

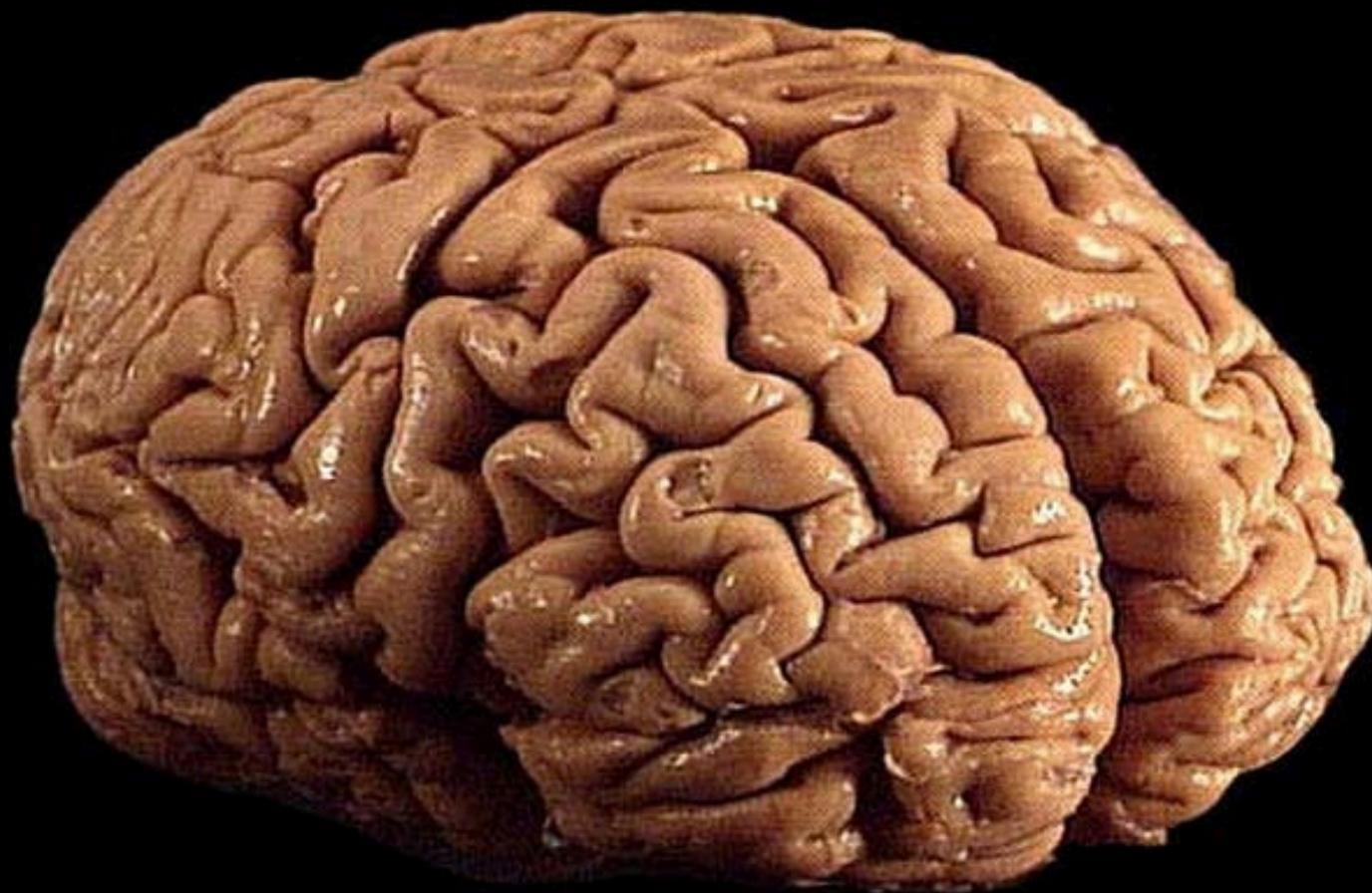
WANNA BE A BRAIN SURGEON?

Sophia Shakur, M.D.

