Title of PhD project / theme	**Lifting the neglect of female genital schistosomiasis in a** *Schistosoma haematobium* **endemic country**
Supervisory team	Amaya Bustinduy (LSHTM) Kiyoshi Kita, PhD (NU) Daniel Ken Inaoka (NU)
Brief description of project / theme	Female genital schistosomiasis (FGS) is a neglected gynaecological disorder caused by the waterborne parasite *Schistosoma haematobium*. FGS affects women of all ages and impairs their normal sexual and reproductive life. FGS has been linked to infertility, ectopic pregnancy and painful sexual encounters among others. Moreover, there is mounting evidence of an association between FGS and HIV and persistent high risk HPV infection. Community and health professional's knowledge and awareness on the disease and its consequences is often lacking. FGS diagnosis remains challenging as it relies on costly resources that are often unavailable in resource limited settings. This limits accurate burden of disease estimations and hinders the establishment of detection and treatment programmes across *S. haematobium* endemic countries in Sub-Saharan Africa. In Malawi where *S. haematobium* is hyper-endemic, there have been very few studies on FGS, and none in recent years. There is therefore little knowledge on the burden of disease and its clinical consequences. This PhD would help lift the neglect on FGS in Malawi and explore potential associations between FGS and sexually transmitted diseases. Potential projects include but not exclusively: • Diagnostic validation of different diagnostic methods for FGS • A multilayer approach to quantifying the effects on the reproductive health of girls and women • Evaluation of the feasibility and acceptability of the Point-of-Care colposcopy compared to more traditional colposcopy methods. • Identification of association between FGS and HIV/HPV through immune phenotyping. • Evaluation of the effectiveness of the treatment with for FGS • Development and testing computer-assisted-image analysis • Development and evaluation of e-training modules for midwives and other health-care personnel for FGS diagnosis.
The role of LSHTM and NU in this collaborative project	The field survey including sample collection will be conducted at LSHTM and NU field.

	Biochemical studies including serological diagnosis for FGS will take place at Nagasaki in collaboration with LSHTM. We will collaborate **Prof Hamano, Nekken** (NU), for serological diagnosis.
Particular *prior* educational requirements for a student undertaking this project	Master's degree in Public Health or Epidemiology. Experience of clinical gynaecological and infectious diseases and training in epidemiology would be advantageous but not essential.
Skills we expect a student to develop/acquire whilst pursuing this project	- Diagnostics for schistosomiasis - Epidemiological study design - Statistical analysis