## **ABSTRACT**

Increasing Access to Ultrasound and Obstetric / Neonatal Training Education in Uganda.

## Kampala, Uganda

In 2015 a partnership was established between the Ernest Cook Ultrasound Research and Education Institute (ECUREI) in Uganda and Rad Impact, a United States based non-profit organization dedicated to improving maternal and child health abroad. ECUREI, in collaboration with the Uganda Protestant Medical Bureau (UPMB), selected 12 rural Ugandan prenatal clinics that had low antenatal care attendance rates to receive ultrasound machines from Rad Impact. These 12 clinics each sent a midwife to receive ultrasound training in a 6-week intensive course offered through ECUREI in January 2016. In January 2017 each of the 12 previous clinics plus an additional 7 clinics sent representatives to received training in the Advanced Life Support in Obstetrics (ALSO) and Helping Babies Breathe and Essential Care for Every Baby. Additionally, a radiologist and engineer worked one on one with the ECUREI faculty to trouble shoot issues with the ultrasound machines and provide additional training to the radiologists. Based on the feedback received from the course participants in 2017, the 2018 course curriculum was modified. Parts of the ALSO curriculum was cut out as some sections were irrelevant due to lack of technology (i.e. continuous fetal monitoring and vacuum delivery). Due to accent differences causing communication barriers, the PowerPoint lectures were cut down and the focus shifted to more hand on workshops. Additionally, the Essential Care of Small Babies curriculum was included. Three of the top students who completed the courses in 2017 were invited back to receive instructor training and they taught the entire Helping Babies Breathe course under the guidance of the U.S. delegation.

All students passed both maternal and neonatal practical examinations, demonstrating competency in managing common peripartum emergency situations. The course received overall very positive feedback from the trainees. Using pre and post likert scales, the students reported significant increase in their confidence in managing the obstetrical and neonatal conditions taught. The three students who returned for instructor training reported increased confidence in their understanding of the material and teaching abilities. One of the new instructors already has plans to lead a Helping Babies Breathe course at his local hospital.