



LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Title of PhD project	Using data from EUROmediCAT to develop statistical methods to Identify medications that might harm the fetus if taken during the first trimester of pregnancy	
Supervisor	Professor Joan Morris	SGUL
Co-Supervisor	Professor Stephen James Weston Evans	LSHTM
Co-Supervisor	Dr Iain Carey	SGUL
Brief description of project	<p>Many women take medications during the first trimester of pregnancy, but there is a lack of evidence about the safety of these medications to the fetus. Harmful medications may cause multiple different birth defects in the fetus. However, previous methods to identify harmful medications have concentrated on identifying single birth defects that are associated with specific medications. This project aims to develop methods to identify groups of birth defects that might be associated with specific medications. Existing data on over 33,000 pregnancies from the EUROmediCAT database will be used to develop the methodology, which is likely to include multiple comparison procedures, Bayesian hierarchical models and cluster analysis.</p>	
Skills we expect a student to develop/acquire whilst pursuing this project	<p>Ability to analyse large data sets in R and STATA.</p> <p>Knowledge of congenital anomalies and safety of medications in pregnancy.</p>	
Particular <u>prior</u> educational requirements for a student undertaking this project	BSc and preferably MSc in statistics/medical statistics.	