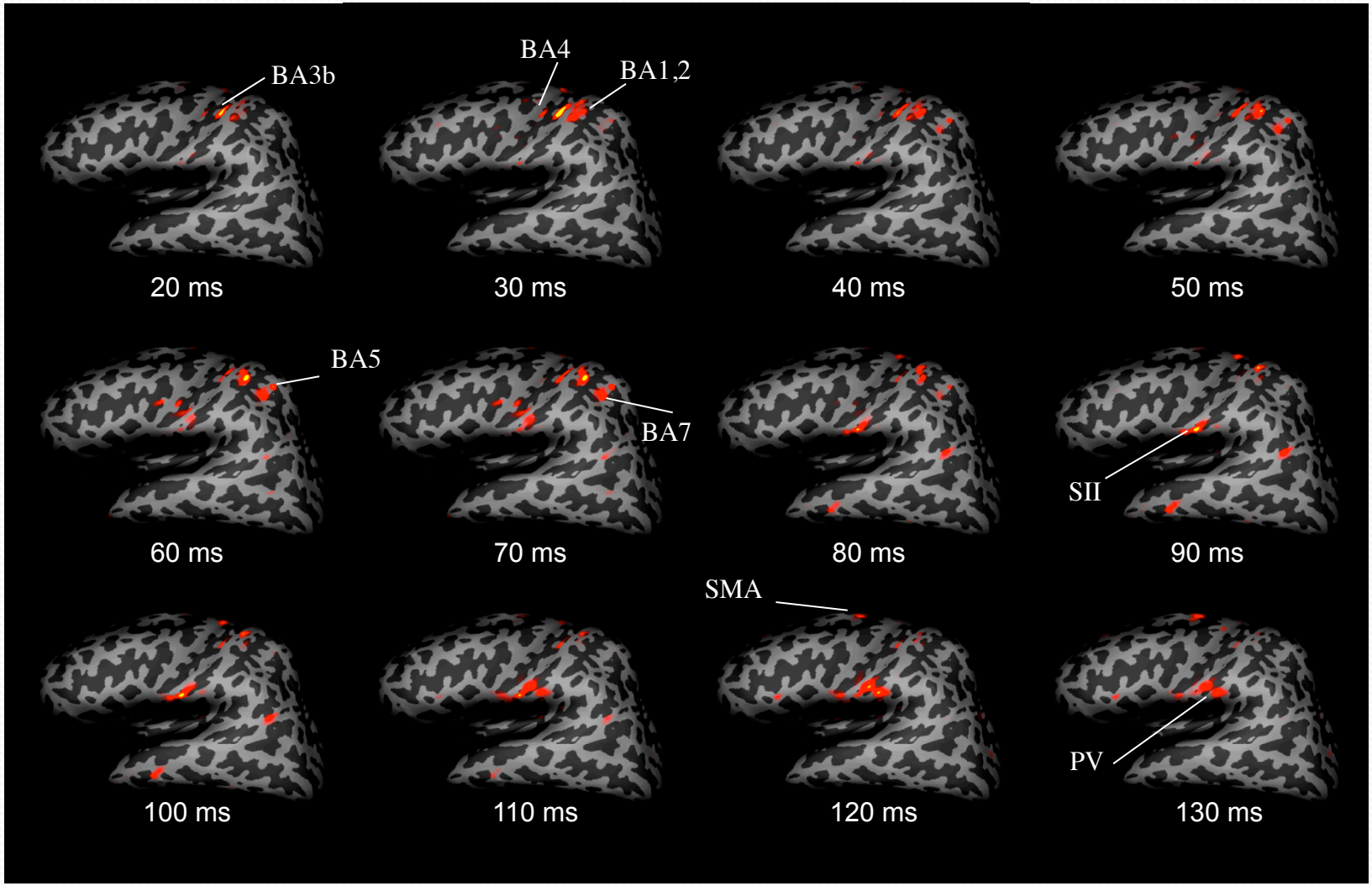
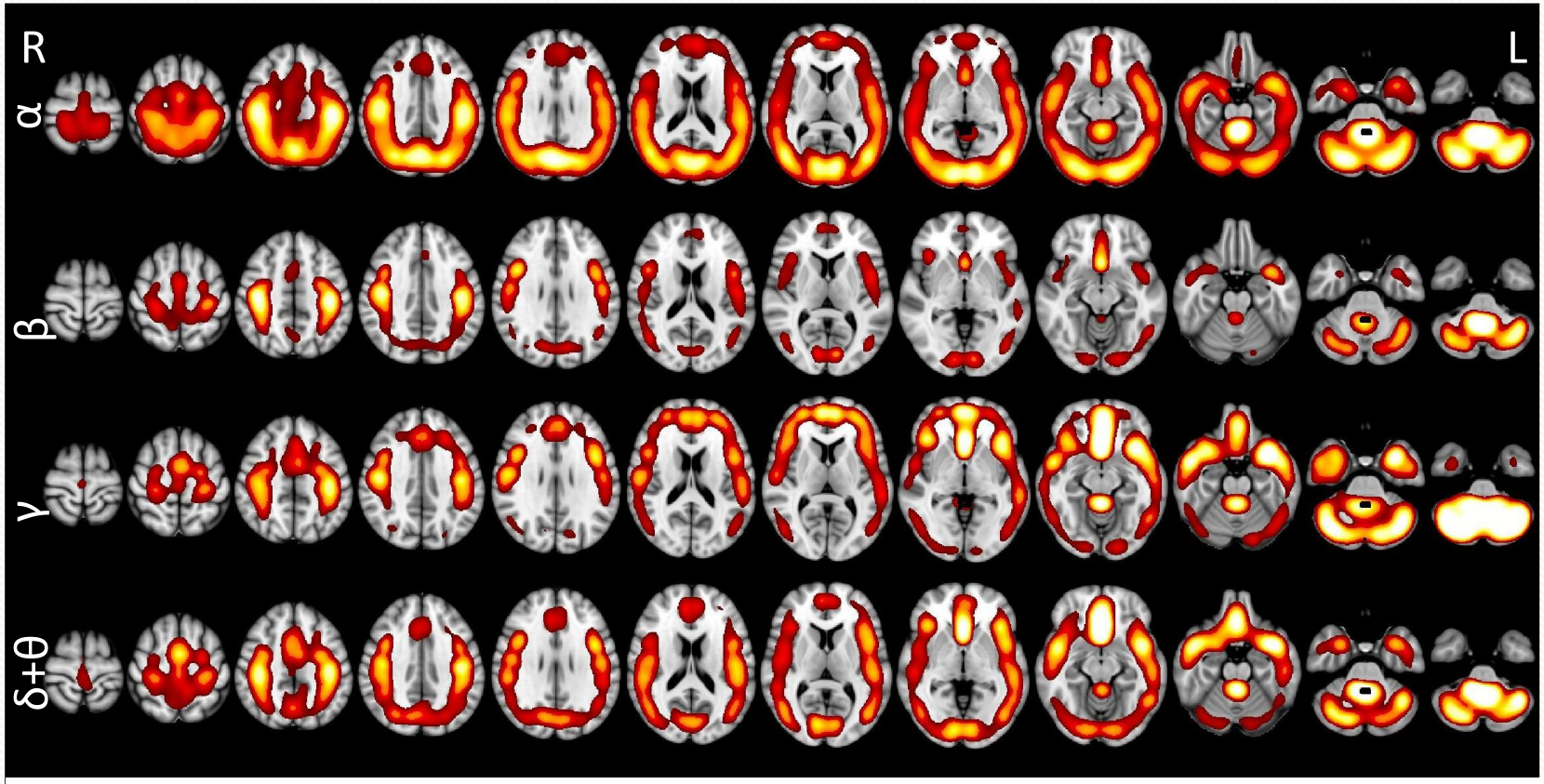
Mingxiong Huang: Human MEG responses evoked by median-nerve stimulation: snap shots of high-resolution VESTAL source magnitude images