Objectives

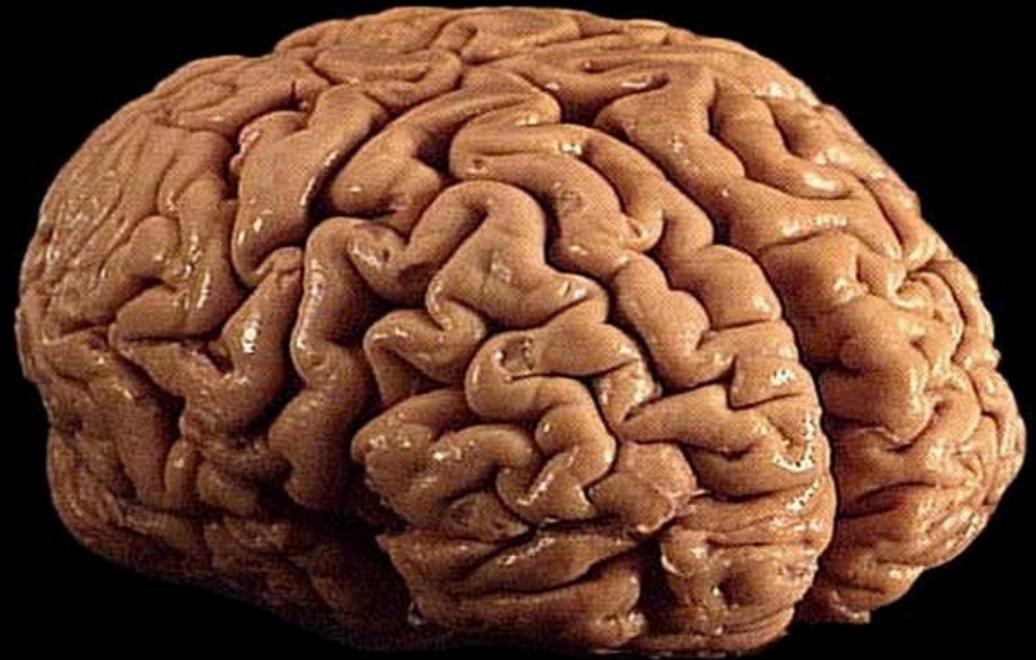
1. What is the brain?
2. Brain anatomy and organization
3. Brain diseases
4. Diagnosis of brain diseases
5. Brain surgery

