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WORKSHOP ON STATISTICAL GENETICS

The Biostatistics Unit of the South African Medical Research Council is offering a workshop on linkage and association analysis in human genetics at the MRC campus in Parow from 1 to 5 October 2007. We are proud to have as presenter Professor Heather Cordell, a Wellcome Trust Senior Fellow from the Institute of Human Genetics at the University of Newcastle upon Tyne, UK. She moved to Newcastle from the Department of Medical Genetics, University of Cambridge, UK during 2006. More details can be found at her home page: <http://www.staff.ncl.ac.uk/heather.cordell/>.

The workshop is intended for statisticians. Applications to attend are invited from interested persons who have the necessary qualifications and statistical experience. A maximum of 15 participants can be accommodated.

We are facilitating this workshop because there is a need for expertise in statistical genetics in South Africa. Many researchers in genetics and related fields are doing very important work and have to send their data overseas for analysis, because we do not have the capacity locally. This is unsatisfactory since successful collaboration requires some face-to-face communication. What makes genetic statistics different and difficult? In genetics, the data often have a built-in dependence or correlation structure. The unit of analysis is often an allele, of which each human has two (at each specific genetic location). Genetic data are often collected from a diseased person and his or her relatives.

The workshop will start with an introduction to the necessary genetic concepts. Graduate level knowledge of statistics, specifically familiarity with topics like logistic regression, maximum likelihood methods and analysis of variance, will be assumed. Each participant must bring a laptop with at least Windows XP and the latest version of R installed: R is open source and available via www.r-project.org/. We will help participants to install the other open source software that we are going to demonstrate. Lectures will be interspersed with computer practicals that illustrate the methods that are explained in the lectures.

The workshop will be from 8:00 to 17:30 every day, except Wednesday. On Wednesday, we will have an optional excursion after lunch, the details of which have not been decided yet. We are considering a wine tour, a visit to Robben Island or a cable car ride up Table Mountain.

The price per person of the workshop is R2000. This includes all course materials, teas and lunches. Participants are responsible for their own travel, accommodation and dinner arrangements. Broadway Guest House www.broadway.mrinfo.co.za is very close to the MRC campus.

Apply by e-mail to Lize.van.der.merwe@mrc.ac.za. Give at least your name, highest qualification in statistics, the institution you work at and a short (two or three sentences) motivation of why you want to attend the workshop (in case we need to select participants). The closing date for applications is 30 June 2007.