

An introduction to Bayesian analysis using WinBUGS



Workshop - Hilton Glasgow Grosvenor
3rd-5th December 2012
08.00 – 17.00

Prof Nicky Best
Imperial College London

Summary of workshop

Use of Bayesian methods is becoming increasingly widespread within quantitative social and health sciences, particularly for analysing data with complex structure, such as hierarchical or multilevel data. However, very few applied researchers have any formal training in Bayesian methods. Days 1 and 2 of this three-day course aim to introduce quantitative researchers to the basic principles of Bayesian inference and simulation-based methods for estimating Bayesian models, and to highlight some of the potential benefits that a Bayesian approach can offer. The 3rd day will cover hierarchical models in more depth (e.g. models for longitudinal data, spatial models for small area data, hierarchical models for variances etc.). There is a large practical component to this course with time for hands-on data analysis using examples drawn mainly from the social and health sciences.

Workshop content

The course will consist of sessions comprising 1-1½ hr lectures followed by relevant computer practicals.

Target Audience

Epidemiologists, biostatisticians and other researchers with strong quantitative skills and experience in statistical analysis. No previous knowledge of WinBUGS will be required. All delegates will be required to use their own laptop with a version of WinBUGS installed (<http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml>) – we may be able to loan some delegates a laptop if this is a problem, please contact the organisers.

Course Materials

Participants will receive written course notes.

ESSENTIAL INFORMATION

Registration: To register for the Workshop please complete the online registration form at:

<http://onlineshop.st-andrews.ac.uk/browse/product.asp?catid=14&modid=2&compid=1>

The fee for the conference is £100 or £50 for registered postgraduate students or unwaged which includes registration, course materials, lunch and course dinner but does not include accommodation.

Location: HILTON GLASGOW GROSVENOR HOTEL, 1-9 Grosvenor Terrace, Glasgow G12 0TA, UK
TEL: +44-141-339-8811.

Enquiries: Please direct any further enquiries to ship@st-andrews.ac.uk