Brain

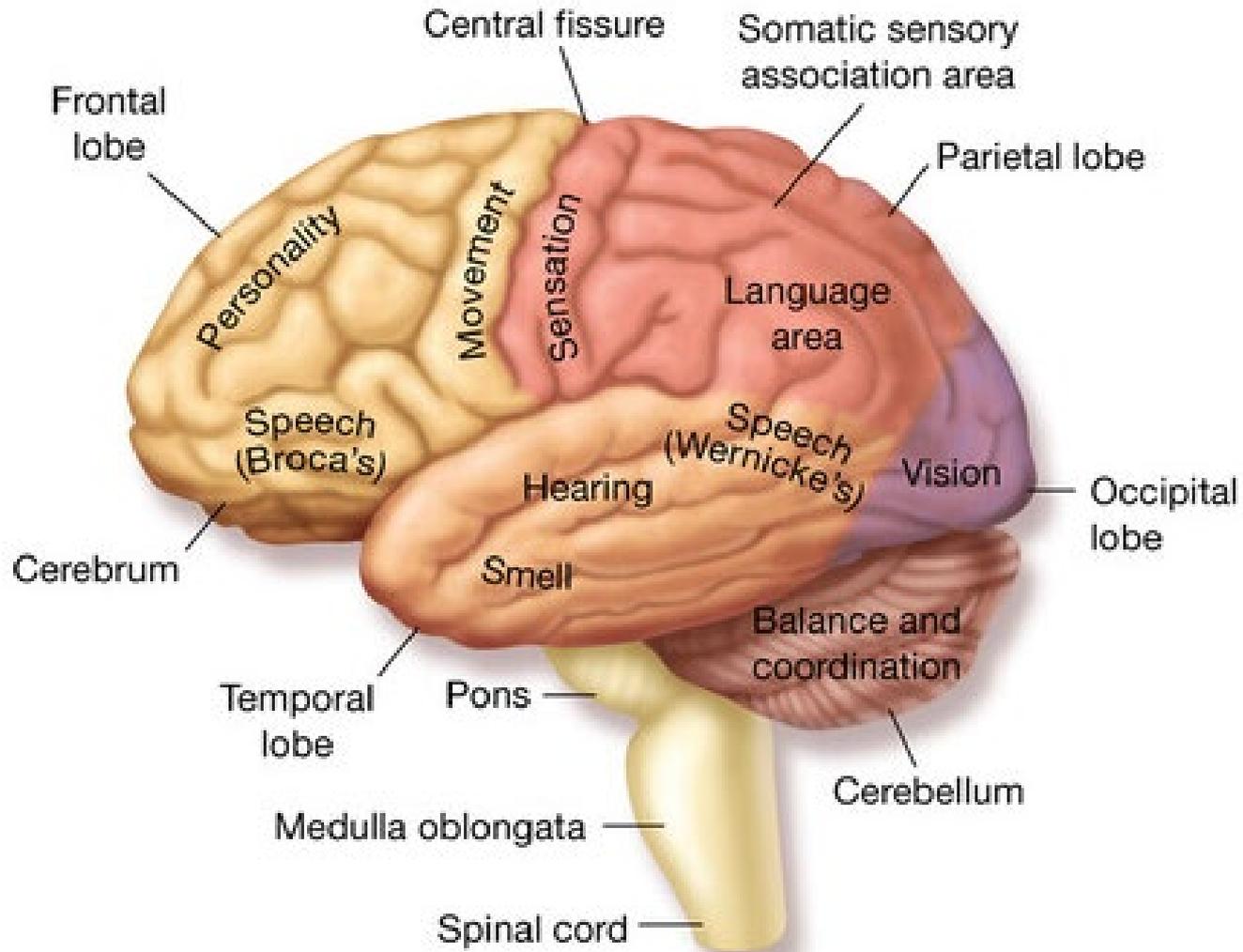


Brain

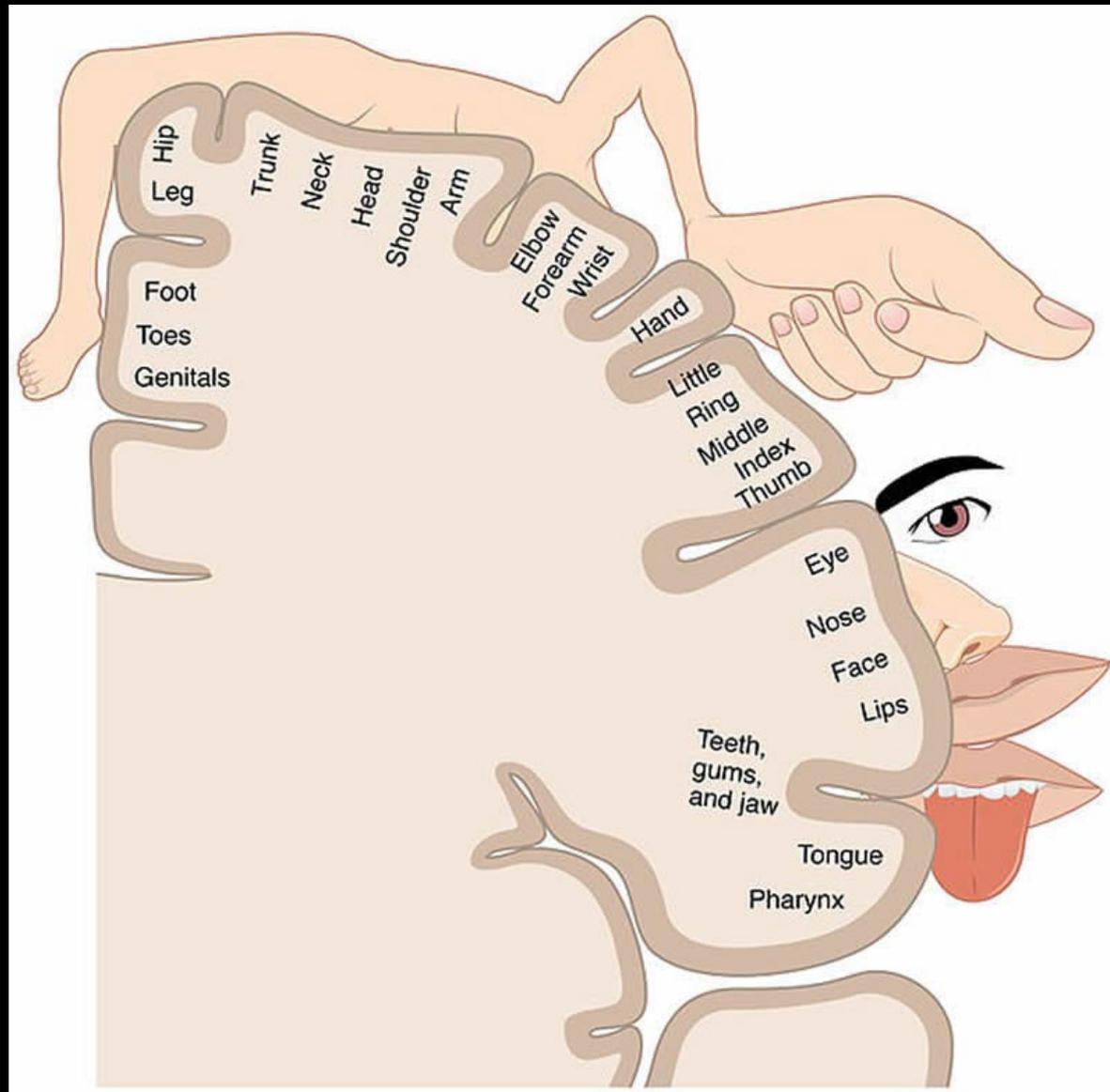
- Organ
- Thinking
- Talking
- Walking
- Memory
- Personality



