portal at: <https://rfi.grants.nih.gov/?s=6282634ce27d0000e0004af2>

Inquiries:

Please direct all inquiries to:

Nalini Anand
Fogarty International Center
Telephone: 301-402-7348
Email: anandn@mail.nih.gov

Blythe Beecroft
Fogarty International Center
Telephone: 301-827-7856
Email: Blythe.Beecroft@nih.gov

Appendix B: List of All Respondents' Institutions and Organizations

Please note that 11% of respondents did not identify their organization or institution.

Academic institutions

- African Health Research Institute
- Albany School of Public Health
- American International University in West Africa
- Boston College
- Brown University
- Canadian University
- Clarke International University
- Columbia School of Social Work
- Dartmouth Geisel School of Medicine
- Ege University
- Emory University
- European Bioinformatics Institute (EMBL-EBI)
- Federal University of Rio Grande do Sul
- Georgetown University
- Harvard Medical School
- Harvard University
- Hormozgan University of Medical Services
- Indiana University School of Medicine
- Johns Hopkins Bloomberg School of Public Health
- Makerere University College of Health Sciences, Department of Pharmacology & Therapeutics
- Maseno University
- Medical Uskudar University
- Moi University
- Mount Kenya University
- National Institute of Public Health in Mexico
- National Research Center in Mexico
- National University of Singapore
- Northern Illinois University
- Shri Guru Ram Rai Institute of Medical & Health Sciences
- University Bukhara State Medical Institute
- University at Albany School of Health
- University of Alabama at Birmingham
- University College London
- University of Costa Rica
- University of Gambia
- University of KwaZulu-Natal, Department of Physiotherapy
- University of Leeds
- University of Maiduguri
- University of Makeni
- University of Minnesota
- University of Pittsburgh
- University of Rwanda
- University of Sao Paulo
- University of Texas at Austin
- University of Washington
- University of West Indies
- University of the Witwatersrand
- University of Zambia
- Watson Institute for International and Public Affairs
- Yong Loo Lin School of Medicine

Government or Multilateral Agencies

- National Institutes of Health (NIH)
- The World Health Organization (WHO)
- New York State Department of Health

Health Care Systems

- Cincinnati Children's Hospital Medical Center
- Diagnostic Imaging

Non-Governmental Organizations

- BIO Ventures for Global Health (BVGH)
- Coalition of Global Health Research Organizations
- Council on Health Research for Development (COHRED)
- European Open Science Cloud (EOSC)
- GE2p2 Global Foundation
- Good Clinical Practice Alliance (GCPA)
- Research Data Alliance (RDA)
- Anesvad Foundation
- Social Innovation in Health Initiative (SIHI)
- Strategic Initiative for Developing Capacity in Ethical Review (SIDCER)

Other

- Elrha R2HC
- Fred Hutchinson Cancer Center
- Global Cervical Cancer Prevention Project
- Health Systems Global Ethics and Justice Working Group

Professional Associations

- American Association for Dental, Oral, and Craniofacial Research
- The Association of Academic Global Surgery (AAGS)

Appendix C: List of Respondents' Country of Origin

Please note that 22% of respondents did not identify their country of origin.

- Afghanistan (1)
- Argentina (1)
- Australia (1)
- Belgium (1)
- Bosnia & Herzegovina (1)
- Brazil (3)
- Cameroon (2)
- Canada (1)
- Chile (1)
- Costa Rica (2)
- Eswatini (1)
- Ethiopia (1)
- France (1)
- Gambia (3)
- Germany (2)
- Ghana (1)
- Haiti (1)
- India (7)
- Indonesia (1)
- Jamaica (1)
- Jordan (2)
- Kenya (5)
- Mexico (4)
- Nigeria (7)
- Pakistan (1)
- Peru (1)
- Philippines (1)
- Puerto Rico (1)
- Romania (1)
- Serbia (1)
- Singapore (1)
- South Africa (2)
- Spain (1)
- Suriname (1)
- Tanzania (1)
- Thailand (1)
- Turkey (4)
- Uganda (4)
- United Kingdom (7)
- United States of America (69)
- Uruguay (1)
- Uzbekistan (1)
- Venezuela (1)
- Zambia (1)
- Zimbabwe (1)



Fogarty International Center