

THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Thursday 2nd May 2024 7:15 for 7:45

Large Lecture Theatre,
MRC Cognition and Brain Sciences Unit,
Chaucer Road, Cambridge, CB2 7EF

Monitoring Vaccine Effectiveness: can we trust results from parties with a vested interest

Roger Sewell

Abstract: Two observational methods are currently being used to monitor post-deployment vaccine effectiveness against infection: the obvious crude method comparing rate of testing positive for infection per head of vaccinated population with that rate per head of unvaccinated population; and the test-negative case control (TNCC) method. The two methods give very different results. Various parties' preference for choice of method appears to broadly coincide with their vested interests in getting the result that method gives. We want to know whether either method is reliable. We suggest how this question could be examined, and will share what conclusions we reach.

Speaker: I spent the first 15 years of my working life as a hospital doctor specialising in renal medicine. I then worked for Cambridge Consultants for 18 years. During and after this time I have worked on a mixture of electronics design, signal processing, and inference, on a wide variety of projects whose common theme was measurement, in a broad sense. These have included measurement of particle size distribution in hydraulic oil, detection of explosives, survival modelling of electronic circuits and components and of patients with tuberculous meningitis, detection of inaudible watermarks in music, and the testing of medical drug delivery devices. I am now retired and during term supervise Trinity undergraduates in pure mathematics as a part-time retirement activity.

Directions: (From Central Cambridge) Chaucer Road is off Trumpington Road – if you are heading away from the city centre it is the first right after the junction with Brooklands Avenue. Number 15 is at the end on the left and is a large Victorian House with a more modern extension to its right. The entrance is in the porch located in the middle of the older section on the left as you come in and is accessed by ascending a few steps from the car park. Cars may be parked there. Note due to building work please enter and leave car park via the 'OUT' entrance (the second of the two entrances on the left as you go down Chaucer Road). The outside door will be locked at 7:45.

Arrivals after 7:45pm can gain admittance by contacting the secretary on 07761769436. A map showing the location of the unit is at <http://www.mrc-cbu.cam.ac.uk/contact-us>.

Provisional Next Meetings:

8th October – Fabio Rigat (AstraZeneca).

4th November - Mihaela van der Schaar (Cambridge Centre for AI in Medicine).

27th November – Peter Treasure (Peter Treasure Statistical Services Ltd).

3rd February 2025 – Lara Mani (Centre for the Study of Existential Risk).

3rd March – James Grime (Institute of Continuing Education) on 'Alan Turing and the Enigma Machine'.

Supper: Some members eat regularly in Wetherspoons (St Andrew's Street) before each meeting at 5-45pm. All welcome !

Subscriptions: of 1 pound are now due for attending the 2023-2024 session.

Secretary: Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 7EF; telephone 01223 769479; E-mail peter.watson@mrc-cbu.cam.ac.uk

Slides and .mp3 files of old talks: <http://www.mrc-cbu.cam.ac.uk/people/peter.watson/csdg.html>