

fMRI

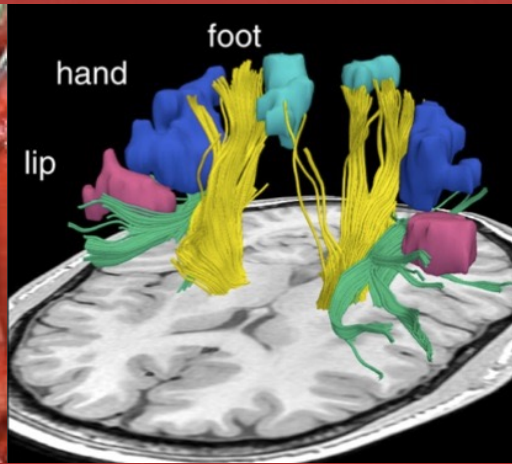
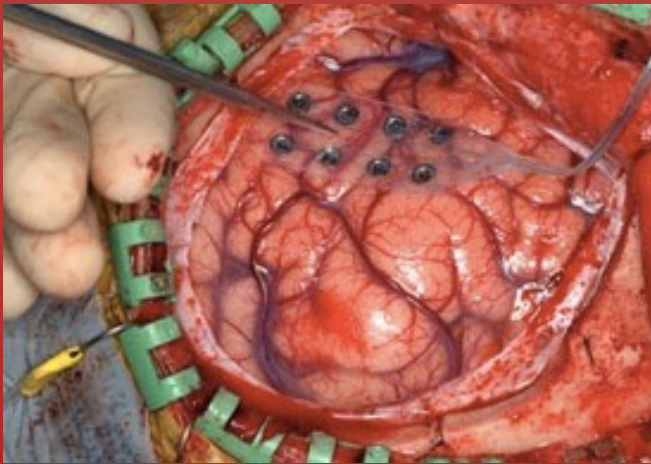
Motor/Sensory

