



Title of PhD project	Intrapartum-related neonatal encephalopathy in Africa: Defining burden, risk and outcomes	
Supervisor	Dr Cally Tann	LSHTM
Co-Supervisor	Professor Kirsty Le Doare	SGUL
Co-Supervisor	<u>Dr Eric Ohuma</u>	LSHTM
Co-Supervisor	Professor Joy Lawn	LSHTM
Brief description of project	Complications occurring at the time of birth, leading to newborn brain injury (known as 'intrapartum-related neonatal encephalopathy'), is one of the leading cause of mortality and morbidity amongst newborns, however challenges exist in identifying those most at risk who may benefit from targeted interventions. A key barrier to providing global estimates is the lack of standardised case definition and difficulties in consistently diagnosing NE in low and middle-income country settings. This PhD project aims to estimate the regional and global burden of NE, and develop and validate a simple and effective risk score to effectively identify those with NE at highest risk. This PhD will build skills in global burden estimation and provide experience in regression modelling and application of the developed model to a large African neonatal cohort. PhD findings have the potential to positively impact future neonatal health research, policy and clinical practice.	
Skills we expect a student to develop/acquire whilst pursuing this project	Conducting systematic review and meta-analyses. Statistical modelling including linear regression. Working with stakeholders.	
Particular <u>prior</u> educational requirements for a student undertaking this project	Some basic statistics training including knowledge of using statistical packages such as Stata. Clinical experience of working in newborn or child health would be useful but not mandatory.	
Project key words	Newborn Neonatal encephalopathy	

	Risk score Global estimates
Possible under 1+4 route? Master's options identified.	Yes LSHTM - MSc Public Health LSHTM - MSc Epidemiology LSHTM - MSc Tropical Medicine & International Health
MRC Core Skills developed through this project	Quantitative skills Interdisciplinary skills
MRC LID themes	Global Health Health Data Science Translational and Implementation Research Infectious Disease
Further reading	Intrapartum-related neonatal encephalopathy incidence and impairment at regional and global levels for 2010 with trends from 1990