

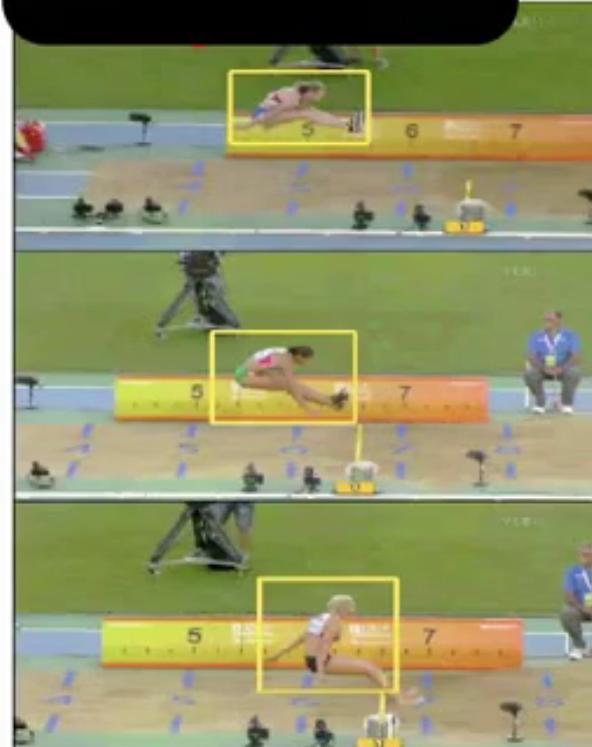
Consumer Images and Videos



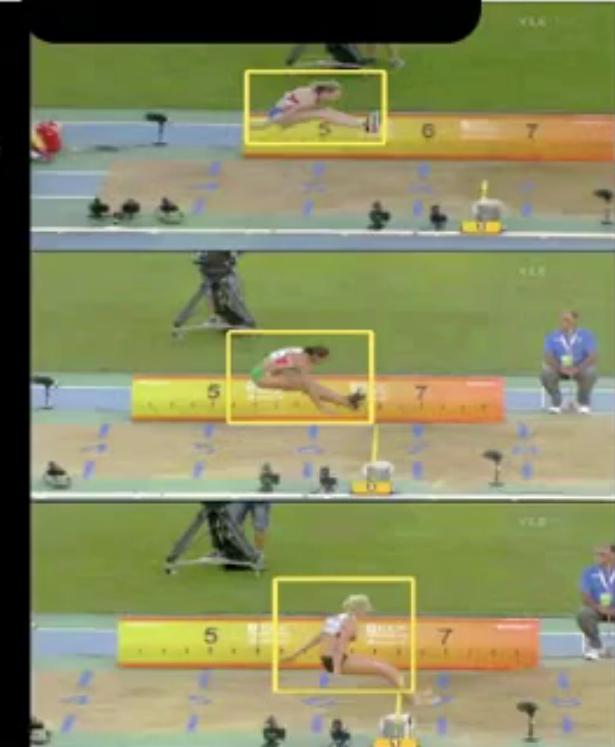


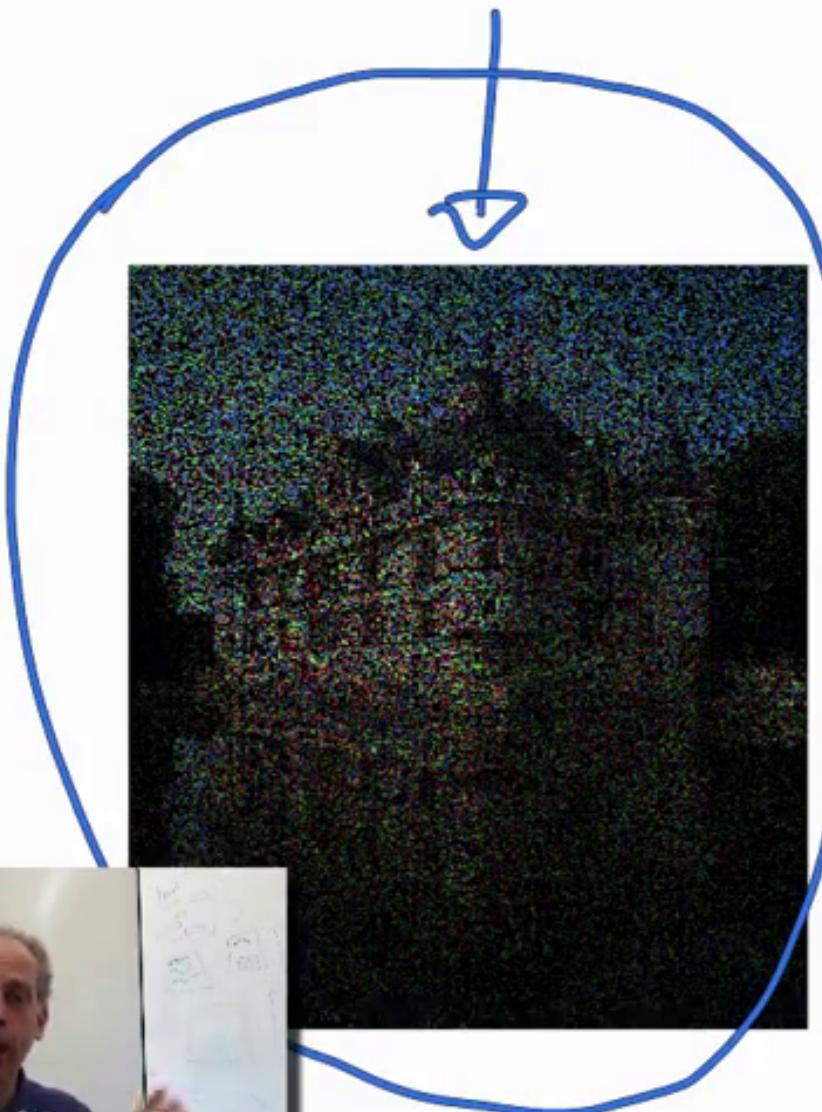