Brain Anatomy



Brain Organization: Homunculus



Brain Diseases

- Stroke
- Trauma (subdural hematoma)
- Brain tumor
 - Ted Kennedy, John McCain
- Parkinson's disease
 - Michael J. Fox
- Brain aneurysm
 - Emilia Clarke
- Hydrocephalus
 - Billy Joel

Diagnosis – Physical Exam

- Weakness
- Numbness
- Speech difficulty (aphasia)
- Imbalance
- Vision loss
- Level of consciousness

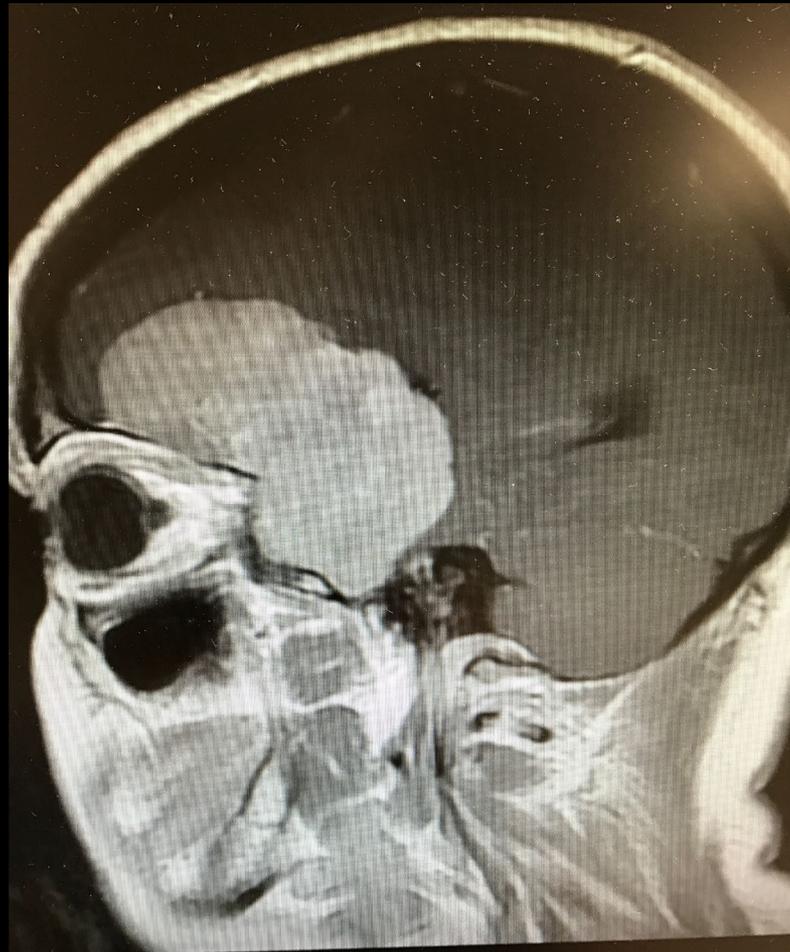