Huang, et al., NeuroImage, 31(3):1025-1037. 2006.

Mingxiong Huang: The World's First Source Magnitude Images of Brain Rhythms for Different Frequency Bands since German Physiologist Hans Berger Discovered Alpha Waves in 1924!

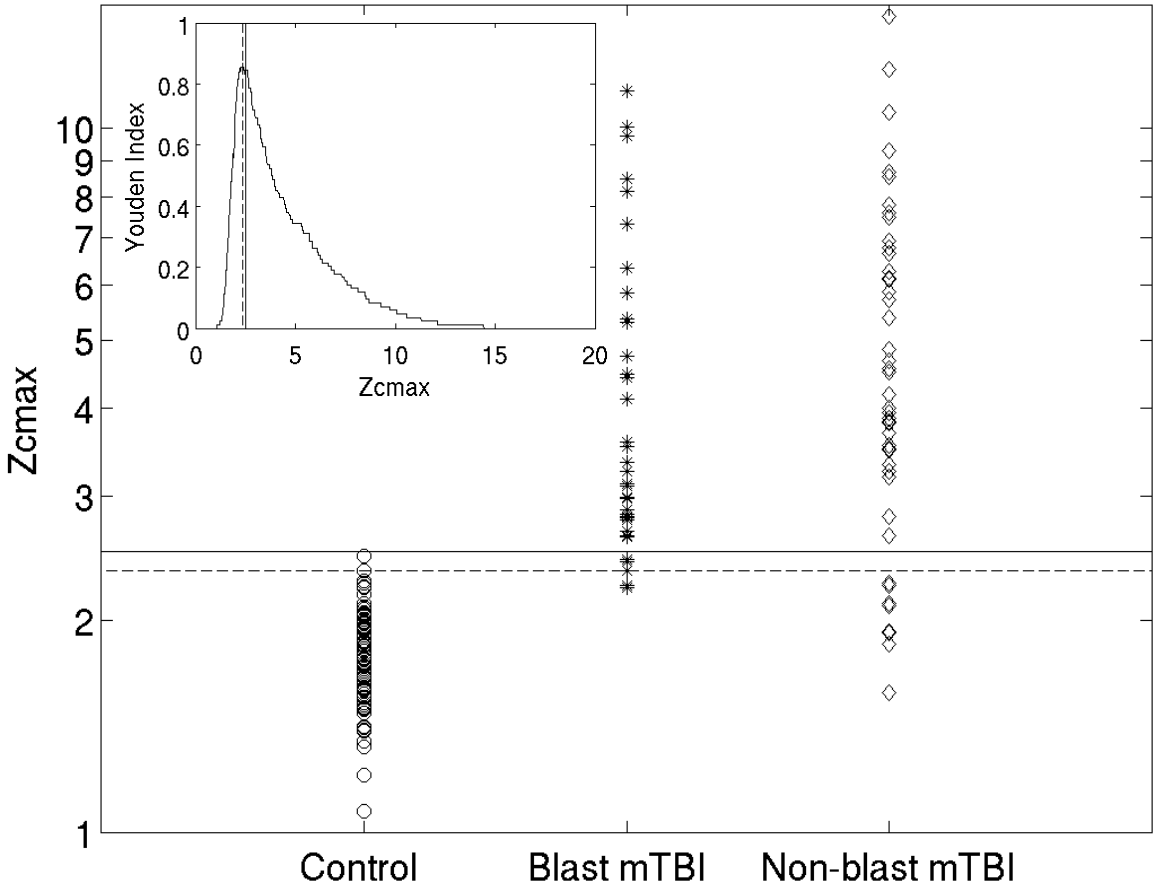
Huang et al., NeuroImage, 84, 585-604, 2014



Whole brain rs-MEG source-amplitude images averaged from 41 healthy subjects in MNI-152 atlas coordinates from **Fast-VESTAL** in alpha (1st row), beta (2nd row), gamma (3rd row), and low-frequency (delta plus theta, 4th row) bands.

