Jones, Silas & Ward Lab
A Cognitive Neuroscience Laboratory at Middlesex University

Middlesex University London

Spatial attention not affected by tACS: a registered report

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OSF

Alpha & attention

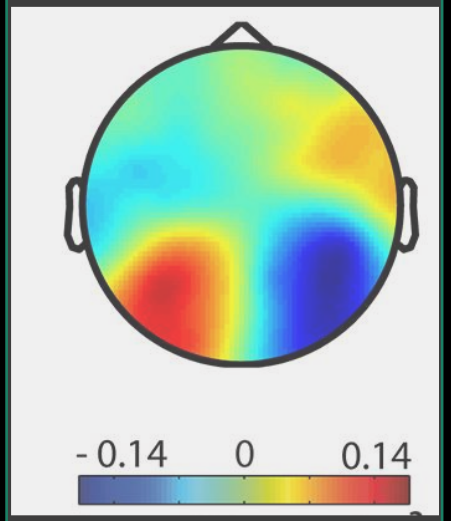
Cue

<

Attention

Target

X



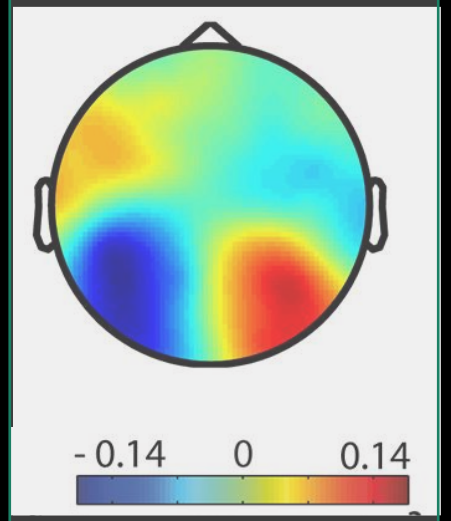
Cue

>

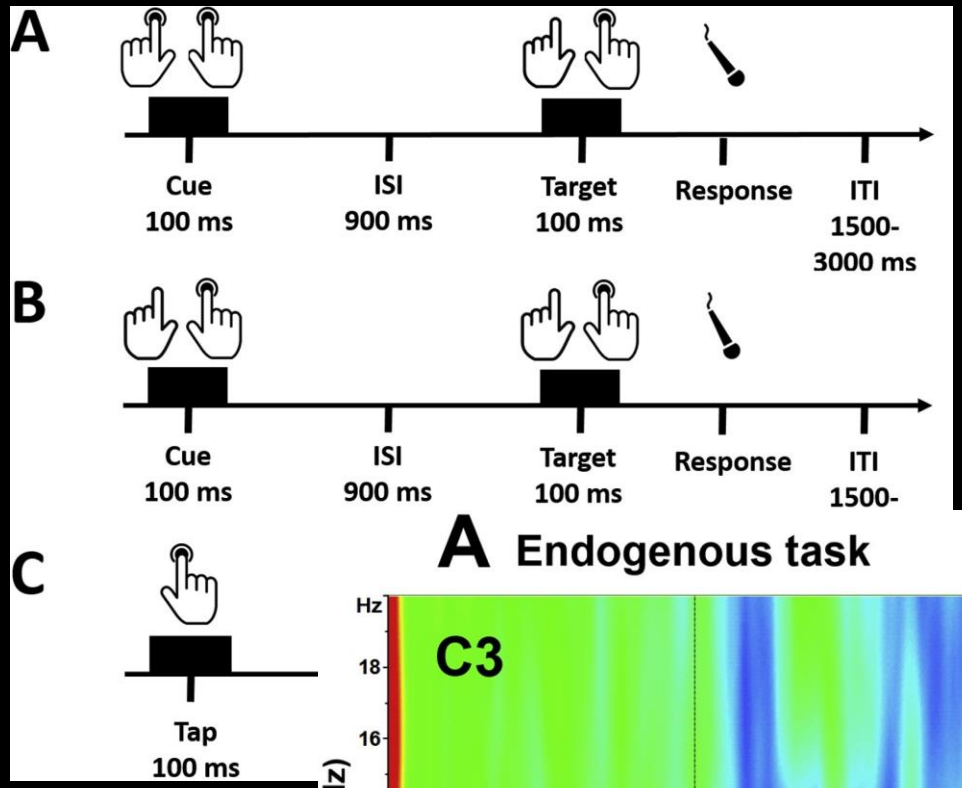
Attention

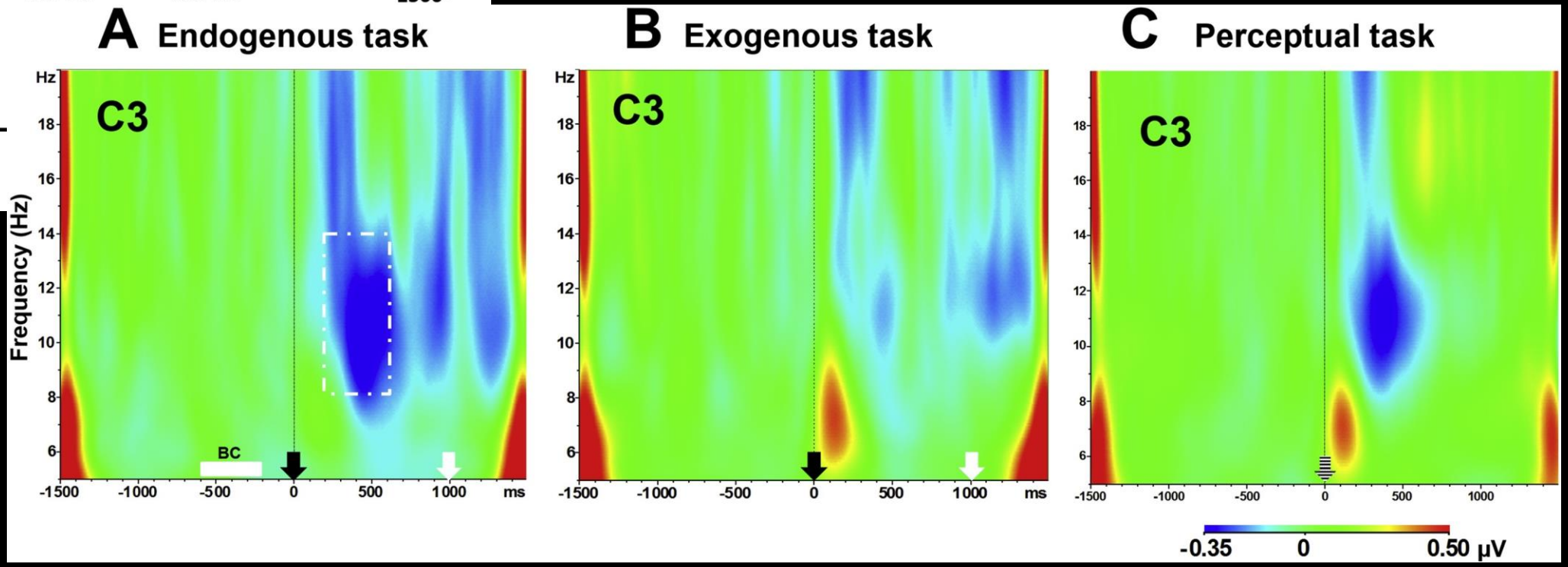
Target

X

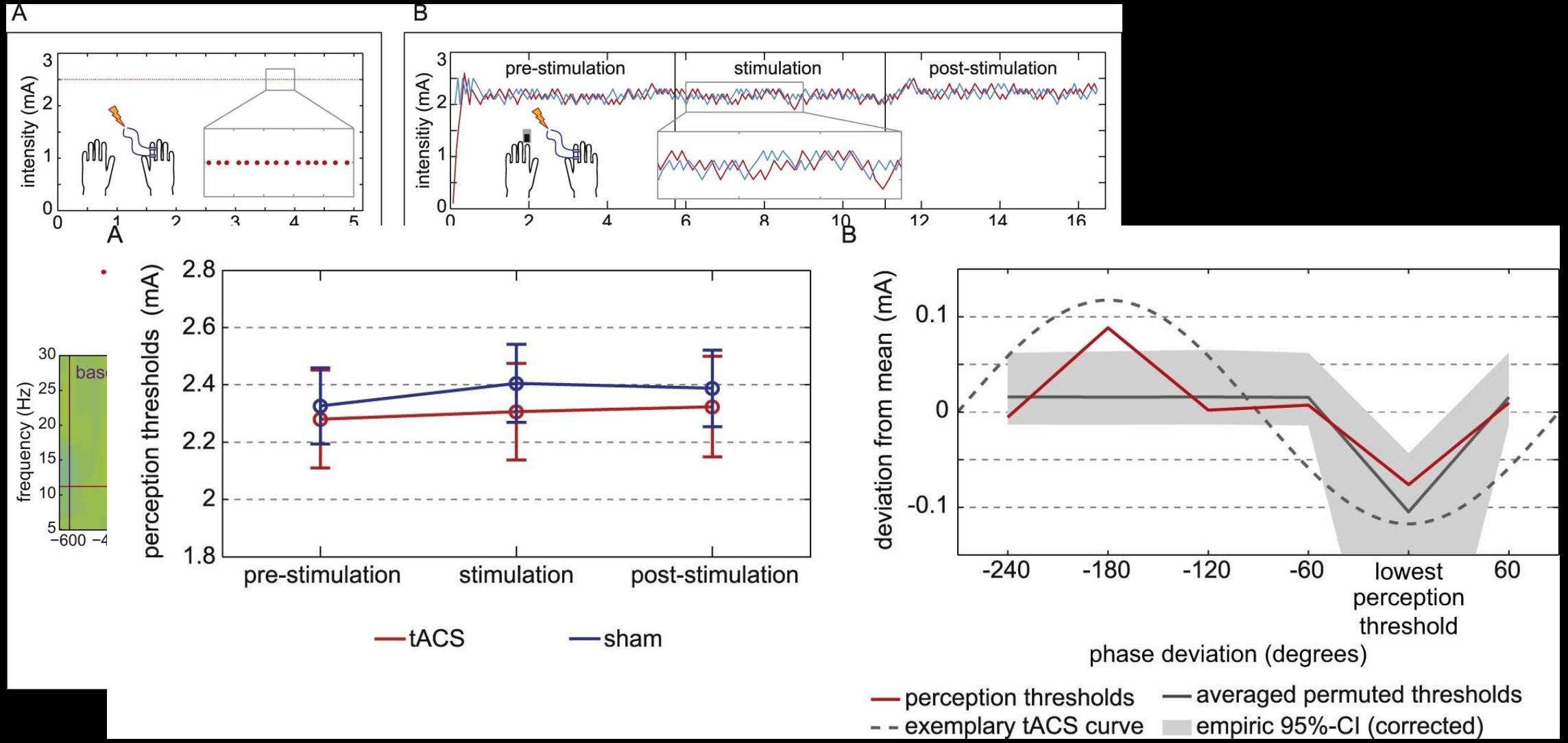


Van Diepen, Mazaheri & Geng (2016)



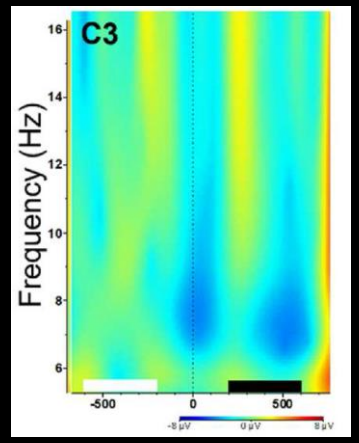


Silas, J., Tipple, A., & Jones, A. (2019). Event-related alpha desynchronization in touch–Comparing attention and perception. *Neuroscience Letters.*



Gundlach et al. (2016). Phasic modulation of human somatosensory perception by transcranially applied oscillating currents. Brain stimulation.