Diagnosis - Imaging

- CT head scan



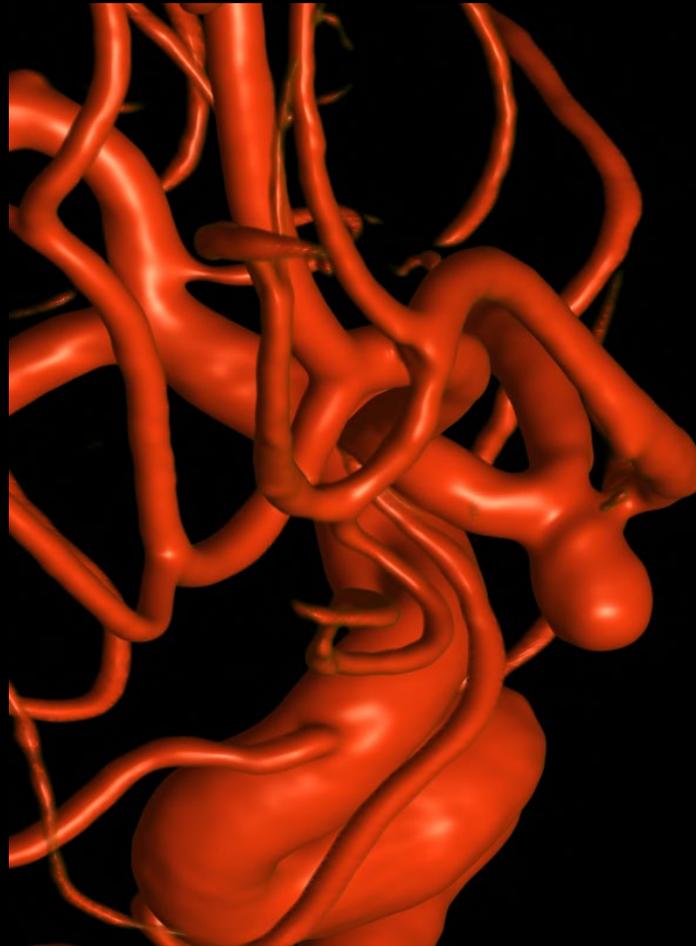
Diagnosis - Imaging

- Brain MRI scan

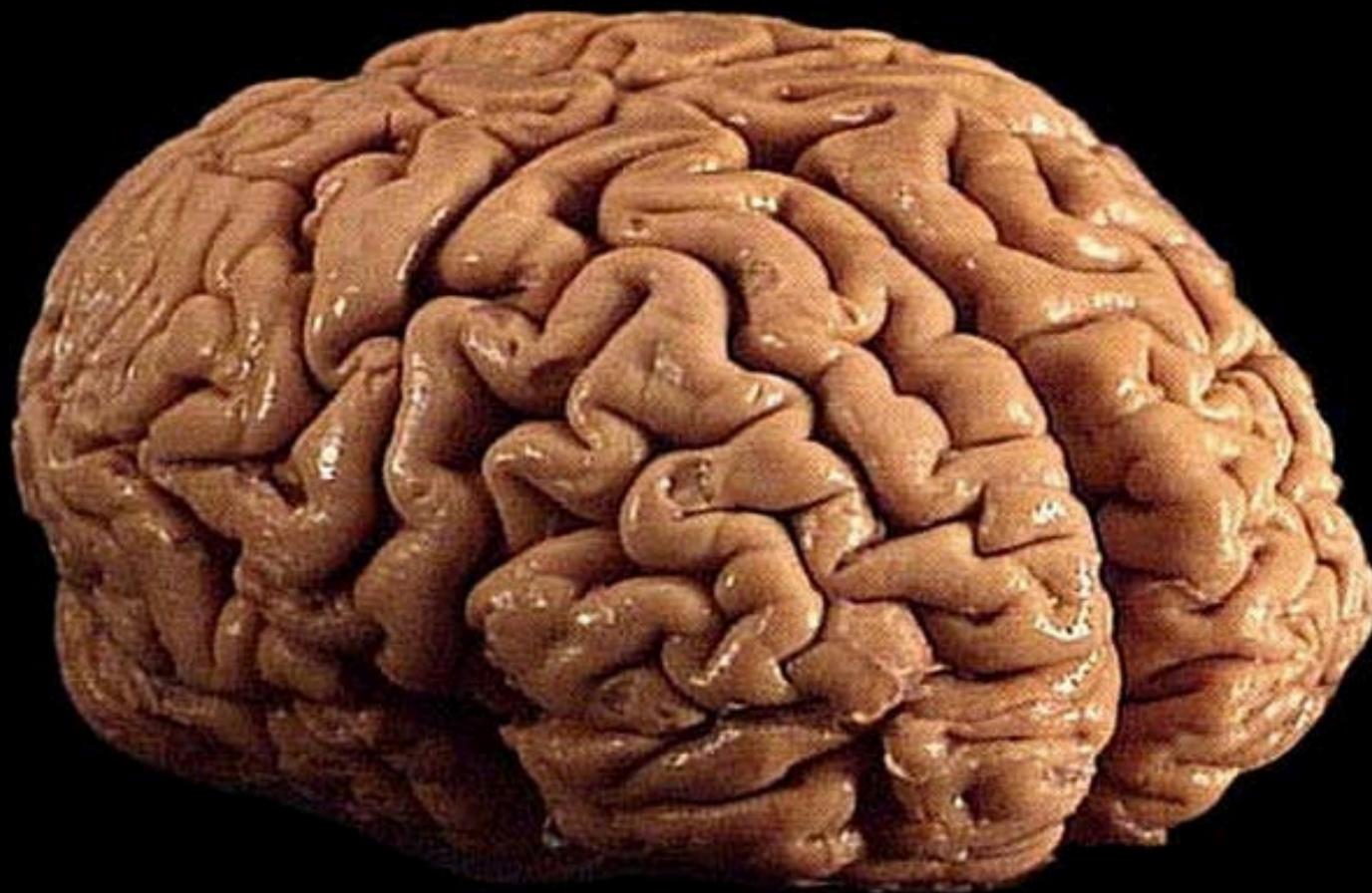


Diagnosis - Imaging

- Cerebral angiogram



