Understanding and Reporting Statistics in Medicine

March 2022
Understanding and Reporting Statistics in Medicine

EASE training events are an excellent way of meeting other editors and industry professionals, learning from expert speakers and joining the discussion on a range of invaluable topics. Many events are held virtually, enabling quick and inexpensive access to a wealth of knowledge.

This series of four online training modules will introduce participants to the most common statistical procedures used in clinical research. Intended for medical writers and editors with little to no background in statistics (and perhaps a great fear of the topic), the modules cover only basic statistical terms, concepts, reasoning, and reporting characteristics of the more common procedures.

The training will be led by Tom Lang, independent consultant and trainer in medical writing and scientific communications.
Course Schedule and Booking

Each module will be held from 4.00pm-5.30pm (UK time). Sessions will be recorded and made available if participants find it hard to make this time.

- Thursday, 3 March 2022
- Thursday, 10 March 2022
- Thursday, 17 March 2022
- Thursday, 24 March 2022

Training will be hosted online through the EASE Zoom platform. Links to join each module will be provided after booking is confirmed.

Cost

EASE members – complete course of four modules £140
Non-members – complete course of four modules £220

Individuals wishing to join EASE to participate in this training at the discounted price should complete our online membership application form and pay before registering.
Course content

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Tom is not a statistician and does not teach statistics in the usual sense of the subject. The modules do not include any maths, calculations, discussion of probability theory, or other topics related to calculating statistics. Instead, it focuses on how to recognize, critique, and query statistical information in reports of biomedical research.

Each of the four online modules will last for 90 minutes and address the following topics:

- Variables, descriptive statistics, estimates, and confidence intervals
- Hypothesis testing (P values and statistical power)
- Association (including measures of risk), correlation, and regression analyses
- Performance characteristics of diagnostic tests.
Reference materials

The course can be supplemented with four references:

1. *How to Report Statistics in Medicine*, by Tom Lang and Michelle Secic, is the primary source material for the course. It’s available from the publisher, the American College of Physicians, in print and electronic versions. [Various versions available from Amazon](https://www.amazon.com) from £10

2. The lectures are also presented in a booklet titled, Understanding Statistics in Medicine, available from [LuLu.com](https://www.lulu.com), which is web-based print-on-demand publisher.

3. The [SAMPL guidelines for statistical reporting](https://www.equator-network.org/guidelines/) (Statistical Analyses and Methods in the Published Literature), available for free on the EQUATOR-network site. Also based on *How to Report*, these guidelines were developed to be included in a journal’s instructions for authors and so are shorter and more limited by design.

4. Participants with be provided with full handouts of the slides used in module.

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Who should attend?

This course is suitable for new or experienced scientific writers and editors with little or no background in statistics. The course is oriented toward biostatistics and clinical medicine, but the concepts apply to many other scientific fields, especially in the life and social sciences.
Tom Lang, MA
Principal, Tom Lang Communications & Training International
United States

Tom has been a technical or medical writer/editor since 1975, working for several prestigious medical centres in the US, and is now an independent consultant and trainer in medical writing and scientific communications. He is also editorial board member for EASE journal *European Science Editing*.

Tom is a Fellow of the American Medical Writers Association, a Past President of the Council of Science Editors, and Treasurer of the World Association of Medical Editors. He has led hundreds of workshops on various aspects of medical writing and editing, written communication, and scientific publications for physicians, researchers, and medical writers in academia and industry throughout North America, Europe, China, Japan, India, and Africa.
