

Dr Emanuele Giorgi

An introduction to model-based geostatistics for Public Health

Sunday, July 14, 9:00- 17:00, CLC 406 (Calman Learning Centre)

9:00 AM - 9:30 AM: Registration and Welcome

9:30 AM - 10:00 AM: Introduction to the Course

- Overview of the day's agenda
- Brief introduction to model-based geostatistics in global public health: type of data; application examples

10:00 AM - 11:00 AM: Model-based geostatistics for prevalence mapping

- Exploratory analysis of prevalence data and model-formulation
- Model-fitting and interpretation

11:00 AM - 11:30 AM: Morning Coffee Break

11:30 AM - 12:30 PM: Spatial prediction

- Types of spatial data in public health
- Data collection methods and challenges
- Preprocessing techniques for spatial data

12:30 PM - 1:30 PM: Lunch Break (CLC 407)

1:30 PM - 3 PM: Practical (Part 1)

- Participants will work through a guided analysis of a geostatistical data-set.

3:00 PM - 3:30 PM: Afternoon Coffee Break

3:30 PM - 4:30 PM: Building Spatial Models (Part 2)

- Continuation of the practical

4:30 PM – 4:45 PM: Further topics in model-based geostatistics

- Brief overview of additional topics to expand learning of geostatistical methods: spatio-temporal models; applications to survey design.

4:45 PM - 5:00 PM: Q&A and Closing Remarks

- Open forum for questions and final discussions