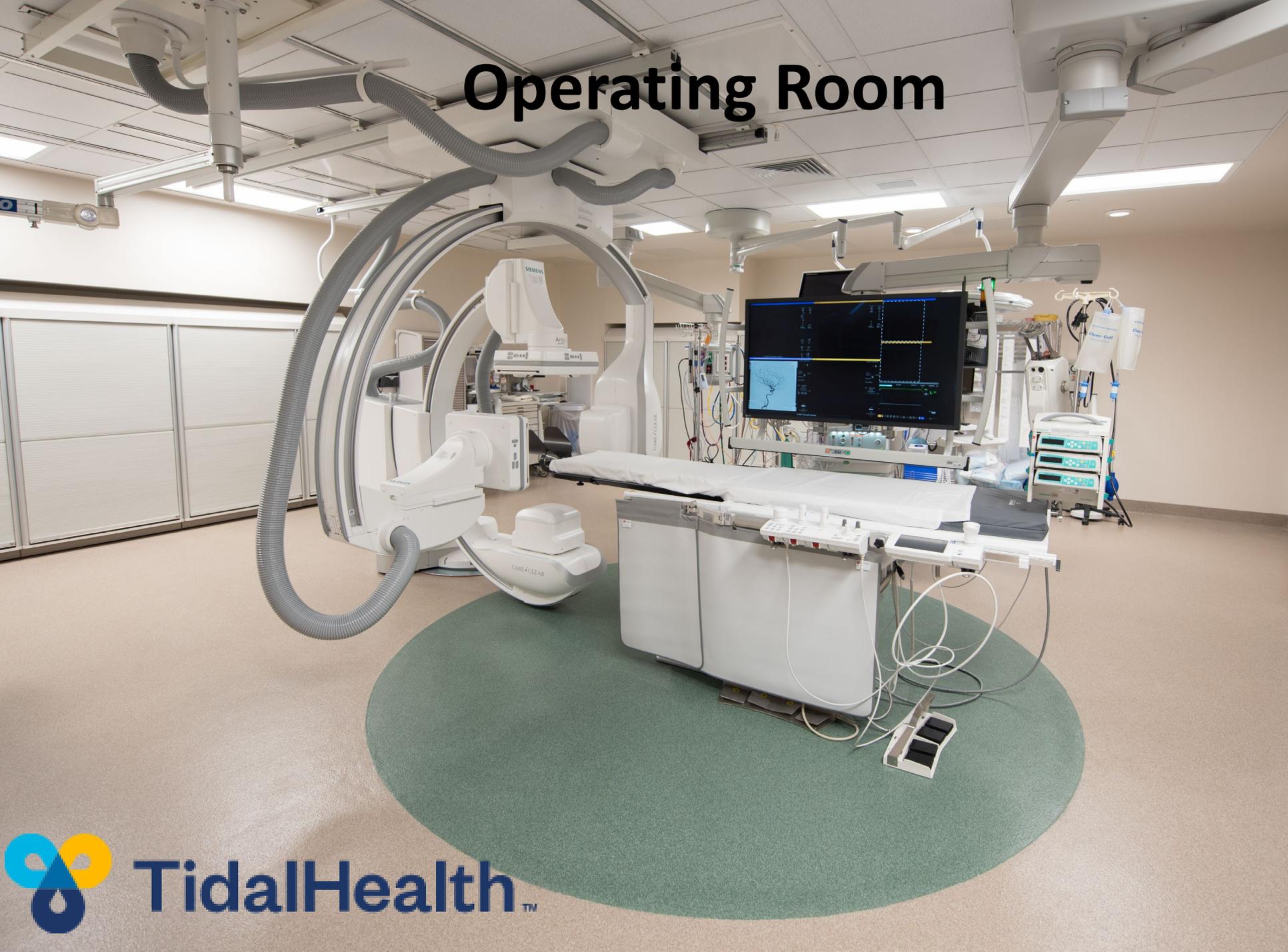
Brain Surgery



Hospital



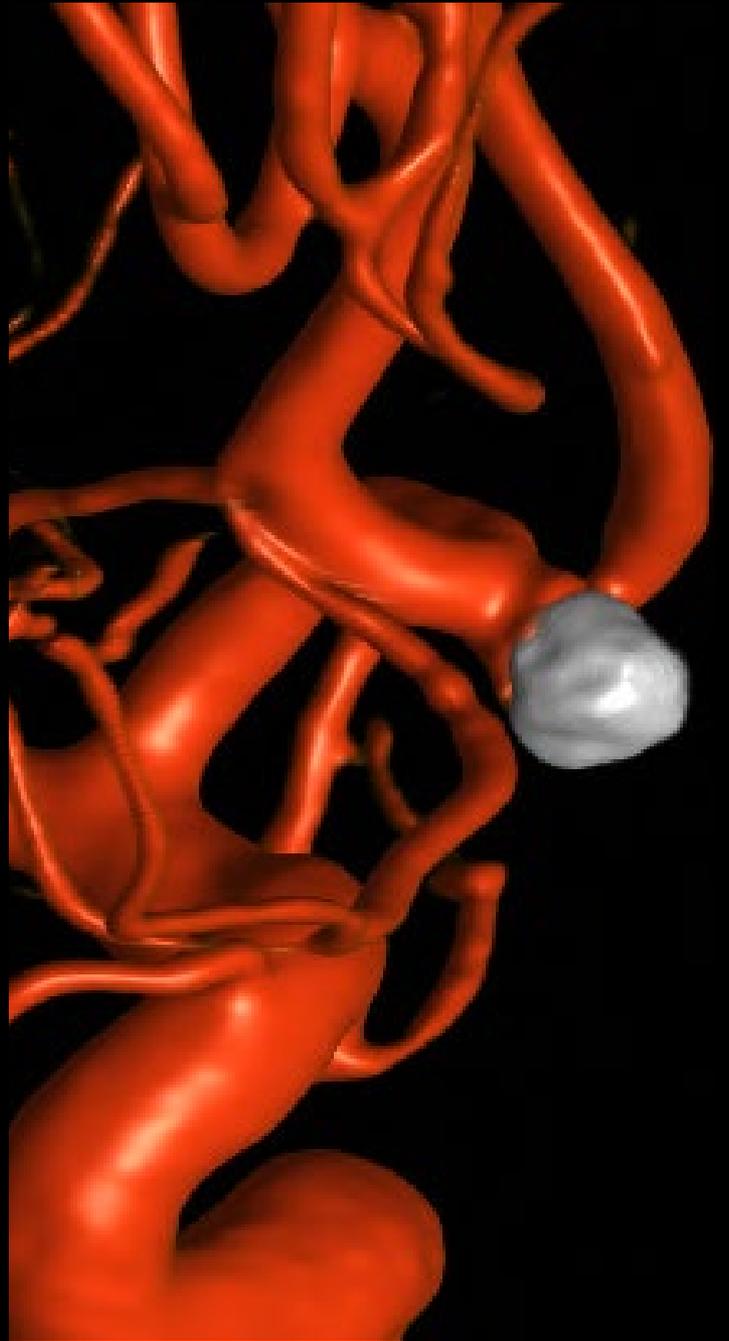
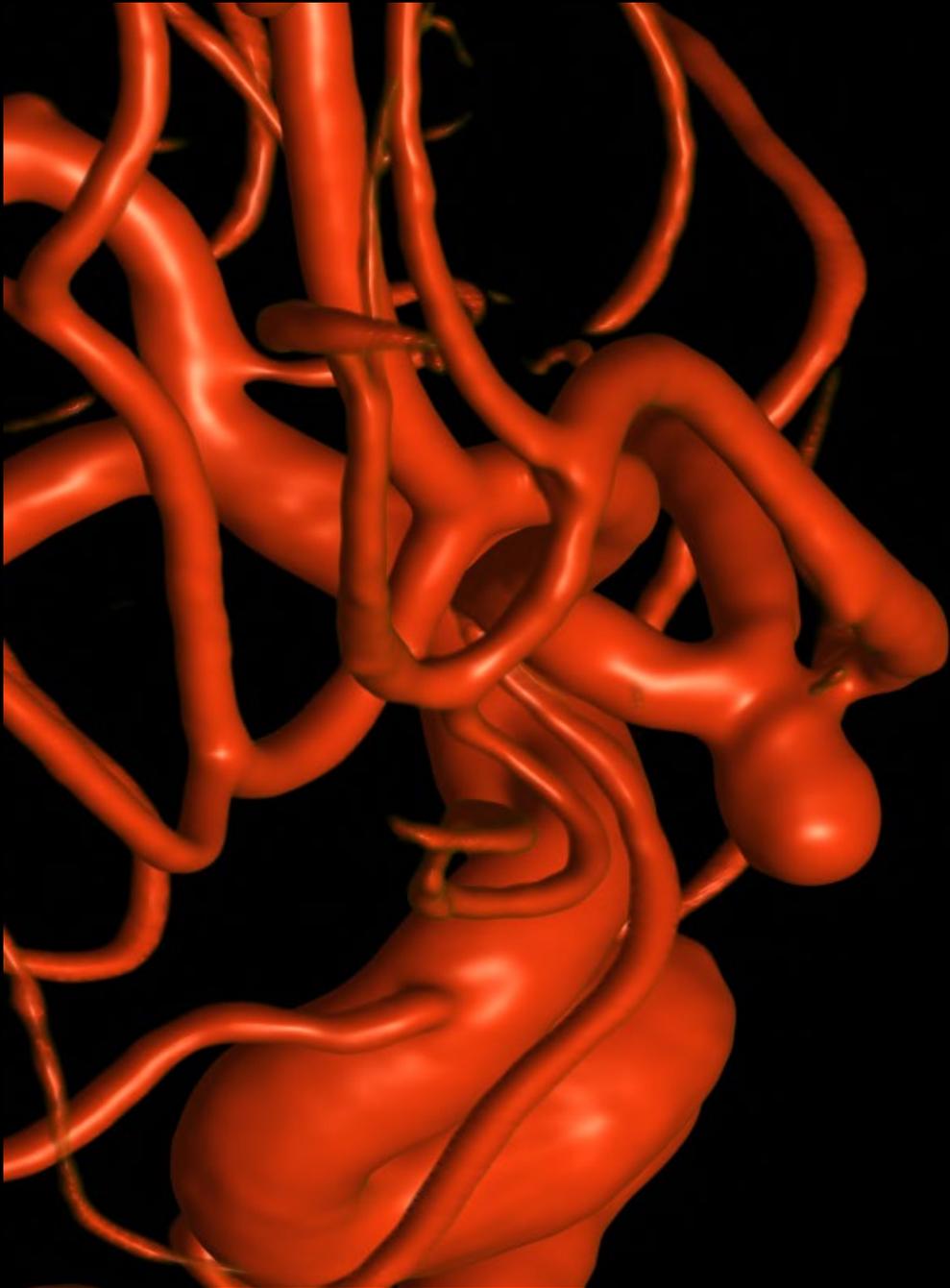
Operating Room















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