ABSTRACT
The world is becoming more interconnected with a need for a global approach to healthcare. Brown University has remained a leader in global health through clinical service, education, cutting edge research and dedication to the development of sustainable global partnerships. We describe two programs from the ground up in Haiti and Ukraine, and the important lessons learned in their development.

The path towards the development of global health programs in Ukraine and Haiti both illustrate that although circumstances may vary between global health programs, the recipe for successful collaboration is the same: identifying specific needs, developing strong and sustained partnerships, and addressing barriers by crafting effective solutions to ongoing challenges.

KEYWORDS: Haiti, Ukraine, Global Health, international collaboration, internationalization

INTRODUCTION
Many academic institutions have increased their focus on global health over the past few years. Migration and increasing foreign travel have mitigated geographic barriers of disease transmission. SARS, drug-resistant tuberculosis, and the 2009 H1N1 influenza epidemic are prime examples of global dissemination of diseases. Global health seeks interconnected solutions to problems of economic development, access to quality health care, and barriers to care. Addressing these issues through a multi-disciplinary approach involving economic, environmental, political, and global cooperation is reflected in the priorities set forth by university global health programs.

Brown University remains engaged in global health through clinical service, medical education, and cutting edge research. Brown faculty and trainees of all levels continue to respond to global inequalities of health and access to care. The most successful interdisciplinary program at Brown is the Academic Model Providing Access to Healthcare (AMPATH) program with Moi University in Eldoret, Kenya. AMPATH has set the standard for long-term sustainable inter-institutional collaboration by promoting health through high-quality patient care, improving capacity through medical education, and mutually strengthening research programs both in the United States and Kenya.1,2

The creation of new programs in global health begins with identifiable needs and develops through bilateral partnerships aimed at addressing those needs in an equitable collaboration. The goal of this article is to describe two new programs, developed from the ground up, in Haiti and Ukraine and the lessons learned in developing new collaborations (Figure 1).

DEFINING NEEDS
Haiti
Prior to the earthquake that devastated Haiti in 2010, its health statistics were the most dismal of any country in the Americas. Poverty, malnutrition, pregnancy-related mortality, and mortality of children under five only begin to frame the health issues facing the country.3 Despite the outpouring of international efforts after the earthquake, Haiti’s health system remains fractured and failing.4 One critical factor is the lack of trained professionals. The target physician density set by the World Health Organization (WHO) is 2.3 per 1000, and in Haiti the density is only 0.25 physicians per 1000 Haitians, compared to 2.67 in the United States, or...
1.8 in the neighboring Dominican Republic.\(^3\) Overwhelmed with the patient load of the hospital and private practices to run on the side, academic physicians have limited time to spend training medical students and residents. The paucity of clinical training opportunities leads to under-investment in trainees who are ill-equipped and unprepared to see patients on their own. Without adequate in-country experiences, many trainees seek international settings to learn, and often do not return.

Drs. Susan Cu-Uvin, Timothy Flanigan, Michael Koster, and Sybil Cineas [Brown clinical faculty] with the support of Patrick Moynihan [president of The Haitian Project], toured several hospitals in the Port-au-Prince area during March of 2010. It was clear that St. Damien, a children’s hospital in Tabarre, distinguished itself as a stable institution among the chaos of post-earthquake Haiti. We pursued a long-term partnership with key stakeholders at St. Damien to address the expressed need of providing in-country clinical education through bedside teaching to the medical students rotating from the Université Notre Dame d’Haïti [UNDH].

Ukraine

In 1991, Ukraine gained its independence from the former Soviet Union, but the health system remains a relic of vertically designed systems that are now barriers to quality care, especially for patients with HIV and/or tuberculosis [TB]. At the same time, Ukraine has the highest rate of HIV infections in Europe and some of the highest rates of multidrug resistant TB in the world. The incidence of TB has increased from 32 per 100,000 in 1991 to 102 per 100,000 in 2009.\(^5-6\) This is a marker for not only a high rate of HIV, which has fueled the tripling of TB cases, but also a failure to appropriately address the epidemic on a national level.

