### THE CAMBRIDGE STATISTICS DISCUSSION GROUP

## Wednesday 27th November 2024 7:15 for 7:45

## Academy House, Hills Road, Cambridge, CB2 8PA

# Cancer: misfortune or carelessness?

### Peter Treasure

Peter Treasure Statistical Services Ltd

**Abstract:** We may or may not get cancer in our lifetimes. How do we deal with such uncertainty? The answer to this question is important: our mental picture of how we get cancer will influence our behaviour, which in turn will influence whether we do actually get cancer.

Models of carcinogenesis presented in the popular press – and even in academic journals – often over-simplify (totally deterministic or hopelessly random) to the extent that behavioural changes seem pointless. In contrast, the Speaker will propose an analogy for carcinogenesis, based on the roulette wheel, which respects the underlying stochastic nature of the process while leaving room for us to shift the odds in our favour.

**Speaker:** Peter Treasure has been a freelance statistical consultant all his working life. A large part of his work has been cancer related: he had a long association with cancer registries, regional and national, and has supported – and is still supporting – many cancer clinical trials, both as a study stastician and as a member of safety monitoring committees. He is also an affiliated lecturer in the Department of Pure Mathematics and Mathematical Statistics, University of Cambridge, where he teaches a Masters-level course on survival analysis (using cancer datasets as examples).

**Directions:** (From Central Cambridge) Academy House is a ten minute walk from Cambridge Central train station. From the train station go straight down to the end of Station Road, cross the road and turn left going straight ahead passing the entrance to Brooklands Avenue on your right. A further couple of minutes walk takes you to the walkway which leads down to Academy House which is on your right just before you get to the Hills Road bridge. Further directions and a map are located in the pdf file at https://imaging.mrc-cbu.cam.ac.uk/statswiki/csdg/newtalks. The nearest parking is at the train station. 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:**

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

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

10th April - Roger Sewell on 'Predicting recurrence of prostate cancer: a Bayesian approach'.

7th October - Florian Markowetz (Cancer Research UK Cambridge Institute) on

'All models are wrong and yours are useless: making clinical prediction models impactful for patients'.

3rd November - Sam Gilbert (Bennett Institute of Public Policy) on 'Benefits of data openness in a digital world'.

Late November - Riikka Hofmann (Faculty of Education) on '100 years of educational trials - no significant difference?'

**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 2024-2025 session.

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