DRUM and international assistance for greatest impact. The GFF encourages country leaders to work with all key stakeholders in setting priorities—not only health ministries but also finance ministries, and not only the public sector but also civil society and private firms. GFF investment cases are drawing support and funds from other global health investors. This means that as countries raise more domestic resources they can pull in additional global financing, including from the International Development Association and the International Bank for Reconstruction and Development.

The time to mobilise domestic resources for health is now. In the next 4 years, at least 35 low-income and middle-income countries are expected to meet criteria for graduation or transition from key development assistance for health financing streams like Gavi, the Vaccine Alliance and the International Development Association.[4] Many of these countries raise relatively little health funding from domestic sources and will struggle to replace external sources of funding, unless something changes.

The GFF replenishment and Oslo DRUM conference are platforms for countries to lead this change. We commit ourselves to sharing what we learn in Oslo in November so that these lessons contribute to a more concerted global response to health finance needs and the broader SDG financing challenge. We will work with countries and multilateral bodies to accelerate this agenda in 2019, through important events of the African Union, the G20 hosted by Japan, and UN General Assembly. We believe country-led initiatives in mobilising and using domestic resources for health may ultimately inspire other development sectors. This matches the Addis Ababa vision, which stressed that cross-sectoral learning and integration are crucial to a development model in which "no country or person is left behind".[1]

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Academic promotion policies and equity in global health collaborations

When global health researchers in low-income and middle-income countries (LMICs) collaborate with academics in high-income countries (HICs), these partnerships often result in disproportionate benefits for the HIC researchers who gain more opportunities for authorship, more prominent authorship positions, more opportunities to present at conferences, and more funding for administrative and student support for LMIC colleagues. This inequity gap persists despite existing guidelines for good collaborative practice and repeated calls to improve global health research partnerships.[1] Models for equitable collaborations differ from country to country and team to team, depending on the experience and empowerment of the LMIC researchers and training institutes, research infrastructure, the length of collaborations, and the amount of funding available for research and training. However, the absence of an optimal model should not be an excuse for poor collaborative dynamics.

HIC and LMIC researchers and institutions, governments, journals, and funders all have parts to play in addressing this gap. Yet because the balance of power

***Panel*: Challenges and recommendations to HIC institutions to facilitate equity in global health research collaborations**

Embedding

HIC institutional policies impede extended residencies in LMICs.

- Remove administrative barriers that limit LMIC residencies.
- Extend tenure clocks to reflect the constraints of embedded research.
- Fund extended residencies in LMICs where research is conducted.

Equitable engagement of LMIC collaborators

Promotion committees do not focus on the nature of the collaboration with LMIC partners.

- Ask promotion candidates to detail specific efforts to promote equitable collaborations.
- Solicit performance feedback from in-country collaborators and LMIC institutional leaders.

Authorship that reflects real collaboration

Academics are evaluated by the number of publications and place in authorship order.

- Value an HIC researcher's contribution when the LMIC collaborator is first or senior author.
- Raise questions about appropriateness of publications about an LMIC that lack any authors from that country.

Training and mentorship

Training and mentoring LMIC students or collaborators is often not valued.

- Encourage candidates to teach or mentor in the LMIC.

Adequate funding for LMIC institutions and collaborators

Promotion committees value funds brought to the HIC institution but not those obtained for LMIC-related costs.

- Value funding jointly obtained by HIC and LMIC collaborators, including funds awarded directly to the LMIC institution.

HICs=high-income countries.LMICs=low-income and middle-income countries.

and rewards tilt strongly toward HICs,[2] it is important to ask what systemic, structural, and cultural factors are at work within HIC institutions that lead to these persistent problems. Our own experiences and those of a group in Kenya[3] suggest that the academic promotion process at HIC institutions is a major cause of inequitable collaborations (panel).

In HICs, most academics move along a defined faculty track, from assistant to associate to full professor. Promotions are based on publications, grant funding, and reputation, the latter generally assessed by the number of conference presentations. This time-bounded, "up or out" path puts pressure on faculty and can create perverse incentives that undermine strong partnerships in global health research. Here we outline five key areas that need to be addressed by HIC institutions, particularly during faculty promotion review, to foster equity in global health research collaborations.

First, we call for promotion criteria to support embedding—ie, the idea that HIC collaborators, including principal investigators, spend substantial time in the LMIC countries where their research is done. Embedding enables nurturing of professional relationships, development of cultural competence, and investment in the collaborative team through shared training and mentorship. Extended residence is often discouraged by administrative barriers and pressures of time limits to obtain tenure at HIC institutions.

Second, equitable engagement of LMIC collaborators and unfair research practices, such as parachuting or parasitic research,[4] should be highlighted. Promotion committees could penalise faculty who do extensive research in an LMIC but have not shown a commitment to meaningful and mutually productive partnerships with local institutions. For example, if an HIC researcher's contributions are limited to provision of funding or deployment of students or fellows to research sites in LMICs, a committee should recognise that weakness.

Third, authorship that is based on real collaboration should be incentivised. While equity in authorship does not necessarily signal an equitable collaboration, it is often an indicator of respectful team dynamics. Promotion committees usually evaluate faculty by the number and impact of their publications and their positions on authorship lists. This approach can result in authorship hoarding, particularly in coveted first and senior positions, and failure to share the publishing rewards with LMIC collaborators. We recommend that promotion committees place value on authorship lists that feature LMIC investigators in first and senior positions and ask faculty members who publish papers with local LMIC data but without local LMIC collaborators to explain why they did so.

Fourth, promotion assessments should consider a global health researcher's contribution to training and

mentorship in the LMIC where the researcher works. Although most promotion criteria require teaching, the focus usually revolves around the training of formal learners at the HIC institution; teaching in LMICs often does not fulfil teaching requirements for promotion. We recommend that promotional reviews recognise the efforts of HIC faculty in global health to build the capacity of collaborative teams in the LMICs where they work, teach courses, mentor local students, and otherwise support local institutions. We also recommend that HIC institutions facilitate hosting LMIC collaborators and students for reciprocal exchanges and learning.

Fifth, promotion committees should consider their faculty's efforts to ensure adequate funding for collaborating LMIC institutions and colleagues. Many promotion committees focus on the amount of grant funding that faculty members bring to the HIC institution. This focus often means that the LMIC in-country research costs are consistently underfunded, LMIC collaborators' time is not adequately covered, and expenses for LMIC investigators to travel to international conferences and other collaborative venues are under-budgeted. We recommend that HIC institutions commit to budgeting the real costs of global health research done at LMIC sites.

Moving from talk to action on equitable partnerships requires overhauling long-standing guidance for evaluating HIC faculty for promotion and HIC faculty themselves being more mindful of privilege. Faculty who consistently do global health research without sincere engagement and promotion of LMIC collaborators should face consequences at their home institutions, while promotion committees should celebrate faculty who take concrete steps towards equity in their research collaborations. HIC institutions cannot espouse global health research without sincerely and constructively grappling with the tensions between long-standing promotion practices and the imperative to engage in fair and ethical collaborations. The time is now to resolve this disconnect and develop best practices to enhance the quality of our global partnerships and scholarship. We demand better.

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