Complex statistical models of large health-related datasets: multiple risks factors for noncommunicable diseases

Main supervisor

Dr James Bentham School of Mathematics, Statistics and Actuarial Science (SMSAS), **University of Kent**, UK www.kent.ac.uk

j.bentham@kent.ac.uk

Deadline: Sunday 21st January 2018

The School of Mathematics, Statistics & Actuarial Science at the University of Kent has a fully-funded PhD studentship available to start in September 2018.

The project will use Bayesian statistical methods and/or data mining tools. They will be used to analyse a large dataset describing risk factors for non-communicable diseases, or NCDs. The risk factors include body-mass index, blood pressure, diabetes, height and cholesterol.

Data on the risk factors are held by the NCD Risk Factor Collaboration, which will provide the data for the project. The collaboration has already produced estimates for single risk factors using Bayesian hierarchical models (see number 14 here for example: www.altmetric.com/top100/2016/). This project will develop the methods for analysing multiple risk factors simultaneously. More details on the project can be found at

www.kent.ac.uk/smsas/postgraduate/PhD-projects/multiple risks jb2048.pdf

and on the research more generally at ncdrisc.org/index.html.

The lead supervisor for the project will be Dr James Bentham (for informal discussions please email <u>j.bentham@kent.ac.uk</u>).

The deadline for applications is Sunday 21st January 2018, and details on how to apply are given here:

www.kent.ac.uk/smsas/postgraduate/phd-applications.html