Result



Truth





Motivation



Medical and Biological Images

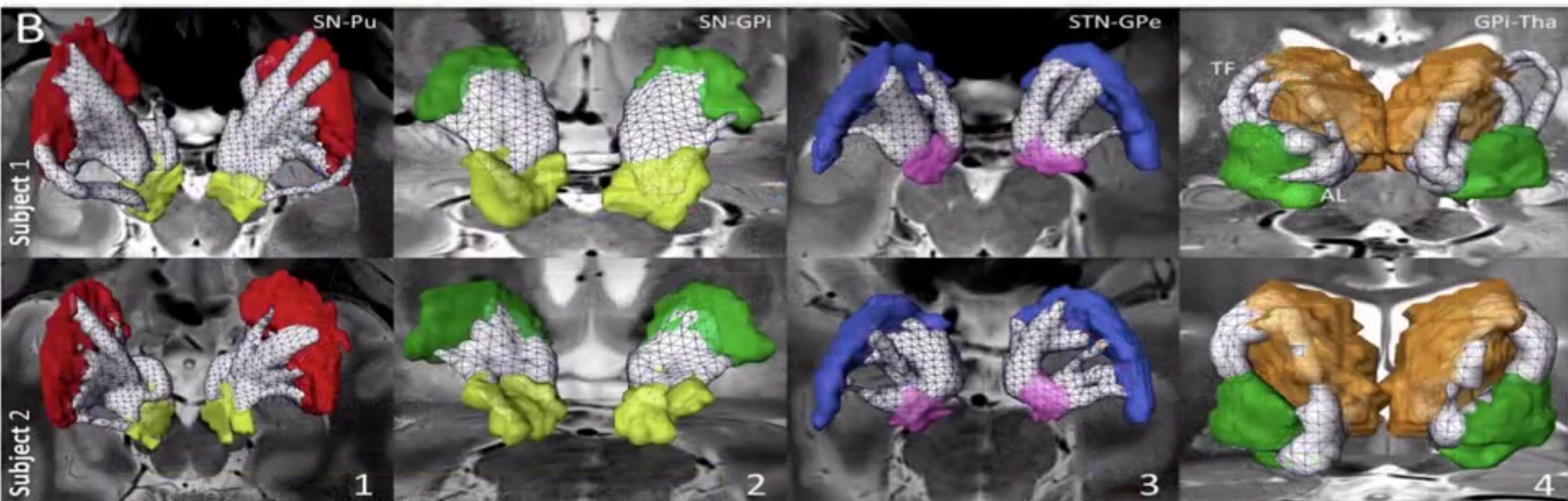


Deep Brain Stimulation (DBS)

