

RESEARCH AND EDUCATION

Global health partnerships: Are they working?

Jonathan A. Muir is a Ph.D. student in the Department of Sociology, a MPH student in the Department of Epidemiology, and a Strategic Analysis and Research Training (START) Research Associate at the University of Washington, Seattle, WA 98104, USA.

Jessica Farley is an MPH student and START Research Assistant in the Department of Global Health at the University of Washington, Seattle, WA 98104, USA.

Allison Osterman is a master's student in the Department of Global Health in the Health Metrics and Evaluation track at the University of Washington and a START Research Assistant, Seattle, WA 98104, USA.

Stephen E. Hawes is an Associate Professor in the Department of Epidemiology and has adjunct appointments in the Departments of Global Health and Health Services at the University of Washington; he is Associate Director of START Center in the Department of Global Health, University of Washington, Seattle, WA 98104, USA.

Keith Martin is the founding Executive Director of the Consortium of Universities for Global Health in Washington, DC 20036, USA.

J. Stephen Morrison is Senior Vice President and Director, Global Health Policy Center at the Center for Strategic and International Studies (CSIS), Washington, DC 20036, USA.

King K. Holmes is a Professor of Global Health and Medicine and Adjunct Professor of Microbiology and Epidemiology, University of Washington, Seattle, WA 98104, USA. *E-mail: kkh@uw.edu

IN 2014, *SCIENCE* AND *SCIENCE TRANSLATIONAL MEDICINE* JOINED FORCES TO PRODUCE an important special issue on global health, which suggested that existing tools can deliver big payoffs (1). The special issue assessed plateauing budgets for global health; the effectiveness of large-scale global health projects; evidence for reduction in global mortality and gender inequities; the scope and trends of the global burden of disease; delivery and coverage of essential global health products; models for integrating research, capacity building, and service with global health education in medicine, public health, and engineering; the growing role of mobile health (mHealth) for universal health coverage; responses to global health crises; emerging and evolving infectious diseases; and a proposed global map of health research and development.

To assess how well global health partnerships for research and education are working, we subsequently undertook a survey of all North American university members of the Consortium of Universities for Global Health (CUGH) and a concurrent survey of their international partner institutions in lower- and middle-income countries. Survey participation rates were high, including 82 North American universities (81% of all 2015 CUGH members) and 47 international partner institutions, (77% of the partner institutions with contact information identified by North American universities). Sample interviews of participants from the North American and international institutions helped to define key themes and contributed to a framework for future global health research and education partnerships.

The survey results, published 1 April 2016, are available here (2). Some of the key cross-cutting findings are listed below.

- (i) The most common types of partnerships include collaborative research (reported by 94% of North American and 80% of international institutions) followed by various types of educational programs (especially for North American students) and health systems development (for 69% of international institutions).
- (ii) High levels of perceived equity and mutual benefits by North American and international institutions.
- (iii) The strongest perceived partnership benefits were from research collaborations and student knowledge acquisition.
- (iv) The most important source of funding for North American institutions was the university itself, followed by the U.S. National Institutes of Health (NIH) other federal funds [including the President's Emergency Plan for AIDS Relief (PEPFAR)], and then foundations and private donors. International partners also depended not only on funding from the North American universities, but equally on foundations, international non-governmental organizations (NGOs), United Nations agencies, international research agencies, and other donors.
- (v) Factors other than funding that correlated with perceived benefits from partnerships for North American universities included being part of larger institutional partnerships, and for international institutions, correlated with the level of North American universities' student preparation.
- (vi) The following areas indicated correctible problems in the collaborations: 20% of North American universities and international institutions reported poor or only fair collaboration in establishing mutual goals; more than 30% of North American universities and international institutions reported poor or only fair collaboration in monitoring and evaluation; and 34% of North American universities and more than 40% of international institutions reported only fair or poor feedback and communication with their partners.

A 10-step framework for success of global health programs was developed from the surveys, interviews, and literature review. These steps included identifying champions and a core team; developing a strategic plan; obtaining institutional support and baseline funding; developing future leaders; guiding student enthusiasm and expectations; monitoring and evaluation; systematic

Citation:

J. A. Muir, J. Farley, A. Osterman, S. E. Hawes, K. Martin, J. S. Morrison, K. K. Holmes, Global health partnerships: Are they working? *Sci. Transl. Med.* **8**, 334ed4 (2016).

10.1126/scitranslmed.aaf6594

communication; and building cross-university interdisciplinary networks. The survey findings document the perceived importance of several collaborative activities—in particular, investments from the North American universities, which are particularly important in the success of global health partnerships—and also identify collaborative activities in need of improvement. The most common collaborations included research as well as education and training, and the findings indicate the potential synergies between global health research and training programs.

–Jonathan A. Muir, Jessica Farley, Allison Osterman, Stephen E. Hawes, Keith Martin, J. Stephen Morrison, King K. Holmes*

1. B. Jasny, L. Roberts, M. Enserink, O. Smith, What works. *Science* **345**, 1256–1257 (2014).
2. J. A. Muir, J. Farley, A. Osterman, S. E. Hawes, K. Martin, J. S. Morrison, K. K. Holmes, Global health programs and partnerships: Evidence of mutual benefit and equity. A Report of the CSIS Global Health Policy Center, *Rowman & Littlefield*, April 2016. <http://csis.org/analysis/global-health-programs-and-partnerships>

Science Translational Medicine

Global health partnerships: Are they working?

Jonathan A. Muir, Jessica Farley, Allison Osterman, Stephen E. Hawes, Keith Martin, J. Stephen Morrison and King K. Holmes

Sci Transl Med **8**, 334ed4334ed4.
DOI: 10.1126/scitranslmed.aaf6594

ARTICLE TOOLS

<http://stm.sciencemag.org/content/8/334/334ed4>

RELATED CONTENT

<http://stm.sciencemag.org/content/scitransmed/6/245/245ed17.full>
<http://stm.sciencemag.org/content/scitransmed/7/316/316ed14.full>
<http://stm.sciencemag.org/content/scitransmed/3/101/101cm28.full>
<http://stm.sciencemag.org/content/scitransmed/6/260/260cm11.full>

REFERENCES

This article cites 1 articles, 1 of which you can access for free
<http://stm.sciencemag.org/content/8/334/334ed4#BIBL>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science Translational Medicine (ISSN 1946-6242) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science Translational Medicine* is a registered trademark of AAAS.

Copyright © 2016, American Association for the Advancement of Science