### THE CAMBRIDGE STATISTICS DISCUSSION GROUP

## Tuesday 30th March 2010 7:15 for 7:45

The Large Seminar Room, Institute of Public Health, University Forvie Site, Robinson Way, Cambridge, CB2 0SR

## **Genetic Epidemiology of Cancer**

# **Doug Easton**CRUK Genetic Epidemiology Unit

Abstract: Common cancers such as breast and prostate cancer cluster in families, consistent with significant variability in susceptibility. Some high risk genes, such as BRCA1 and BRCA2, confer high risks of breast and other cancers, but are rare in the population and only explain a small fraction of the familial risk. This talk will refer to evidence from linkage studies and statistical modelling which suggests that susceptibility to these diseases is probably mediated through many genetic loci, each conferring a small risk. Recent genome-wide association studies have been successful in identifying some common variants associated with the risks of breast and prostate cancer, and suggest that many more could be identified.

**Speaker:** Professor Doug Easton is a Principal Research Fellow of Cancer Research UK and Director of the Cancer Research UK Genetic Epidemiology Unit, University of Cambridge. He was elected a Fellow of the Academy of Medical Sciences in 2002. A member of the National Institute for Clinical Excellence (NICE) guideline development group on familial breast cancer, he also sits on the steering committee of the Breast Cancer Information Core (BIC) and the Advisory Committee to the NIH Cancer Family Registry (CFRBCS). His principal research interests are in genetic epidemiology of common diseases, especially cancer and his major research contributions have been in design and analysis of large-scale epidemiological studies, and in the development of original statistical methodology.

**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:**

10th May – Tim Sparks (Posnan University of Life Sciences) on 'Harmless pastime or serious science? What does phenology tell us about the impacts of a changing climate?'.

19th October – Martin Gibson (Formerly EMC Europe, Director of Lean Six Sigma) on 'The good, the bad and the ugly of Lean Six Sigma'.

**Supper:** Some members eat regularly in the University Centre before each meeting at **5-45pm**. Feel free to join them. **Subscriptions:** of 1 pound are now due for attending the 2009-2010 session.

**Secretary:** Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 7EF; telephone 01223 355294 Extension 801; E-mail <a href="mailto:peter.watson@mrc-cbu.cam.ac.uk">peter.watson@mrc-cbu.cam.ac.uk</a>

Take a look at our website: http://www.mrc-cbu.cam.ac.uk/people/peter.watson/csdg.html