

ESTS school – Academic Competence Track

ESTS Course on Statistics and Methodology

ESI, Hamburg, Germany

2 - 4 November 2015

Accredited by EACCME with 12 European Credits

Faculty

Pierre-Emmanuel Falcoz, Strasbourg, France
Eric Lim, London, UK
Gilbert Massard, Strasbourg, France
Isabelle Opitz, Zurich, Switzerland
Gaetano Rocco, Naples, Italy
Gonzalo Varela, Salamanca, Spain (practical workshop ideologist)

Aims

- Basic knowledge in biomedical statistics
- Study design
- Grant application

Objectives

- Provide tools to set up clinical or experimental trials, retrospective studies
- Help to understand the technical vocabulary to communicate with professional statisticians and methodologists.

Format

- 2 days
- Arrival during morning day 1 – first session afternoon
- Day 2 – full day
- Day 3 – adjourn at 13.00

Location

European Surgical Institute, Hamburg, Germany

Day 1: 2 November 2015

Faculty and delegates are expected to arrive before 14:00.

An informal lunch will be offered

14.00: Welcome, presentation of ESTS educational activities G Massard, Strasbourg
Presentation of faculty and objectives of the course I Opitz, Zurich

Presentation round of participants:

What are my objectives and experienced problems?

What do I expect from this course?

15:00 – 16:30: Statistics 1

E Lim, London

- Descriptive and comparative statistics:
 - Binary and categorical variables
 - Continuous variables
 - Testing statistical significance

16.30 - 17.00 coffee break

17.00 – 18.00: Statistics 2

P E Falcoz, Strasbourg

- Diagnostic tests – sensitivity, specificity
 - ROC-analysis

18.00 – 19.00: Statistical significance

G Varela, Salamanca

- Biological or clinical relevance

Day 2: 3 November 2015

9.00 - 10.30 Statistics 3

- Survival analysis G Varela, Salamanca
- Quality of life G Varela, Salamanca
- Introduction to multivariable methods – linear regression E Lim, London

10.30 – 11.00 coffee break

11.00 - 12.00 Practical work

- Searching for evidence in the literature (group working, all faculty)

12.00 - 13.30 Lunch

13.30 – 16.00: Methodology 1

- Types of clinical studies I Opitz, Zurich
- Phases of clinical trial I Opitz, Zurich
- How to set up a protocol for a clinical or experimental trial I Opitz, Zurich
- How to create a database P E Falcoz, Strasbourg
- The evil of biases G Rocco, Naples

16.00-16.30 coffee break

16.30 -19.00: Methodology 2

- Tips for retrospective studies G Rocco, Naples
- Tips for registry studies G Rocco, Naples
- EBM and guide-lines P E Falcoz, Strasbourg
- How to conduct a meta-analysis E Lim, London

19:30 – 22:00 Dinner

Day 3: 4 November 2015

8.30 - 10.00: Practical workshop

- Design a study inspired by a clinical problem (all faculty, group)

10.00 -10.30 coffee break

10.30 - 12.30: Putting into practice

- How to write a grant application G Varela, Salamanca
- Ethical and regulatory constraints G Rocco, Naples
- How to raise funding G Rocco, Naples

Evaluation and conclusion

I Opitz, Zurich
G Massard, Strasbourg

An informal lunch will be offered at 12:30