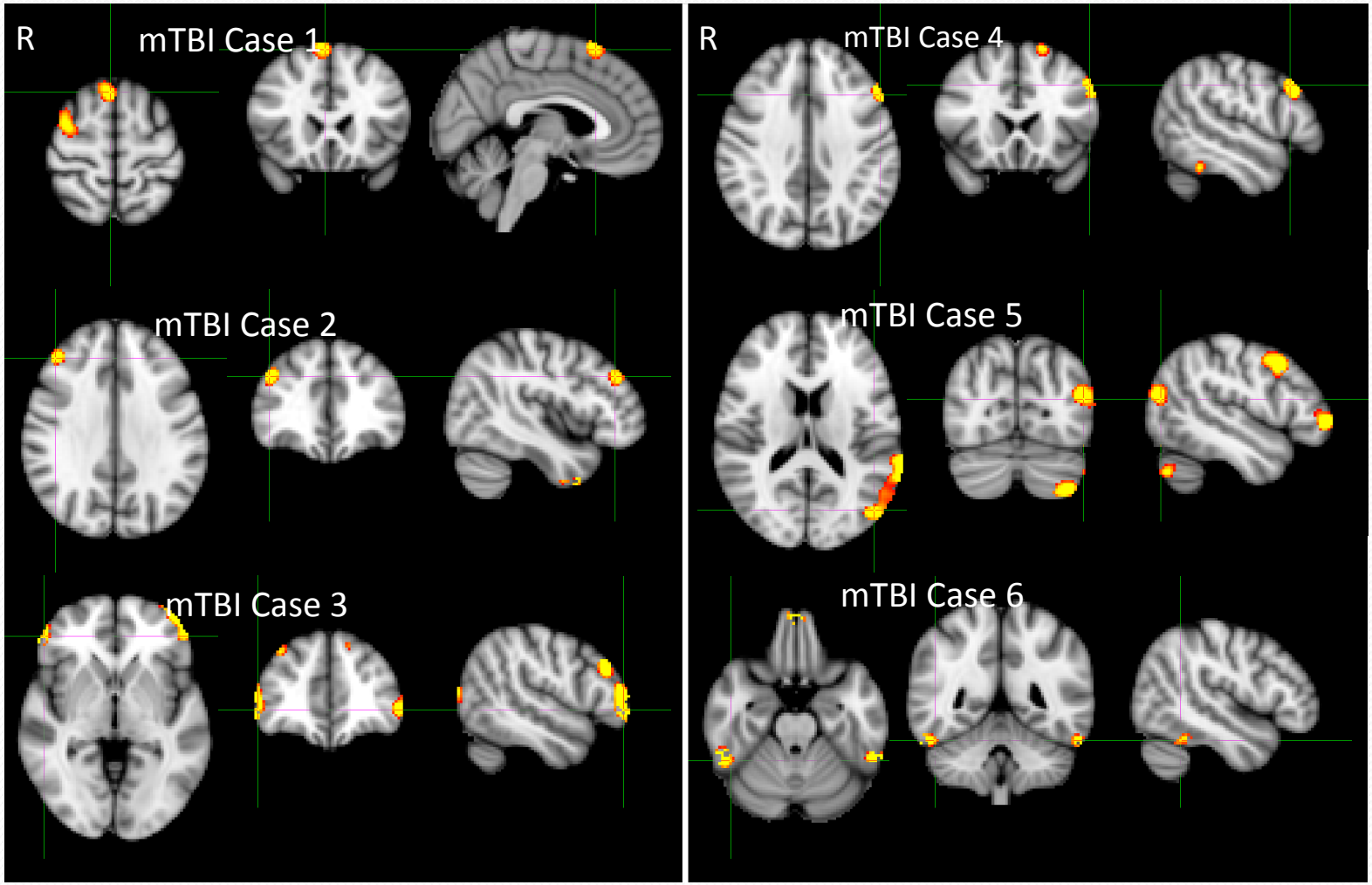
Mingxiong Huang: rs-MEG slow-wave imaging's positive detection rates (i.e., sensitivity) for mild TBI

- With 0% false-positive rate in healthy control subjects.
  - In the blast mild TBI group, the MEG positive-finding rates was **86.1%**.
  - In the non-blast mild TBI group, the MEG positive-finding rates was **83.3%**.