The slide contains several diagrams related to DBS:

- A 3D diagram of a human head showing the placement of a DBS electrode (labeled "2") and an implanted stimulator (labeled "1").
- An inset diagram showing a cross-section of the brain tissue. It illustrates the "DBS Electrode" passing through "Fibers of Passage" and "Local Cells", with "Afferent Inputs" also shown.
- A text box stating: "Successful DBS surgery is critically dependent on precise placement of DBS electrodes into target structures".
- A small grayscale MRI scan of a human brain with a red rectangular box highlighting a specific region.
- A detailed anatomical diagram of the basal ganglia and surrounding structures. Labels include: IC (internal capsule), Ca (caudate nucleus), Put (putamen), GPe (globus pallidus, pars externa), VIM (ventral intermediate nucleus of the thalamus), ZI (zona incerta), STN (subthalamic nucleus), and SN (substantia nigra).

Specific White Matter Pathways



Nigrostriatal

- Hard to reconstruct
- Consistency
- Some degree of variability between subjects

Nigropallidal

- Involved in PD (loss)



CN



Pu



GPe



GPi

Subthalamopallidal

- Regulate burst activity in BG



SN



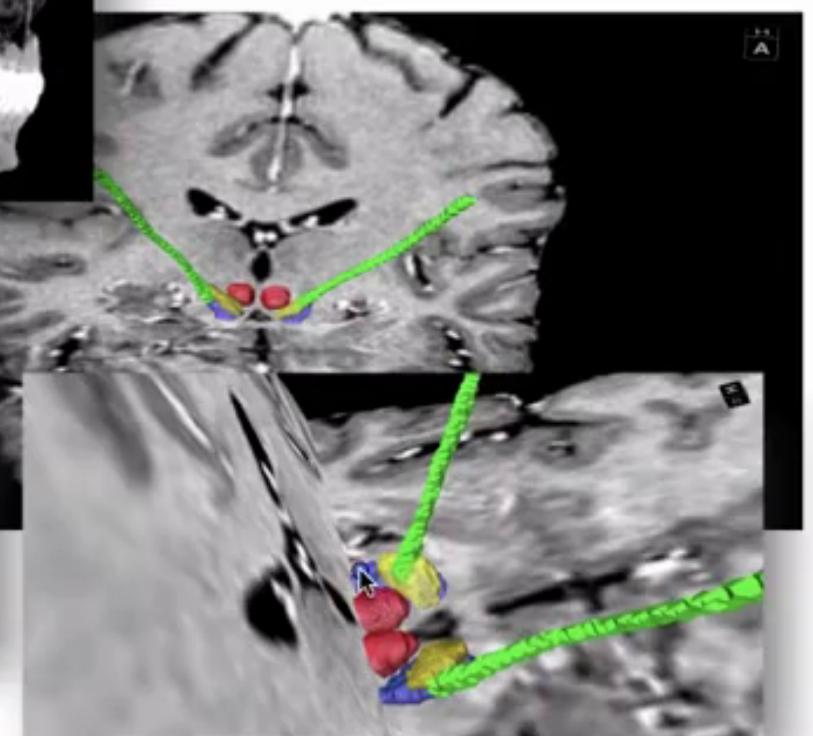
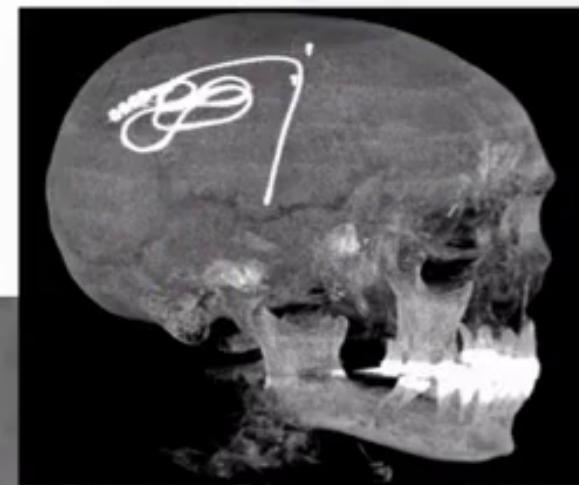
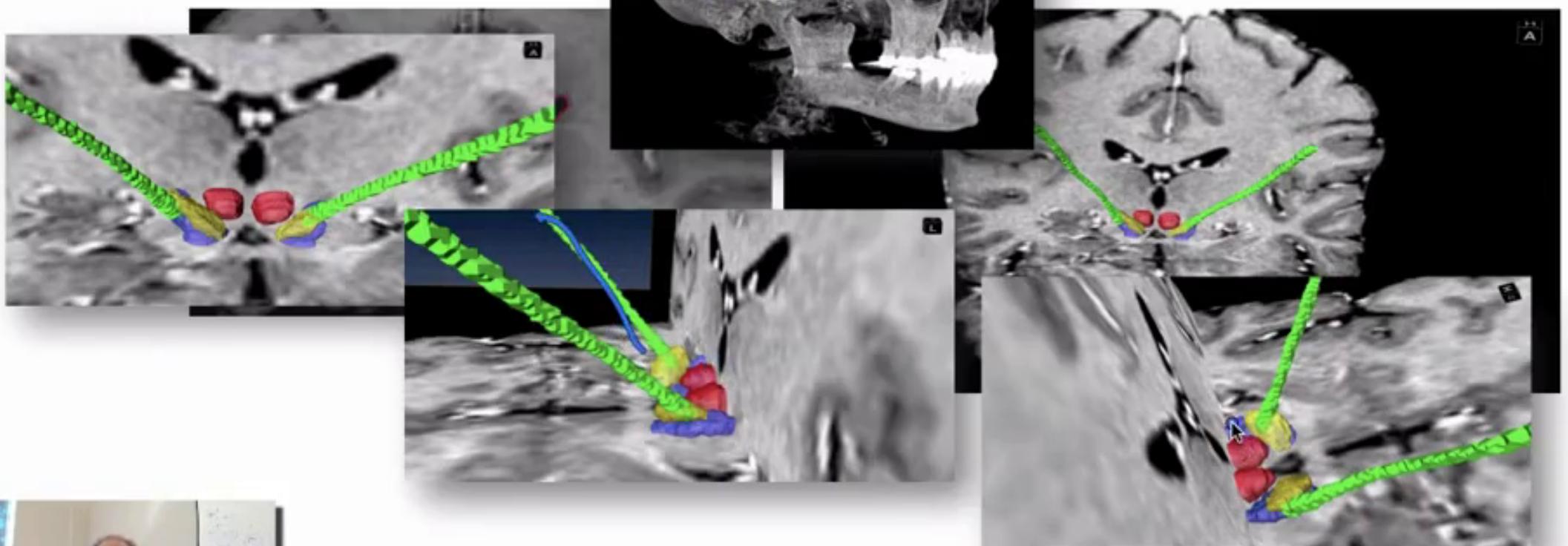
STN