EEG: Individual alpha frequency



ALPHA | BETA | SHAM

tACS = 2mA

> 12 hours

> 12 hours

tACS: Endogenous & Tactile Attention

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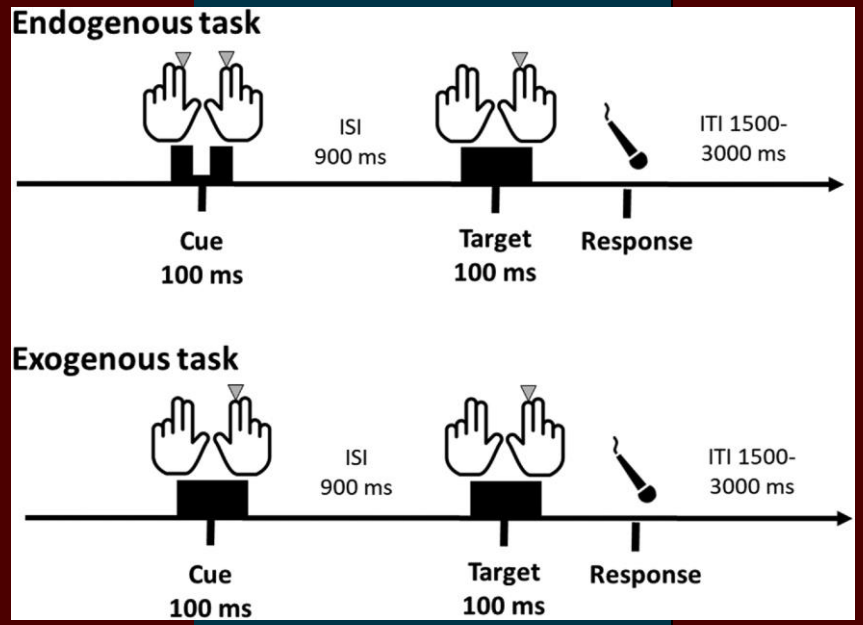
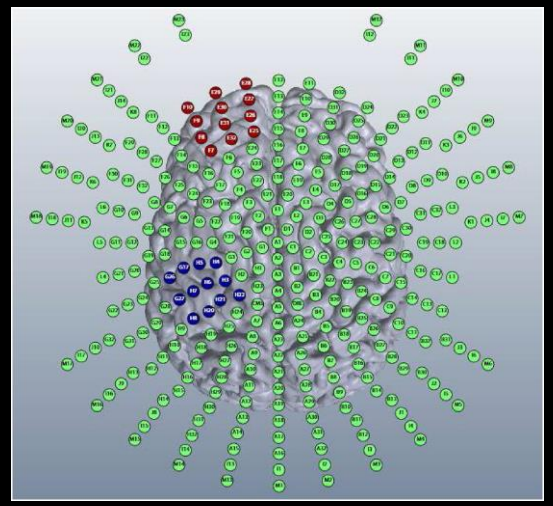
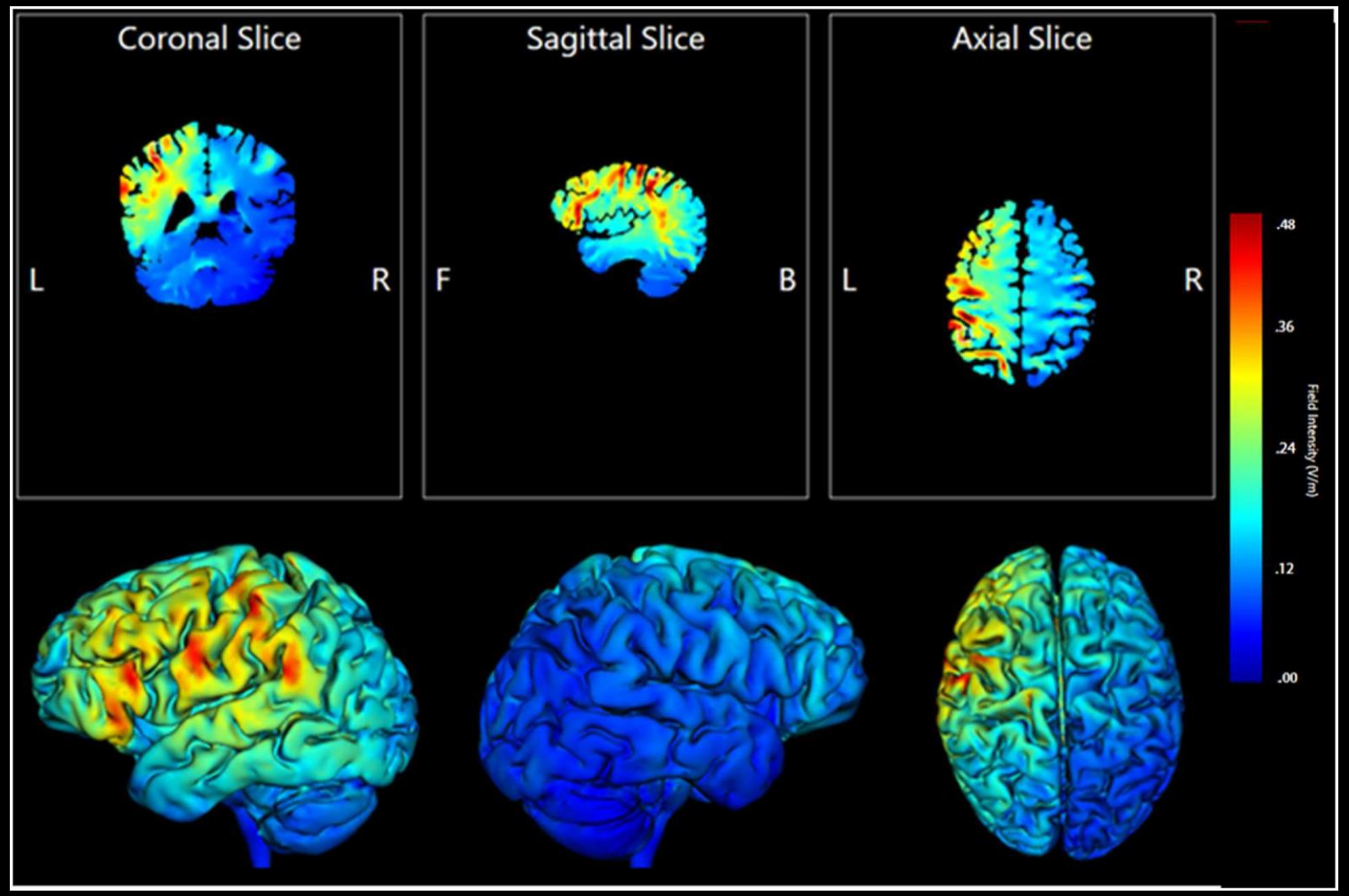






