Top-down modulation of low-level visual processing: Bridging attention and working memory

Theodore P. Zanto, Kelly Hennigan & Adam Gazzaley
Departments of Neurology & Physiology, University of California, San Francisco

METHODS

**Subjects**
Aged 18–35 years, N=20

**Behavior**
Heterochromatic Flicker Photometry
Start-stop Color & Motion Threshold

**EEG**
64 Electrodes Sampled at 1024 Hz
Artifacts removed via ICA & +/- 50uV threshold
ERPs filtered 1-30Hz
Planned T-tests computed at p = 0.05

RESULTS: COLOR

**Attention to color yields an enhanced N1 peak.**
When subjects ignore color, slow response trials elicit more negative N1 and SN activity.

RESULTS: MOTION

No differences observed between fast & slow trials when attending to motion.
When subjects are instructed to ignore motion, an enhanced P1 is observed during trials with a slow response.

REFERENCES