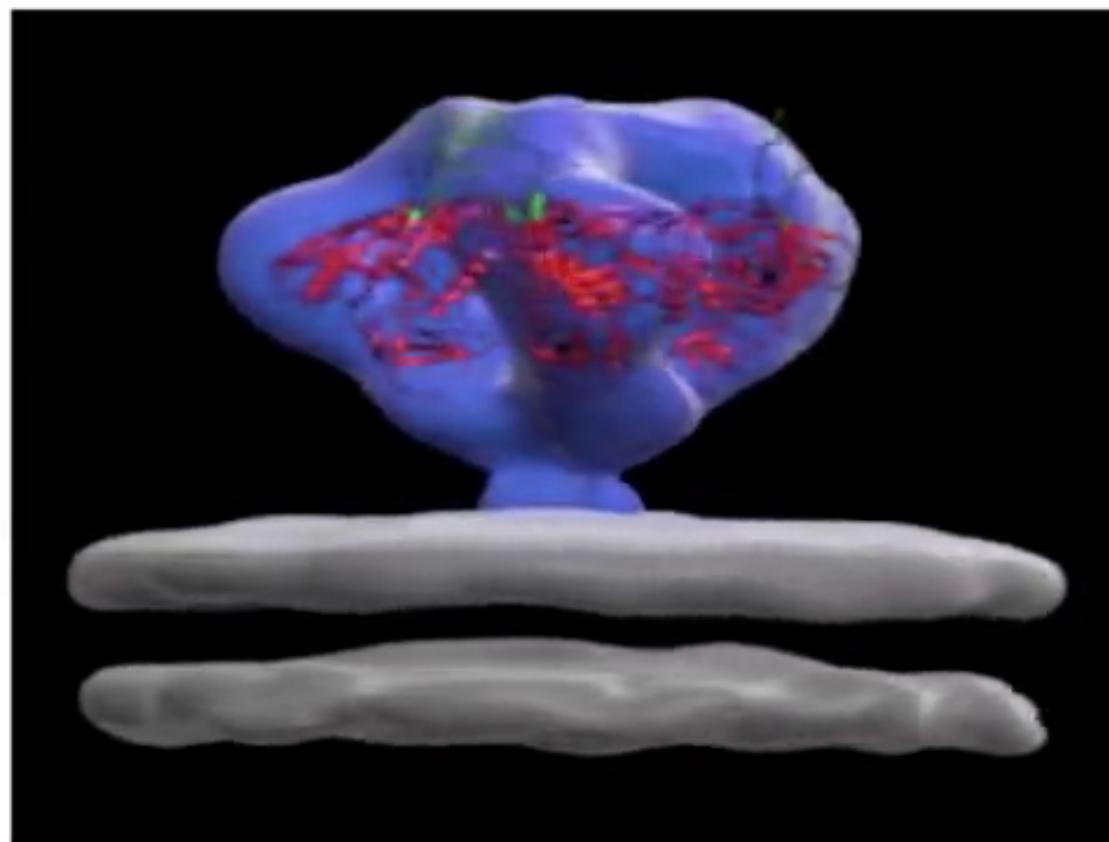
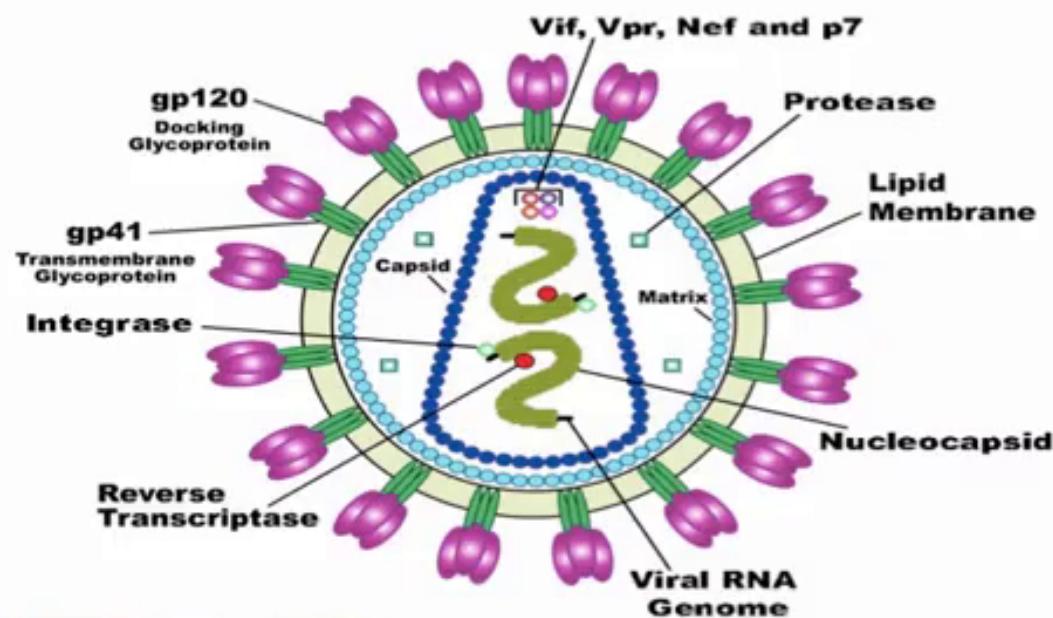
Tha