Memory

{ August 19, 2011

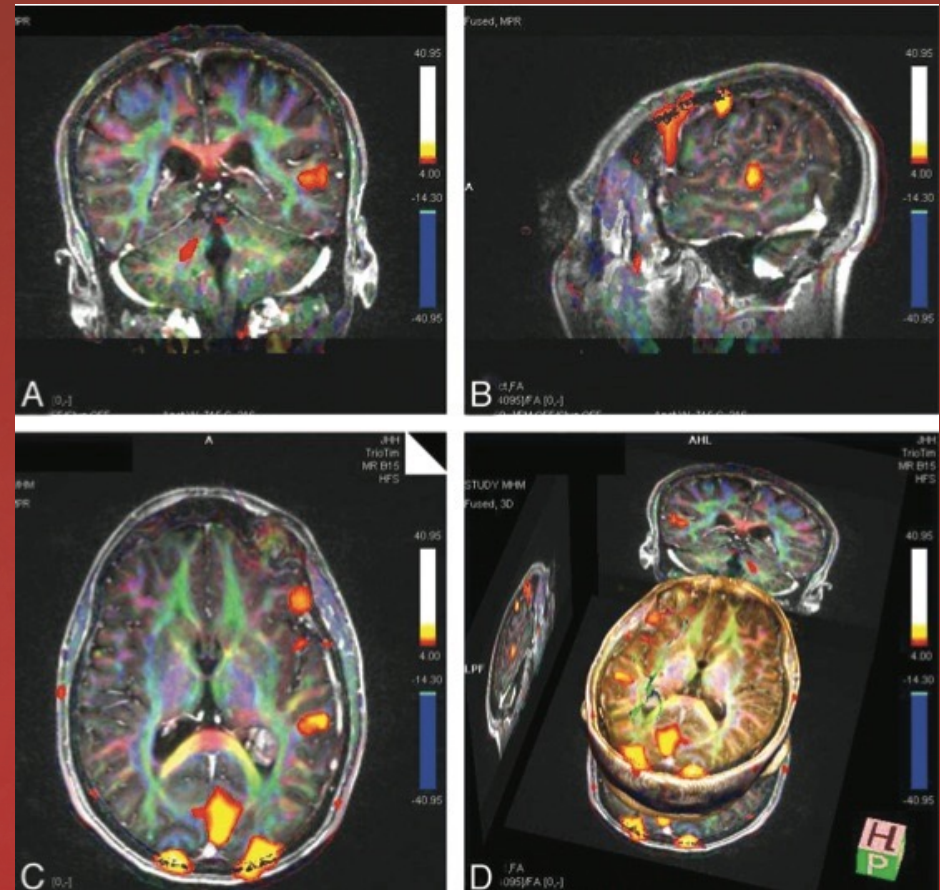
# Networks

1. Motor/Memory
2. Language
3. Tractography
4. Resting fMRI – connectivity
5. Intra-op & BUMC Cases



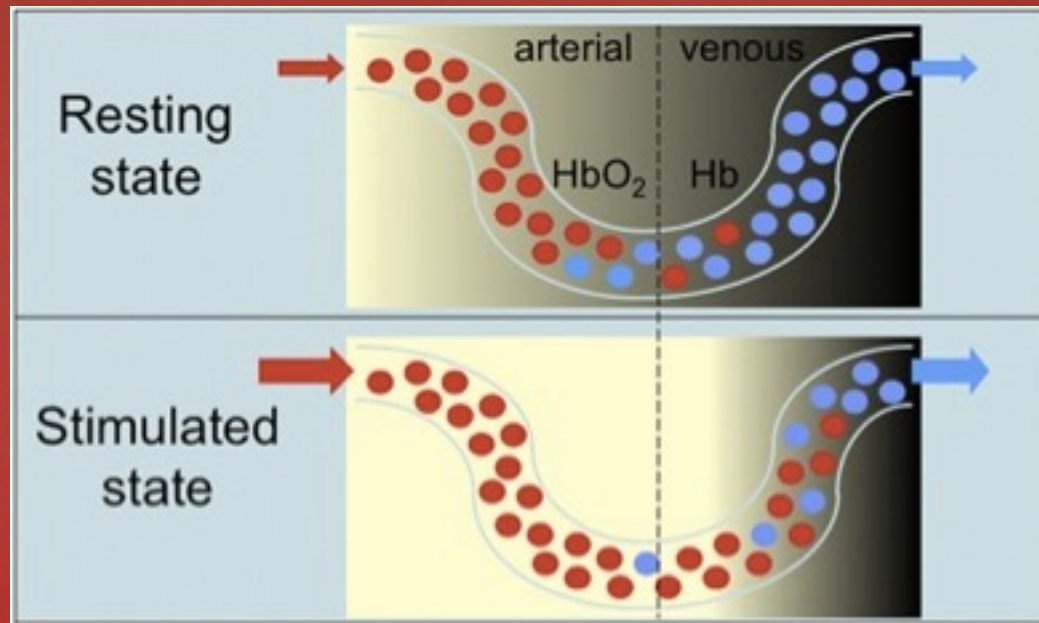


- ⌘ Motor / sensory
- ⌘ Speech
- ⌘ Visual



# Eloquent cortex

- ⌘ Measuring blood flow changes
