

BIOENGINEERING

Tenure-Track Faculty Candidate Seminar

Date: Monday, February 10, 2020

Time: 3:30 pm - 4:30 pm

Location: Merten Hall, 1204

(Videoconferencing to Colgan, 221)



Jenna Mueller, Ph.D.

Biography: Dr. Jenna Mueller works with the Center for Global Women's Health Technologies at Duke University to develop accessible biomedical devices to improve the management of cervical cancer in low and middle-income countries. She received a B.S. degree in bioengineering with a minor in global health technologies from Rice University, and completed both an M.S. and Ph.D. in biomedical engineering with a Doctoral Certificate in Global Health at Duke University for her work developing optical systems and automated algorithms to improve the accuracy of cancer excision during surgery.

Abstract: Cervical cancer is the second leading cause of cancer-related death for women worldwide; 85% of deaths occur in low- and middle-income countries (LMICs), despite the fact that well-established interventions exist. This disparity persists primarily due to limited access to expensive diagnostics and few patients returning for treatment of pre-invasive disease. In this talk, Dr. Jenna Mueller will describe a combination of innovations that are at different stages in the translational pipeline to transform the management of cervical pre-cancer in LMICs. These innovations include the Pocket colposcope, a portable device to screen women for cervical pre-cancer at the primary care setting, and gel ethanol ablation, an accessible treatment that involves injecting ethanol into a lesion to cause necrosis.