

THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Monday 3rd April 2006 7:15 for 7:45

The Large Seminar Room, Institute of Public Health,  
University Forvie Site, Robinson Way, Cambridge

**Design of cluster randomised trials, using empirical evidence on  
the intraclass correlation coefficient**

**Rebecca Turner**  
M.R.C. Biostatistics

**Abstract:** When designing cluster randomised trials, an anticipated value for the intraclass correlation coefficient (ICC) is required, and researchers usually base their choice informally on the magnitude of previous ICC estimates. Numerous estimates for the ICC are available in research databases and publications. In this work, we construct an informative prior distribution to summarise available ICC information, while acknowledging differences in relevance and precision. This is of direct practical use in cluster randomised trials. I will describe how to choose a trial design that provides adequate power across the range of likely ICC values.

**Speaker:** Rebecca Turner joined the MRC Biostatistics Unit in 2002, after completing her PhD at Imperial College. Previously she has worked at the MRC Clinical Trials Unit and Imperial College School of Medicine, collaborating on both clinical trials and observational studies. Current research interests are focused on bias modelling in evidence synthesis, and the design and analysis of cluster randomised trials.

**Directions:** : (From Central Cambridge) Turn right off Hills Road into the Addenbrooke's site then turn left at the hospital roundabout onto Robinson Way. Follow Robinson Way until you see an access road on the left signed 'Forvie Site' (but note that the sign is on your right). Turn into the access road and follow signs - first to the Institute and then to the Large Seminar Room. There is ample car parking. The front doors will be locked at 7:45. Arrivals after 7:45pm can gain admittance by contacting the secretary on 07761769436.

**Provisional Next Meetings:**

4th May – Adam Kleczkowski (Plant Sciences) on 'Parameter estimation and prediction for the course of a single epidemic'.

3rd October – Nick Galwey (GSK) .

**Supper:** Some members eat regularly in the University Centre before each meeting at 5-30pm. Feel free to join them.

**Subscriptions:** of 4 pounds are now due for attending the 2005-2006 session.

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