- ⌘ Deoxygenated blood provides the contrast



# What is fMRI

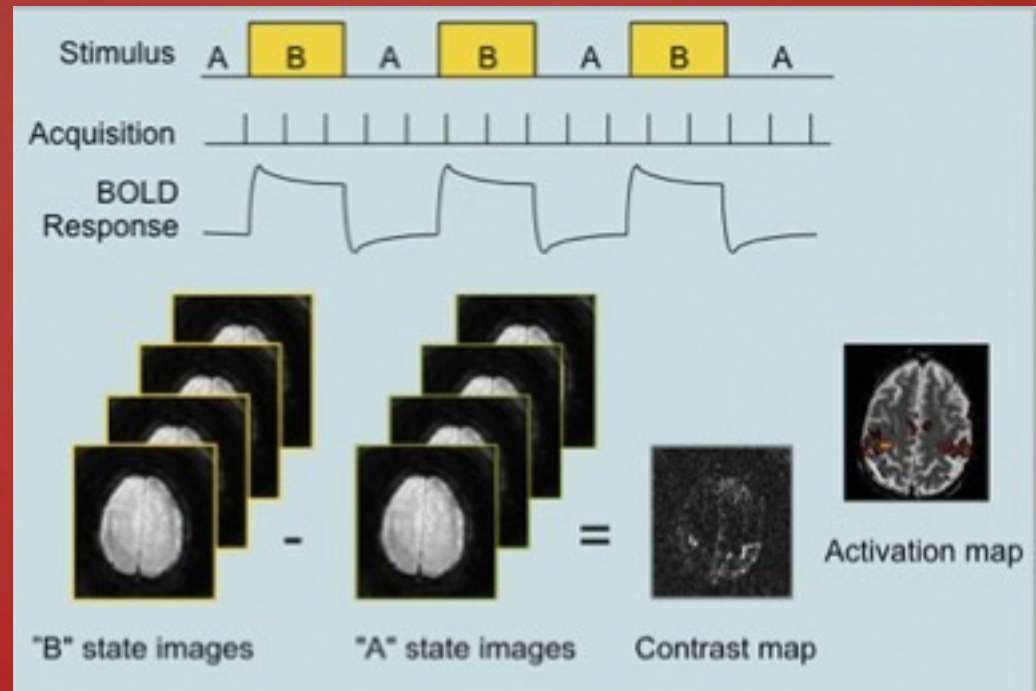


- ⌘ Changes are small
- ⌘ Brain gets bored easily (need constant new stimulation)
- ⌘ Compare to baseline

# Problems

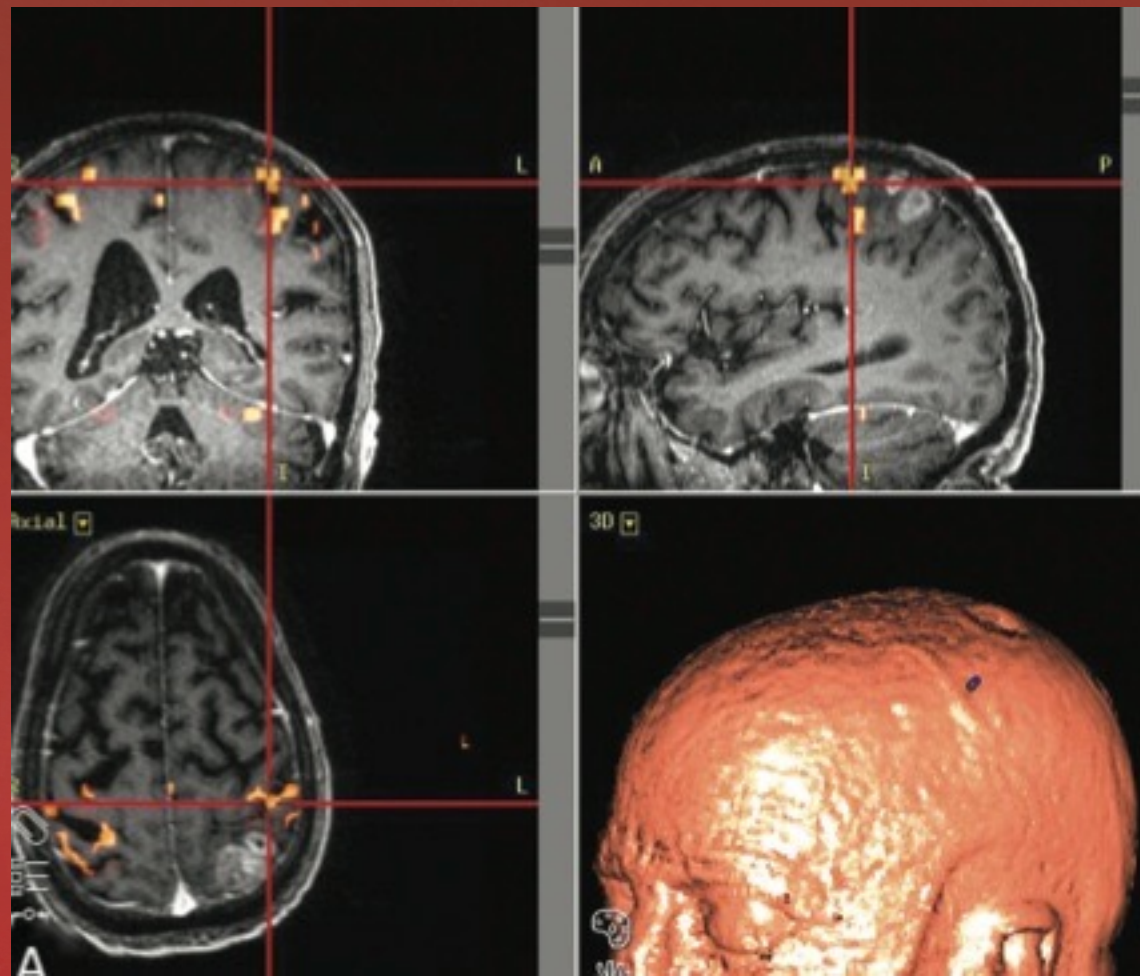
- ⌘ Repetitions
- ⌘ On and off every 30 secs for 3 mins.

