

Workshop: Estimating Effects and Correlations in Neuroimaging Data

July 15th, 2009, 12-5pm
Columbia University

In recent months two high profile articles have been published (Vul et al., *Perspectives on Psychological Science* and Kriegeskorte et al, *Nature Neuroscience*) which have highlighted methodological problems in the analysis of neuroimaging data. The goal of the workshop is to discuss appropriate ways to test for effects and correlations in neuroimaging data and to have a productive discussion about what the results mean and how should they be interpreted. We hope to have a lively debate about the appropriate manner in which analysis should proceed.

The workshop will take place on Wednesday July 15 between 12:30-5:30pm at 417 International Affairs Building (Altschul Auditorium).

Admission is free - however we ask that you register in advance. Please register by Friday, July 10th at the workshop webpage:

<http://www.stat.columbia.edu/~martin/ECWorkshop.html>.

SCHEDULE:

- 12:30 - 12:45 **Introduction.** Martin Lindquist, Department of Statistics, Columbia University
- 12:45 - 1:35 **Varieties of voodoo.** Ed Vul, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology
- 1:35 - 2:25 **Circular analysis in systems neuroscience - with particular attention to cross-subject correlation mapping.** Nikolas Kriegeskorte, Laboratory of Brain and Cognition, Section on Functional Imaging Methods, NIH
- 2:25 - 2:50 Coffee Break
- 2:50 - 3:40 **TBA.** Tor Wager, Department of Psychology, Columbia University
- 3:40 - 4:30 **Why we (usually) don't have to worry about multiple comparisons.**
Andrew Gelman, Department of Statistics, Columbia University
- 4:30 - 4:40 Break
- 4:40 - 5:30 Commentary by Cosma Shalizi (Dept. of Statistics, Carnegie Mellon University) and Dapha Shohamy (Dept. of Psychology, Columbia University) followed by open discussion

ORGANIZERS

Andrew Gelman and Martin Lindquist, Department of Statistics, Columbia University

This event is sponsored by the Department of Statistics at Columbia University. This workshop is part of the Department of Statistics special focus series on Statistical Methods in Neuroscience.