

Workshop: p-values, null-hypothesis significance testing, and practical stats

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Format: 1 – 2 x 1hr

Date options: *Wednesday 10am, Wednesday 2pm, Thursday 1pm, Friday 2pm*
Week 12-16 June
Week 19-23 June
Week 26-30 June

Tentative outline

Version: 1.0 (01 June 2017)

Concepts

- p-values: What they are, and what they are not
- Guidelines from the American Statistical Society on p-values
- The current null-hypothesis significance testing (NHST) paradigm
- Common (mis)interpretations in NHST
- Absence of evidence is not evidence of absence – Or is it?
- False-positives and false-negatives
- Multiple testing correction and why it's important
- What test to use?
- A brief overview of common statistical tests (parametric vs. non-parametric tests etc.)

Practical stats

- How to visualise and interpret results of common statistical tests
- Linear regression and linear models
- Correlation
- Optional topics