Limited resources due to a transitioning health care system have caused intermittent drug supplies and contributed to multiple drug resistance [MDR]. In some areas, the level of MDR has surpassed 20% of those patients treated for primary TB and is higher than 40% in those with previous treatment.\(^6\) Reimbursements and pay are very low for physicians, especially in the treatment of TB, resulting in an aging cohort of doctors all trained in an outdated and nonfunctional system. A patient with a diagnosis of TB and/or HIV may additionally be facing social stigma, economic hardships, and co-morbidities with other illnesses. A strong system of multidisciplinary care within a functional health care system is needed to address these issues. Although change in a system takes time, it also takes motivation and often support from global collaborators to encourage perseverance.

Key physician mentors from Brown, including Dr. Flanigan and Dr. Boris Skurkovich, have been able to work with Ukrainian collaborators to identify specific needs a partnership could address in Ukraine. These needs include improved clinical education for HIV/TB care for women and children and the creation of working multidisciplinary models of care. Some of the factors related to the success and implementation of these models of care are affected by societal perceptions influenced by the media as well as economic feasibility. Therefore our collaboration in Ukraine has
identified needs to include broad topics such as: 1) education to improve accurate and informative media coverage of HIV- and TB-related topics, and 2) research on the economic impact of HIV and TB epidemics on the economy of Ukraine.

DEVELOPING PARTNERSHIPS

Partnerships are the keystone of successful collaboration. They must be mutually beneficial, trustworthy and long-standing to sustain collaboration. Creating partnerships also takes significant investment, being on-the-ground with face-to-face time is essential to establish relationships, mutual trust and confidence.

Haiti

Our first partner in Haiti was with Louverture Cleary School (LCS), a free boarding school for disadvantaged Haitian children. LCS is run by The Haitian Project, a Providence-based nonprofit organization, which supported our logistics (security, transportation, room and board) during the first several visits in 2010, when strained medical institutions could not support volunteers.

During our first meeting with the St. Damien Hospital for Children’s administration, there was significant distrust and resistance to involving another partner into a system that was already taxed. Recognizing that foreign aid can be distracting and draining to current systems, we first listened to the needs of the hospital and community. Most of the concern centered around past experiences of groups trying to change operations in one visit, without understanding the context of the economic, political, and cultural milieu. One critical issue identified was health-force shortage, especially well-trained pediatricians. Even within St. Damien’s, most physicians lack pediatric residency training. There are barely enough doctors to cover the clinical service, and only a few are able to dedicate the time to teach students. We committed to a long-term partnership, offering to augment rather than change current practices. Repeat visits with the same core faculty demonstrated our dedication to the partnership and strengthened the working relationship both with physician colleagues as well as with administration.

In parallel, we continued to meet with the dean and key administrators at UNDH, including a visit in October 2010, where Dean Edward Wing of Alpert Medical School and Robert Klein, MD, chair of the Department of Pediatrics, traveled to Haiti to negotiate a memorandum of understanding between the universities and hospitals. This support was essential to achieving and maintaining successful negotiations. An LCS graduate attending UNDH medical school, with significant experience at St. Damien after the earthquake, operated as the on-the-ground liaison. This liaison was critical in facilitating communications and coordinating efforts of all partners. Next, during a month-long visit in March of 2011, we worked side by side with our Haitian colleagues and created an academic environment for students, which was well received from the perspective of the students, as well as key stakeholders at St. Damien and UNDH.

Building on the success of supporting medical student education through lectures, bedside-teaching, and clinical education, we also pursued small research projects with Haitian collaborators at their request. Brown hosted a talented UNDH student, committed to pediatrics in Haiti, for a month-long elective in pediatric infectious diseases during the summer of 2011. At the same time, a faculty physician and social worker from St. Damien also attended the Brown University’s Advanced Research Institute (BIARI) for HIV care. These activities again allow for significant relationship building and with their success have solidified the partnership. We continue to pursue further co-partnerships with larger institutions such as the American Academy of Pediatrics [AAP, Section of International Child Health], the Haitian Pediatric Society, and discussions with other U.S. academic institutions now becoming involved with St. Damien.