# Paradigms

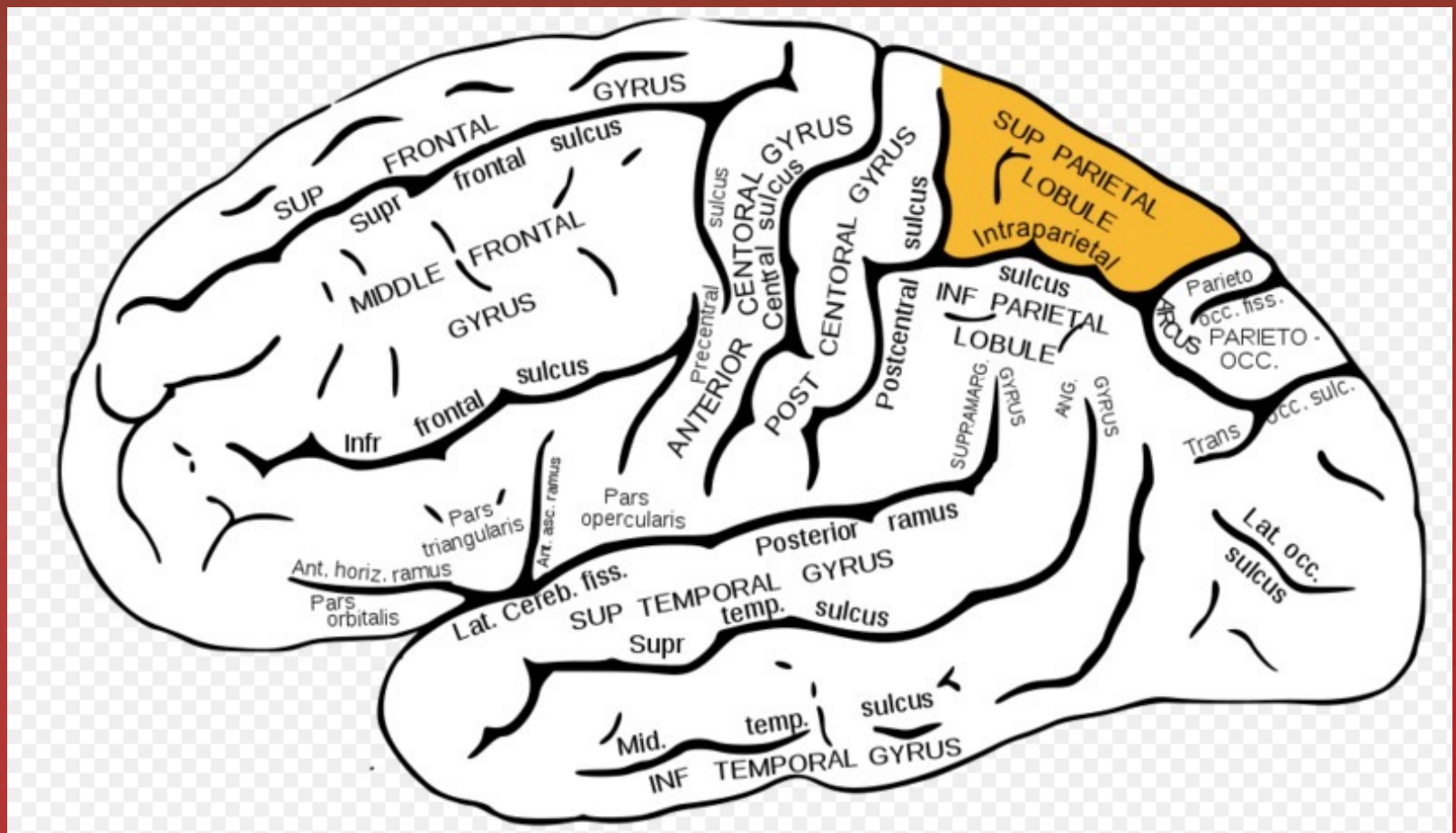




# Problems – Now that we have the images



- ⌘ Multiple activations for a single task
- ⌘ Is it real or artifact
- ⌘ Tip of the iceberg



# Motor



