

THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Thursday 7th March 2002 7:15 for 7:45

Darwin College,  
Cambridge

**Multilevel modelling of racecourse fatalities:  
the younger the safer**

**James Wood**

Animal Health Trust,  
Newmarket

**Abstract:** Serious injury to racehorses is of considerable concern to racing and animal welfarists. Greater understanding of the likely causes of these injuries is a necessary step in reducing them. We have been using data on all British races from 1990 to 2000 (c750,000 starts), determining factors associated with risk of fatal injury, and evaluating the usefulness of predictive modelling. Although we have used a horse race start as our basic unit of observation, race starts are clustered within races, which are clustered within race days and racecourses and horses are clustered within training yards. Multilevel models have improved our risk estimates and our understanding of where sources of residual variation reside. A very applied talk!

**Speaker:** James Wood is a vet who has specialised in epidemiology. His initial training in epidemiology was from the London School of Hygiene and Tropical Medicine. He is now head of epidemiology at the Animal Health Trust (AHT) near Newmarket, where the unit consists of a multidisciplinary team of vets, epidemiologists, statisticians and mathematicians (in no particular order).

Work in the unit, which relies on collaborations, covers infectious diseases and musculoskeletal injuries in horses and cancer and inherited diseases in dogs. Prior to the AHT, he worked in veterinary practice, briefly on scrapie at MAFF's Central Veterinary Laboratory and also ran a lamb production trial in East Anglia.

**Directions:** Darwin College is situated on the corner of Silver Street and Queen's Road. Free parking is available on Silver Street opposite the college and on Queen's Road. Admittance may be difficult after 7:45.

**Provisional Next Meetings:**

4th April – Toby Prevost (CAMS) on 'Statistical involvement in General Practice cluster randomised trials'.

9th May – Krys Kelly (Amgen) on 'Eleven years of statistics and statistical issues in the pharmaceutical industry'.

**Supper:** Some members eat before a talk at the University Centre meeting in the downstairs bar at 6pm. All welcome !

**Subscriptions:** of 4 pounds per member are now due for the 2001-2002 session. Cheques should be made payable to Peter Watson and may be posted to the secretary at the address below.

**A reminder: Anyone who doesn't mind e-mailed notices replacing their postal ones if they haven't already please contact the secretary. Many thanks.**

**Secretary:** Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 2EF; telephone 01223 355294 Extension 722; E-mail peter.watson@mrc-cbu.cam.ac.uk