Development of a Massive Open Online Course (MOOC) on Tropical Parasitology at the Kilimanjaro Christian Medical University College

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Rationale for MOOCs

- Internet increasingly available in resourcelimited settings
- Expand access to educational materials
- Topics optimally taught by faculty with greatest familiarity and experience
- Conceived as a complement, not a replacement, for didactic teaching





Methods

- November 2013 Duke University CIT calls for MOOC development applications; KCMU College/ MEPI faculty develop proposal on tropical parasitology
- December 2013 KCMU College application selected for \$10,000 support from CIT, supplemented by MEPI resources
- CIT provided expertise in MOOC development, instructional design, filming, editing and implementation
- KCMU College/MEPI faculty developed content including field filming and clinician interviews
- Launched through Duke Coursera website February 9, 2015





Video Recording Studio





Anopheles distinctive characteristics

Rest on upright surface at an angle of about 45 degrees



 Legs with speckled appearance









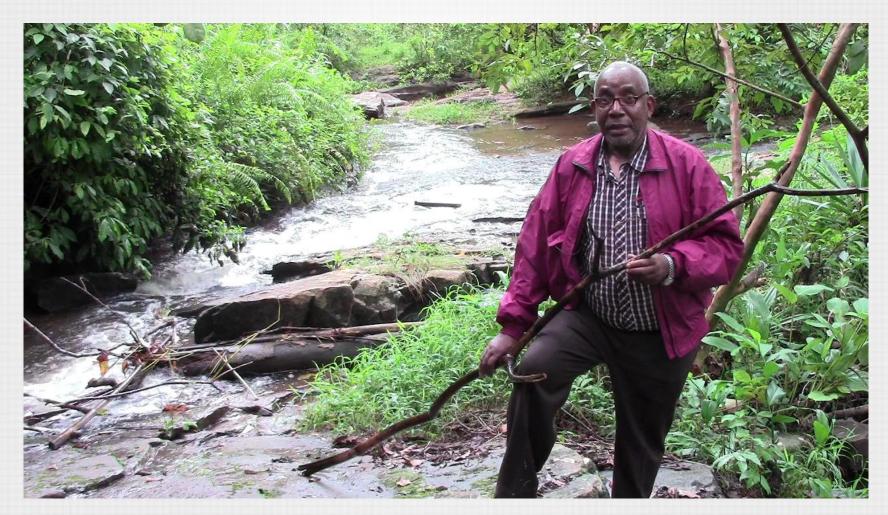
Field Recording







Field Recording







Course Content

- 13 modules (malaria, protozoa, cestodes, trematodes, nematodes and ectoparasites)
- Each module followed by a quiz
- Comprehensive final exam
- Passing students receive a certificate
- Required for all KCMU College medical, nursing and laboratory technology students





Tropical Parasitology Viewers

- 8177 viewers; 117,721 lectures downloaded,
 exams and quizzes completed 19,578
- 171 countries
- Continents: North America 35%, Europe 25%,
 Asia 17%, Latin America 11%, Africa 10%
- 40% from LMIC
- 50% had MD, PhD, nursing or MS degrees





Viewer Feedback

- 95% found the exercises extremely, very or moderately valuable in learning
- 92% extremely, very or moderately stimulating
- 93% extremely, very or moderately likely to recommend to a friend or colleague
- 775 Discussion Forum posts





Future Plans

- Revise course July 20, 2015; include more field filming and clinician interviews
- Video-recording facility utilized by faculty and students to prepare resource materials
- New Mooc's?





Conclusions

- MOOC successfully developed through a MEPI partnership
- Tropical Parasitology filled a content void and was rapidly disseminated
- SSA faculty have important knowledge and experiences to share, and should be encouraged





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