Research Fellowship in Type 1 Diabetes and Global Health Equity

Fellowship Director: Gene Bukhman

INTRODUCTION
The Division of Global Health Equity, housed in the Department of Medicine at Brigham and Women’s Hospital, is seeking a clinician (physician, nurse, or physician assistant) interested in advancing their research skills and experience regarding the type 1 diabetes (T1D) burden in populations living in extreme poverty. This fellowship will include direct collaboration with the Program in Global NCDs and Social Change, housed in the Department of Global Health and Social Medicine at Harvard Medical School (HMS), and the NCD Synergies project at Partners In Health (PIH). The team across BWH, HMS, and PIH focuses on diverse areas within the noncommunicable disease (NCD) spectrum, including implementation, policy, education, and research in “integration science” for NCDs and injuries among those living in extreme poverty.

OBJECTIVES
The fellowship will include the following primary objectives:
1) To gain experience and technical knowledge in T1D research relevant to low-income countries
2) To collaborate with and support country-level colleagues
3) To support clinical innovation around T1D practice in these settings
4) To provide clinical training to other providers in these settings
5) To effectively collect and analyze data on innovative T1D interventions

The Fellowship Program strives to attain these goals by providing fellows with a combination of formal didactics, mentored clinical and training activities, and mentored research.

PARTNERSHIP COLLABORATIONS
Given the nature of the close collaboration across PIH, HMS, and BWH, the fellow will be expected to work within the expectations and priorities of all partners. This is especially important when visiting the PIH site-based teams, which are executing care delivery and research in accordance to the leadership of the respective ministries of health.

CURRICULUM OVERVIEW
The proposed Fellowship Program would be a one to two-year research fellowship in global health and T1D. The first year would begin with intensive didactic and practical training designed to provide fellows with a strong foundation in the practice of global health in resource-limited settings.

This training would start with the three and a half week Global Health Delivery Intensive (GHDl) Program offered each summer at the Harvard School of Public Health (HSPH). The GHDl Program is designed for mid-career global health professionals seeking training in global health delivery concepts and skills. Participants in the GHDl program take three courses: Epidemiological Methods for Global Health (IDS505), Introduction to Global Health Care Delivery (GHP532), and Management Practices in Health Care Delivery (GHP555). The educational goals of the Global Health Delivery Intensive (GHDl) Program are to initiate the fellows into a new way of approaching global health, to introduce them to the science of global health delivery, and to provide them with the tools they need to be successful practitioners in this field.
This intensive month of didactics would be followed by a 10-day on-site Global Health and Social Medicine course in a PIH-supported country, also known as the “Global Health Boot Camp.” This course has previously been established and consists of site visits, mobile clinics, direct patient care at the hospital and health center level, didactic lectures, and facilitated discussions. The educational goals of the Global Health Boot Camp rotation are to learn about the social, political, and economic factors that have shaped health care systems in resource-poor settings, to gain a deeper understanding of the social determinants of health, and to gain firsthand experience with a model of care which addresses these factors.

Trainees will then participate in a four-month field-based practicum in Haiti, Malawi, Liberia, or Rwanda, followed by a three-week writing period in the fall, and again in the spring (during which time they will be placed in a different country). Trainees will be learning primarily through practice-based, experiential learning. They will be guided by experienced mentors through this process. Fellows will also learn by teaching key concepts and skills to mid-level providers in other countries particularly around type 1 diabetes.

One of the primary Fellowship goals is to prepare Fellows to effectively collect and analyze data on innovative T1D interventions. During the formal didactics period at the beginning of the fellowship, trainees will have lectures on global health research ethics, research capacity building, research proposal development, and methods in implementation science. Throughout field-based time periods, Trainees will participate in the design of monitoring and evaluation systems for these interventions, and they will collect and analyze data on associated costs and relevant outcomes under the mentorship of the Program Director and PIH site-based colleagues.

During each of the two writing periods, trainees will have three weeks of protected time dedicated to completing the analysis and writing up the results of their field work. This can take the form of developing new training materials, or analytic work that results in a peer-reviewed publication. The two writing periods will follow the two practicum periods, and will also give trainees time an opportunity to reflect on their experiences and lessons learned during their field experience.

LOGISTIC CONSIDERATIONS
- Location: This position is based in Boston, USA at Brigham and Women’s Hospital with significant time spent in up to four PIH-supported countries, including Rwanda, Malawi, Liberia and Haiti. Approximately 8-9 months will be spent in the field.
- Time commitment: At least 1 year, with 2 year preference; Starts in July 2020
  - Full-time position with flexibility for protected time to conduct US-based clinical practice
- Personal leave: As is consistent with BWH policy, we will give four weeks of vacation time and twelve paid sick days.

IDEAL QUALIFICATIONS
- Clinician (physician, nurse, or physician assistant) with experience treating T1D patient and managing T1D treatment programs
- Master’s degree in public health or other field related to global health research
- At least one year of global health field-based experience
- Proficiency in quantitative research methods and statistics
- Fluency in spoken and written English
- Proficiency with STATA (or other statistical software), Microsoft Word, Excel, PowerPoint
• Experience in clinical research, including literature review, academic writing and basic data analysis
• Excellent communication skills, ability to work well with diverse team and exhibit humility, respect and team spirit
• Flexibility in to travel and be based in field for at least 8 months per year.