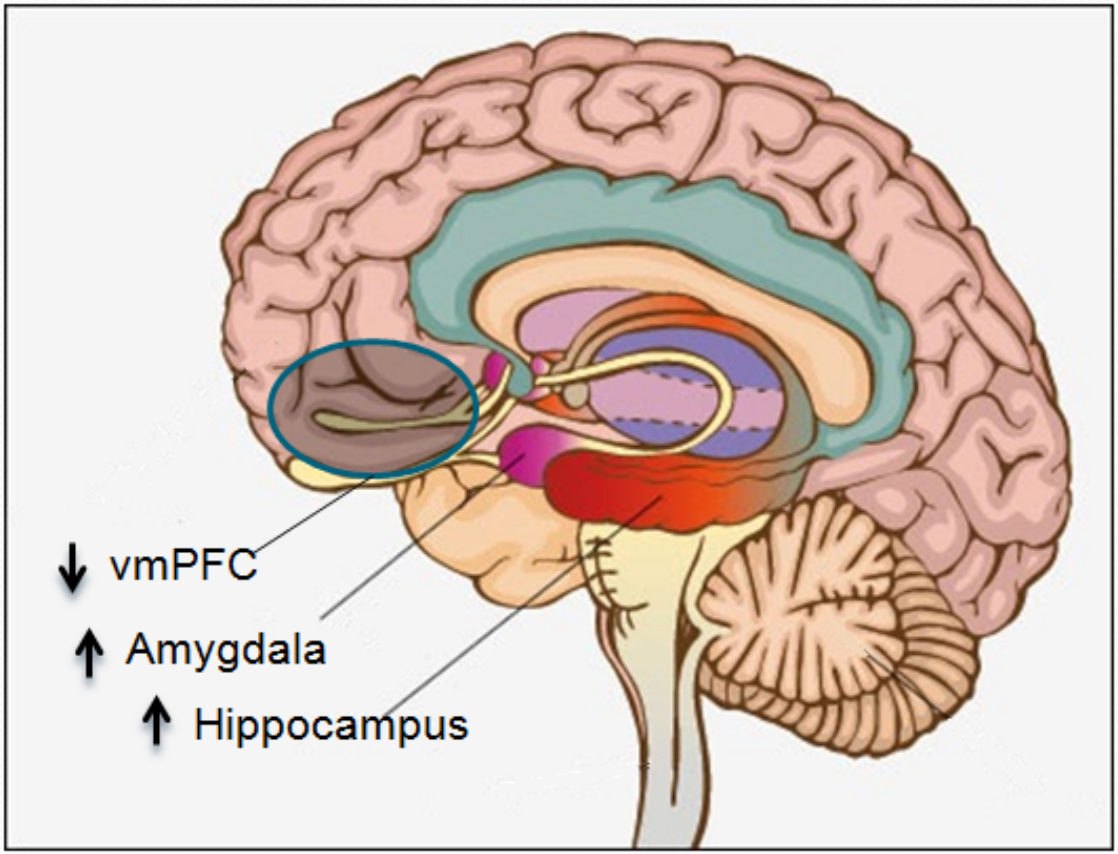
Huang et al., NeuroImage: Clinical, 2014, 5:109-119.

Mingxiong Huang: Voxel-wise Single-subject-based MEG slow-wave imaging for individual mild TBI patients by Fast-VESTAL



