**Final Progress Report** 

## Queenan Fellowships for Global Health: Investigator-Initiated Research Grant "The Length of the Cervix among HIV-infected Women in Botswana"

I am happy to report that we have completed recruitment for the Cervical Length Study in Botswana.

This academic year (2016-2017) included 3 research blocks in Botswana dedicated to recruitment for the Cervical Length Study (September/October, 2016; January, 2017; April, 2017). Our patient recruitment summary is below.



During each research block, I traveled to Botswana and went to Molepolole daily to recruit patients in the ultrasound unit at Scottish Livingstone Hospital. Again, the Botswana Harvard Partnership provided research assistant support, and we steadily recruited patients throughout each scheduled block. Meanwhile, I continued to have weekly Skype meetings with my Maternal Fetal Medicine and Infectious Disease mentorship team in Boston.



Prior to my study visits, Findo, the study research assistant, performed outreach visits to the surrounding clinics to remind them of my scheduled recruitment push. This meant that women in the designated gestational age range could come for an obstetric scan with gestational age assessment. If eligible for the study, the patient would be asked if she would like to volunteer for the Cervical Length Study. During each recruitment

push, Findo and I would do outreach together to the surrounding clinics to thank the midwives for sending their patients to us for an ultrasound and to give them a schedule for our next recruitment push. In this way, I had the privilege of getting to know some of the dedicated midwives in the community and understanding where the patients were coming from when they arrived for an ultrasound.

Aside from my research priorities during my time in Botswana, I contributed to teaching residents and medical officers at the Scottish Livingstone Hospital. I attended morning report each day before the ultrasound unit opened for patients, discussed cases, and occasionally gave a lecture on an obstetrics topic. Being a part of the day-to-day teaching environment in a hospital in Botswana was challenging and rewarding, and a true privilege of this Queenan Fellowship for Global Health.

With my travel back and forth from Boston to Botswana over the last two years, I formed what I hope will be a lasting relationship with the Botswana Harvard Partnership and Scottish Livingstone Hospital. I will be forever grateful for the Queenan Fellowships for Global Health that helped me hone research skills in the global health setting and develop relationships with patients, providers, and mentors that will inform my career in Maternal-Fetal Medicine forever.

The Cervical Length Study has completed enrollment. Statistical analysis and writing are underway. We will send the completed manuscript to the Foundation for SMFM.

## **BUDGET:**

All \$15,000 from the Queenan Fellowship Grant was used for travel-related expenses. There were no indirect costs for the Cervical Length Study. Research assistant salary support was sponsored by the Botswana Harvard Partnership. The Sonosite (Titan Model) portable ultrasound machine used throughout this study was procured through the SoundCaring Program, and donated to this project.

TIMELINE and DELIVERABLES:	
April, 2015	Pilot research trip to Botswana
August, 2015	IRB Approval, MGH
February, 2016	Ministry of Health Approval, Botswana
February/March, 2016	Research rotation #1: relationship building and study planning
April/May, 2016	Research rotation #2: Begin patient recruitment
June, 2016	Research in Progress presentation at the Harvard University Center for AIDS Research
July, 2016	Mid-project surveillance and continued enrollment, recruitment push
September/October, 2016	Research rotation #3: Recruitment push
November, 2016	Study progress evaluation
January, 2017	Research rotation #4: Recruitment push
April, 2017	Research rotation #5: Final recruitment push
May, 2017	Data entry Fellows Research in Progress presentation at MGH Department of OBGYN
June/July, 2017	Complete data review, statistical analysis Abstract submission for SMFM, 2018
Fall, 2017	Manuscript completion