Introduction
The work of the Committee on Global Health and International Partnerships, which met five times between March 27 and May 21, 2014, was guided by the following charge:

• To describe the depth and breadth of the global health activities currently available in the Medical School
• To determine which activities are most effective and why
• To determine which activities are sustainable
• To identify goals for efforts for the next 5-10 years
• To identify programs that have potential for fundraising

The committee reviewed the current state of global health (GH) education, research, international collaborations and partnerships at TUSM, focusing on current strengths/assets. We also identified gaps and opportunities that will need to be addressed in order to further advance GH at TUSM in the next 5-10 years. Finally, in order to place TUSM’s involvement in GH in a larger context, we reviewed current trends in GH, and the role of other US universities in advancing GH.

Current global health activities and education at Tufts

Background and current activities
• Historically strong: GH at the Medical School has been in place for over 40 years although without administrative assistance or organization.
• Establishment of Dean for Global Health in 2009.
• Establishment of TUSM Global Health Faculty Council in 2010 and Global Health Seminar Series the following year to promote faculty exchanges and collaboration.
• Established Center for Global Public Health in 2013.
• Support for student involvement in global health has grown steadily, starting with the establishment in 2006 of Global Health Placement and Travel Scholarship Program for TUSM students.
• Establishment of GH concentration within the Master in Public Health Program in 2009
• Collaborations in over 20 countries in four continents; most active sites include: India, Ghana, Kenya, Namibia, Guatemala, Nicaragua, Haiti, and Panama.
• Current strengths in diarrhea, nutrition, HIV, water.
• Since 2005 TUSK has been installed at 14 schools in 10 countries in India, Africa, and the Middle East.
• Twenty years of training grant funding for international colleagues to obtain MPH or MSc in Clinical Research from Tufts (10 degrees granted to date).

Strengths

• The Medical School
  a) Successful system for placing students in GH program and availability of travel grants to support students’ participation in GH clinical electives, public health applied learning experiences, research and medical missions. The placement process is via a competitive application process, and is a national model. The pre-travel orientation, post-travel debriefing and program evaluation processes are robust and highly rated among students.
  b) GH faculty council ensures dissemination of GH activities and internal collaborations
  c) Involvement of numerous faculty members in multiple departments in various GH projects spanning education and training, research, implementation science, capacity building, technical support, service delivery and innovation.
  d) Current successful and productive research activities and collaborations in diarrheal disease, growth faltering, water, HIV, nutrition, among others, in multiple international sites.
  e) Successful MPH program with a GH concentration:
     • Successful degree program that attracts students nationally and internationally
     • Founding of a unique semester abroad for MPH students at Christian Medical College
     • Joint venture to build a Tufts-CMC-Global Health Education program

• The Center for Global Public Health
  a) Increasing the impact and visibility of GH faculty and Tufts University nationally and internationally, improving funding prospects, increasing research output and broadening scope of activities and collaborations.
  b) Center working to foster collaborations throughout the University and with governmental agencies, NGOs and international organizations.
  c) Responding to global transition to non-communicable diseases – research in CVD, DM, cancers and aging in the US and in low and middle income countries already in place.

Current challenges and opportunities in global health

While TUSM has in place a strong foundation to support faculty and student participation in GH, we also found that there were gaps in key areas, including logistical support, communication (within TUSM, across the University and with the external world) and sustainable sources of funding support for current programs.
Infrastructure and logistical support for international programs:
- Lack of sustainable funding sources to support TUSM students to work- or study GH internationally.
- Need for additional faculty in GH for research, teaching and service, and additional faculty mentors to meet the growing interest and participation in GH projects and field experiences.
- Need for support for Global Health faculty; potential mechanisms of support could include designated Chairs.
- Support for International collaborators to visit Tufts for faculty/project development.
- Housing for students or colleagues who visit Tufts.
- Office space for visiting scholars.
- Funding for course work or degree programs for international colleagues at Tufts.
- Administrative support for international trainees.

Communication:
- Gap: Need better communication about ongoing activities to foster collaborations within TUSM and across the university.
- Challenge: need to market our successes and activities more publically; improve visibility of GH activities at Tufts.