BETTER. SMARTER.
Soterix medical

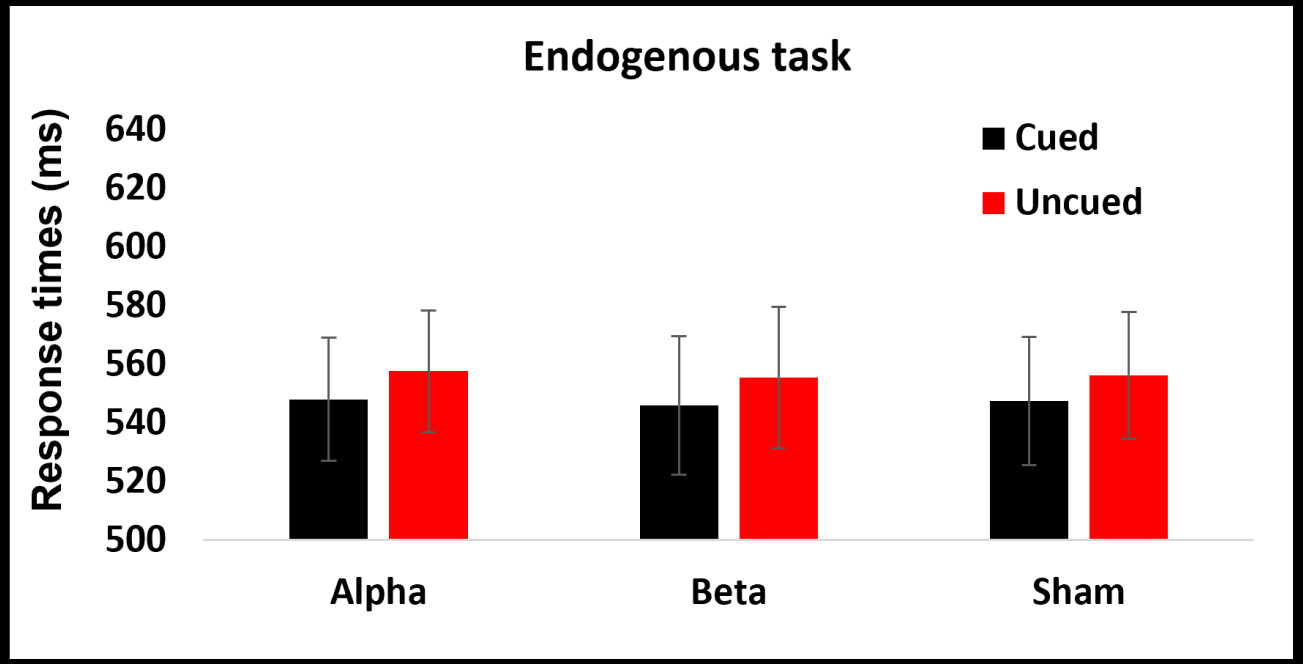
Pre-registration

Sample size estimation

- Powering critical effect of interest = 43 
- Powering smallest effect of interest = 56 
- Modelling sample size based on pilot data = 77 

