### THE CAMBRIDGE STATISTICS DISCUSSION GROUP

## Thursday 8th February 2001 7:15 for 7:45

The Senior Parlour, Gonville and Caius College, Trinity Street, Cambridge

# Some Recent Progress in the Design of Regulatory Toxicity Studies

### **Graham Healey**

Huntingdon

**Abstract:** A brief review of three of the major areas in toxicology, Bulk Chemicals, Agrochemicals and Pharmaceuticals, will be presented. Each area involves whole programmes of tests, and current developments with a statistical interest will be discussed for some of the tests employed. Examples may include curve-fitting for degradation and bioaccumulation studies, the design of acute toxicity studies, progress in the search for in vitro replacements, the increased sophistication of immunological tests, the analysis of mesocosm studies for the assessment of aquatic community disruption, the relevance of toxicokinetic data and the design and analysis of reproductive and tumour studies. The overall aim is to show to what extent statistical design and analysis are involved in toxicology today.

**Speaker:** Graham graduated in Zoology and Applied Entomology before taking a MSc in Biometry. He went on to lecture in Agricultural Statistics in Malawi where he pursued the local wildlife. Back in the UK he worked for the pharmaceutical company, G.D.Searle, as statistician in charge of preclinical support. In 1992 he became Head of Statistics in Huntingdon providing support to the departments of toxicology, pathology, drug metabolism, cell biology, environmental fate and clinical research. Graham has been a member of PSI (Statisticians in the Pharmaceutical Industry) for over 20 years and has given many talks and organized many meetings on pre-clinical topics.

**Directions:** Enter the college via the front entrance on Trinity Street opposite St. Michael's church. Pass the Porter's lodge on your right. Turn right and follow the quadrangle around passing through the tunnel in the far righthand corner situated by 'V' entrance. Carry straight on for 28 yards till 'D' entrance appears on your right. Go through 'D' entrance and up two flights of the stairs immediately in front of you. The Senior Parlour is located to the left at the top of the second flight. Parking at the college is very restricted. Free parking (after 5pm) is available on Queen's Road by the college "backs". A pathway (Garret Hostel Lane) leads from the road across the river and terminates at the back of the college.

#### Next Meetings: Please note change of March speaker.

8th March – Alistair Murray (British Antarctic Survey) on 'How many krill are in the sea?'

10th May – Jennifer Potts (Cognition and Brain Sciences Unit).

**Provisional:** 5th April – Judith Quinlan (SmithKline Beecham).

**Supper:** Some members eat regularly in the University Centre before each meeting at 6-15. Feel free to join them. **Subscriptions:** of 4 pounds per member are now due for the 2000-2001 session. Cheques should be made payable to Robert Milroy and may be posted to the secretary at the address below.

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