



Biostatistics Unit

Following the success of two previous workshops (2009 and 2010) on Bayesian Data Analysis, the Biostatistics Unit of the South African Medical Research Council is presenting the 3rd two and half day introductory workshop on **Bayesian Hierarchical Models in Biostatistics** to be held at the SA-MRC Pretoria offices from 23 to 25 November 2011.

Statistical inferences based on Bayesian estimation methods are increasingly used to provide solutions to problems that cannot be solved precisely using standard frequentist methods. Bayesian method can be applied in many medical and related fields. This workshop will provide participants with an introduction to the ideas of Bayesian hierarchical modelling together with hands-on experience of running the WinBUGS software, a Bayesian computational tool. This workshop will emphasize practical data analysis, where the formulae and algebra will be kept to a minimum. Thus, the workshop is aimed at improving knowledge as well as data analysis using Bayesian modeling and estimation.

The workshop will (a) focus on basic elements of Bayesian inference; (b) introduce several example data and the use of WinBUGS software; (c) introduce Bayesian computational tools (d) cover the use of Bayesian hierarchical models in the analysis of epidemiological and biomedical data, for example, longitudinal, spatial and disease mapping data; and (e) perform hands-on experience of data analysis using WinBUGS.

The workshop is intended for researchers in statistics and biostatistics or those involved in quantitative applications in epidemiology, medicine, biological sciences and environmental science. Participants should have good knowledge in basic statistics, including linear and generalised linear regression analysis at the graduate level. Each participant must bring a laptop with at least Windows XP and the latest version of WinBUGS installed from <http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml>.

The workshop will be facilitated by **Professor Samuel OM Manda PhD**, Senior Specialist Statistician, Biostatistics Unit, SA-Medical Research Council, Pretoria, South Africa.

Applications to attend are invited from interested person. A maximum of 20 participants can be accommodated. The workshop will be from 8:30 to 16:30 every day for the first two days, to 12:30 on Friday, the 25th of November 2011.

The fee per participant is R1800.00 (inclusive of VAT) to be paid in advance. This includes all course materials, teas and lunches and the workshop dinner on Thursday the 24th November 2011. Participants are responsible for their own travel, accommodation and other dinner arrangements.

Enquiries and application to the biostatistics secretary: Mrs. Emily Gomes: email: emily.gomes@mrc.ac.za; tel: +27 (0) 12 339 8523; fax +27 (0) 339 8582 giving at least your name, highest qualification in statistics, the institution you work for. Please register by mailing or faxing the completed form below and fee payment (ref: **BSU_Bayesian2011**) to Ms Emily Gomes before the 31st **October, 2011**.

Registration Form

Hierarchical Bayesian Data Analysis in Biostatistics conducting on 23 - 25 November 2011 at the Medical Research Council,
Pretoria

Name :

Title :

Institution :

Department :

Mailing Address :

Phone :

Fax :

E-mail :

Enclosed, deposit slip or a bank draft/cheque/postal order/local order for the amount of ZAR 1800 payable to South African Medical Research Council; First National Bank, Corporate Account Services Branch; Account Number 621 42728750; Branch Code 204 109; Swift Code FIRNZAJJ.