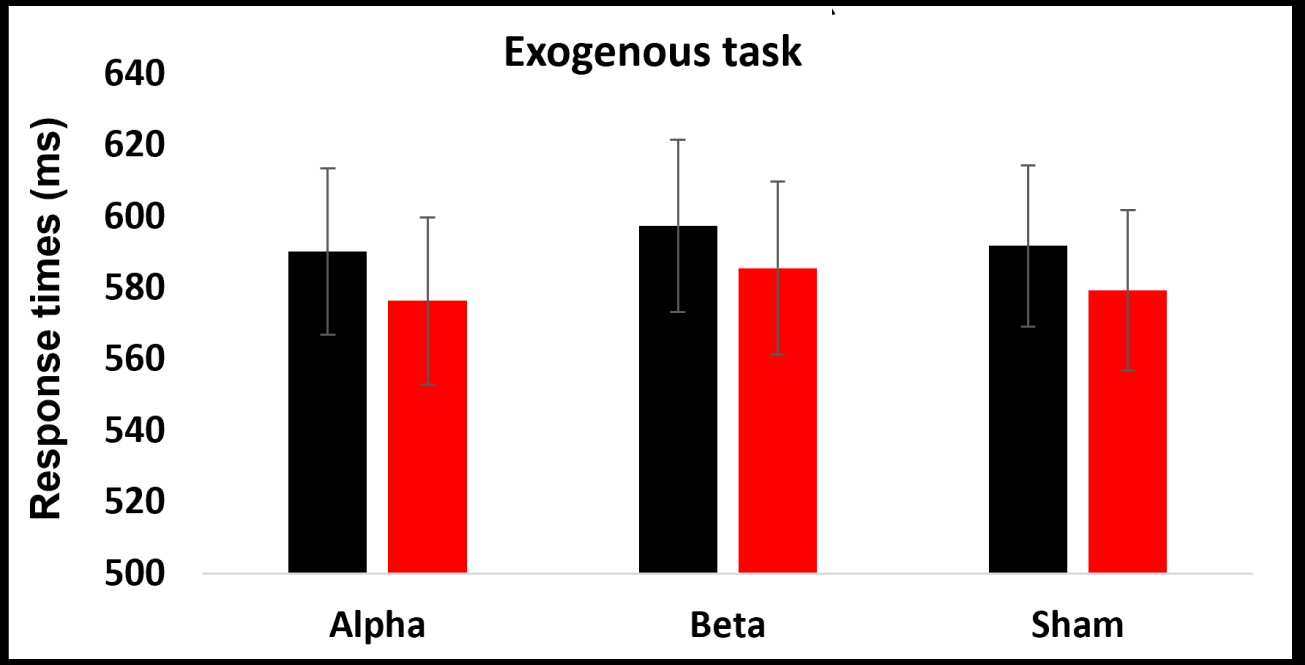
Design

- One sham 
- One sham + one control 

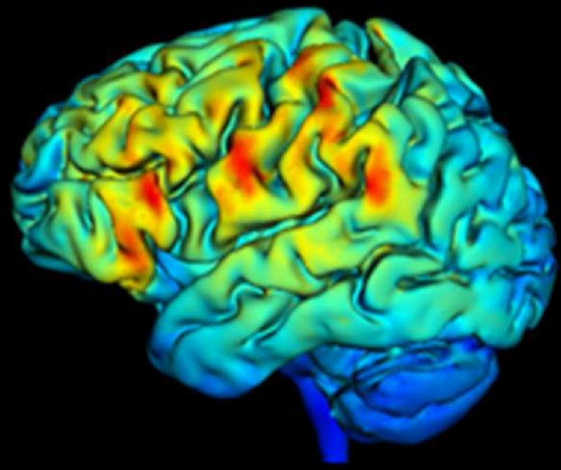


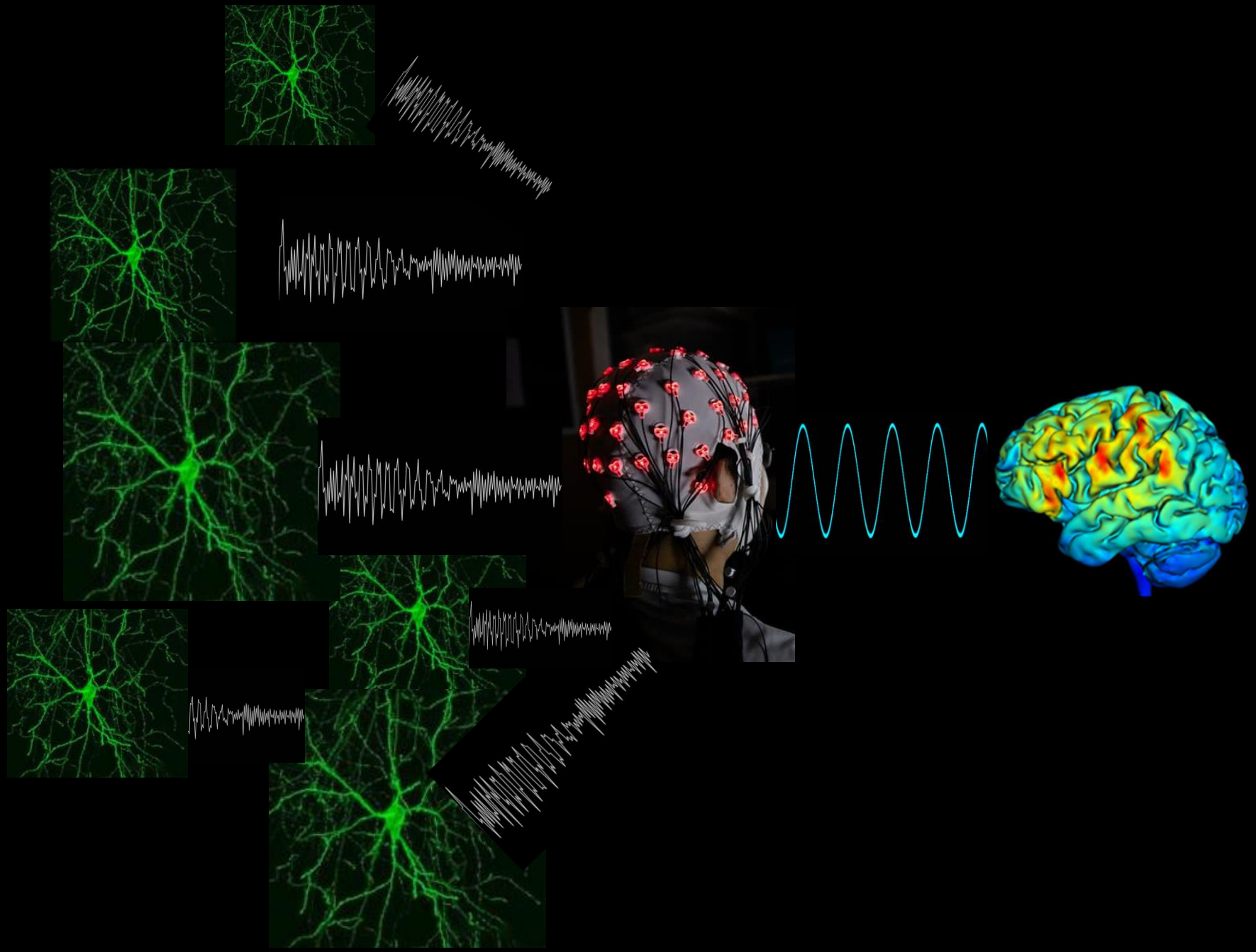
Task*Cue*-Stimulation interaction
F = .21, p = .182 η_P^2 = .003.

BF10 = .047
-> strong/moderate evidence for null




magstim
neuroConn
single mode





Thanks

Wayne Anderson

Kielan Yarrow

Jones, Silas & Ward Lab

A Cognitive Neuroscience Laboratory at Middlesex University

FUNDAÇÃO Bial

Institution of public utility

Middlesex University London

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