Effectiveness and Sustainability:
- Local capacity building is a challenge for many of our partner institutions. TUSM has a unique opportunity to leverage our collaborations to assist in providing needed training to health care workers, research and program coordinators, and allied health professionals. This will help not only to strengthen our collaborations but also will contribute towards sustainability of the programs and interventions. Another challenge has been sustaining effective usage of TUSK at schools in Africa and India where TUSK has been introduced. The schools in Africa alone, all grant funded, are not ready to support TUSK at the end of the grant period.
- There is a need to develop better strategies to choose new sites for GH activities, and means to foster and recognize international colleagues and mentors.

In addition to the aforementioned challenges, the committee identified a number of existing opportunities (including current strengths and expertise) of which TUSM is yet to fully take advantage in the global health arena:

Distance Learning – If we wish to provide education and training to distant students, there is a significant gap in GH training resources, particularly staff, to support online teaching and learning.

Simulation – There is a huge potential to leverage Tufts-wide expertise in simulation to support education and training opportunities for international partners. In order to take advantage of this innovation, TUSM should explore the development of simulation related curriculum technology to tackle numerous public health related issues, especially related to quality and safety, and work on dissemination with international partners.

Quality Improvement – Explore how to leverage GH service activities to encompass evaluation and quality improvement activities.

Expertise in aging at Tufts – Explore how to leverage this expertise to international sites.
Committee recommendations

Education and Training
The variety and depth of TUSM’s current international partnerships in education and research can be further strengthened by promoting **greater reciprocity** through:

1. Funding collaborative, pilot projects for teams of faculty from TUSM and International sites.
2. Ensuring bi-directional travel funding for students and for colleagues from international sites.
3. Expanding resources and logistical support including short and long term housing for students and colleagues visiting from international sites as well as office space.
4. Developing curriculum on health care delivery and implementation science and making this a prominent part of each project and GH education for students.
5. Integrating GH education into the MD curriculum, given its importance and relevance to the practice of medicine for the 21st century physician. This will ensure that all medical students (not just those students who choose to participate in a GH experience while at TUSM) will acquire a core set of competencies in GH.
6. Developing ongoing technical support for international institutions that currently use TUSK.

Research
1. Promote greater faculty collaborations within TUSM and across Tufts to enhance areas of strength
2. Promote new faculty hires in GH and support current faculty by founding chairs of GH
3. Provide seed grant support for existing faculty and new faculty to engage in evolving research:
   a. Non-communicable diseases
   b. Implementation science to improve the uptake, implementation, and translation of research findings into routine and common practice (see technical support)
4. Provide seed grants to faculty teams from TUSM and international sites to promote interdisciplinary collaboration and to develop pilot data that can be leveraged to attract external funding.
5. Provide opportunities for trainees to obtain funding for GH doctoral thesis support.

Innovation
1. Promote a culture that encourages faculty and students to engage in innovation in the research and design of technologies, programs, interventions and teaching by methods such as GH innovation awards and school-wide annual symposia to celebrate faculty and student achievements.
2. Provide support and resources for faculty to work with international colleagues to facilitate timely adoption of proven innovations to scale and to maximize their impact.
3. Assist international partners to create sustainable implementation of proven innovations.
4. To support workforce development Tufts can leverage the work of TUSK installations in 10 countries by developing a sustainable model similar to the work “OpenMRS” an Open Source Medical Record system developed as a collaboration from the University of Indiana and Partners for Health. This might involve funding a start-up organization based in the developing world with a fee for service paid by participating schools.
5. Leverage Tufts’ expertise in simulation education by building on the work of Paul Sergeant MD, PhD regarding low cost simulation models (virtual anastomosis).
6. Develop distance learning models which leverage our current assets to support GH research, education and health care delivery/service.
**Capacity building in research, education and training**

1. Increase access to Tufts’ short courses and degree programs for our international partners.
2. Cultivate new funding sources that specifically support capacity building, and assist our faculty and their collaborators in securing sustainable funding sources.
3. Provide support for development of on-site training seminars in international sites.

**Technical support**

1. Leverage our research expertise by studying the effectiveness of interventions aimed at preventing diseases, and implementing care delivery systems.
2. Adopt an outcomes-oriented approach towards our work in GH, incorporating program assessment in our collaborations to enable us to demonstrate effectiveness of the projects we implement. This outcomes orientated approach will enable us to better determine the impact TUSM is having on the health of the communities within which we work, and to adopt an evidence-driven approach to future programs.

**Service delivery**

1. A number of our faculty and students are engaged in the direct provision of health services to under-served communities. These activities need to be catalogued; oversight needs to be standardized and monitoring and evaluation of defined outcomes need to become routine.
## Membership

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<tr>
<th>Name</th>
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