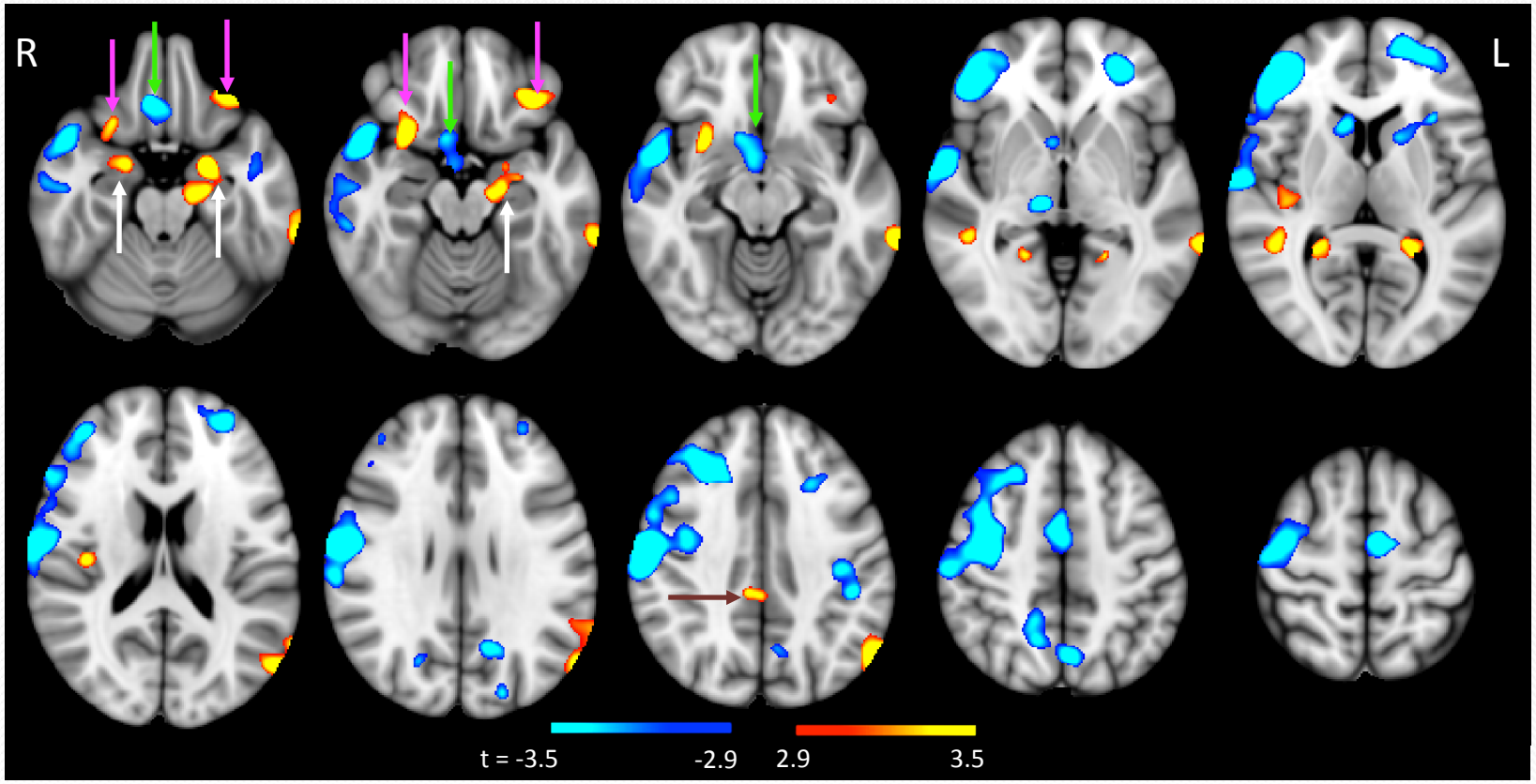
Huang et al., NeuroImage: Clinical, 2014, 5:109-119.

Mingxiong Huang: The neurocircuitry of PTSD



- Hyper-activity in Amygdala
- Hyper-activity in Hippocampus
- Hypo-activity in ventromedial prefrontal cortex (vmPFC)

Mingxiong Huang: MEG Beta-band hyper- and hypo-activity in PTSD versus healthy controls.



•Hyper-activity: L+R Amygdala (white arrows), L hippocampus, L+R posterolateral OFC (magenta arrows), R insular cortex, PCC (brown arrow), etc.
•Hypo-activity: vmPFC (green arrows), L+R dlPFC, precuneus cortex, L+R frontal poles, L temporal poles, etc.

Huang et al., NeuroImage: Clinical, 5:408-419, 2014