Ukraine

The development of partnerships in Ukraine evolved over a period of years starting as early as 2006. The partnerships began with several small unrelated medical trips by people related to Brown over a period of 5–7 years. Slowly the realization of an interest in the same region of the world was recognized and a group of interested partners coalesced. A collaborator on previous medical projects in Ukraine served as a cohesive source and facilitated several trips to seek out potential collaborators in the field of HIV/AIDS and TB. In parallel, an opportunity arose to fund improved care among women and children affected by HIV/AIDS in Ukraine and Brown University received the first grant to support work in Ukraine in September 2011. This created an opportunity to address many of the issues facing the barriers to care among HIV and TB patients in Ukraine.

The following year was spent making multiple trips to
Ukraine to meet with potential collaborators. The goal of these meetings was to create a multidisciplinary approach to care that addressed not only the medical care for patients, but also economic and social barriers to excellent care. These factors include the media perception and coverage of HIV and TB, health economics and how health of individuals affects the economy of Ukraine, and how social support and innovative technologies including cell phones can be adapted to make a difference in supporting patients through challenging treatment regimens. By identifying collaborators in these areas we were able to encourage dedicated people to present proposals to address these issues. We then were able to work with them to optimize and finance their proposals through the generous support of the ANTIAIDS Foundation. We are currently in the stages of financing projects and aiding in their implementation in Ukraine.

BARRIERS AND SOLUTIONS

Lack of time to spend on committed projects is the major barrier of collaboration. Usually both parties are working on these projects in “spare time” as these projects are in addition to their full-time responsibilities. Additional barriers include language, cultural differences, financial, social and historical constraints, assessment of benefit, and lack of commitment. Very often there can be a different approach to the normal work day or the standard form of communication from the norms in the United States and recognizing these differences can be critical in maintaining a working collaboration.

Many of these barriers can be alleviated with strong relationships that have weathered multiple projects together over time. The key is identifying partners that are willing to work towards a common goal, maintain communication with frequent face-to-face visits, and flexibility to address barriers as they arise. The ability to address issues as they appear also greatly improves when a person who serves as a project manager/facilitator is able to be “on the ground.” Creating a team of dedicated partners, especially a multidisciplinary team also helps solve problems. Consistent and diligent efforts are needed to continue the collaboration. With consistency over time the approach is more like walking a smooth road rather than climbing a hill. Starting with small projects and attainable goals, and building on success are critical to creating a long-lasting and productive partnership.

One example of a small project with the potential of success is the creation of a journal club. Journal clubs are a common occurrence in U.S. medical education, but unheard of in Ukraine. The introduction of a Skype journal club between collaborators opened the doors of communication and discussion for new ideas and views of research and allows a safe forum for questions and brainstorming to foster clinical research.

This interactive process will be the cornerstone of a robust partnership, and has the capacity to blossom into a program like AMPATH that provides comprehensive care, improved education, and relevant research through an academic medical model.

CONCLUSIONS

The world is becoming more interconnected with a need for a global approach to not only health care but the multitude of issues affecting health. Understanding the contributing elements to successful collaborations on global health creates building blocks for future implementation of multidisciplinary solutions to global issues. The time and effort that is spent understanding and implementing joint global health projects among nations will enhance medical training and lay the foundation to successfully address any future array of problems such as economic development, cultural barriers and political instability, among many others.

The two programs described here illustrate that although circumstances may vary between global health programs, the recipe for successful collaboration is the same: identifying specific needs, developing strong and sustained partnerships, and addressing barriers by crafting effective solutions to ongoing challenges. Only through this mutually dedicated process can we hope to successfully build capacity and strengthen health care on a global level.
References

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