Pallidothalamic

- Motor control
- Working memory
- To Lpo, Vo, CM/Pf, MD

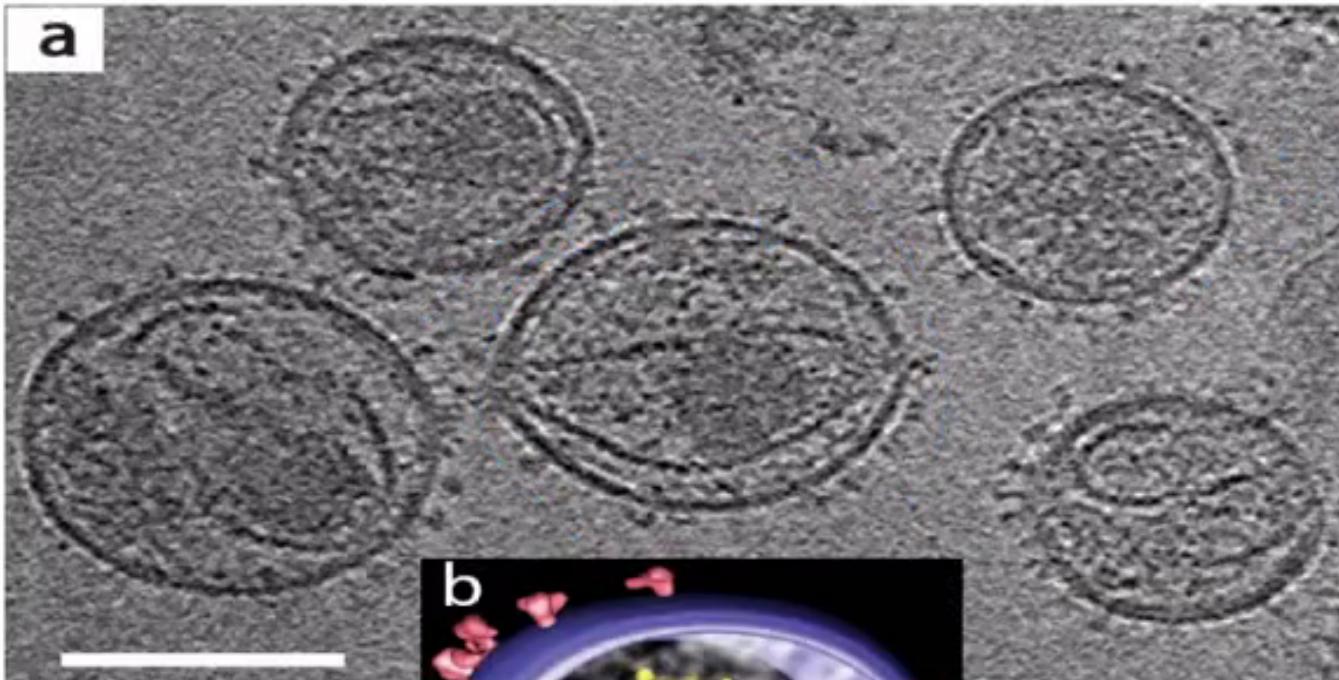


HIV Research

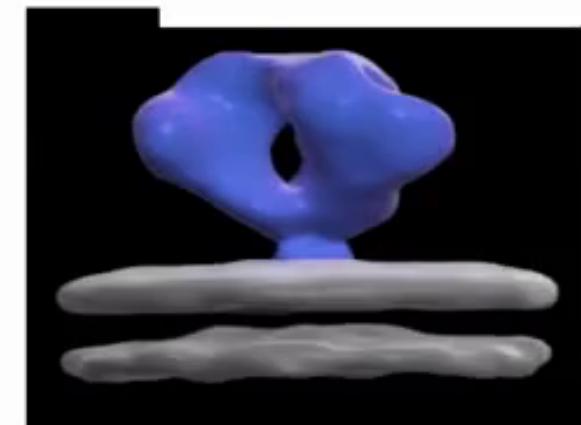
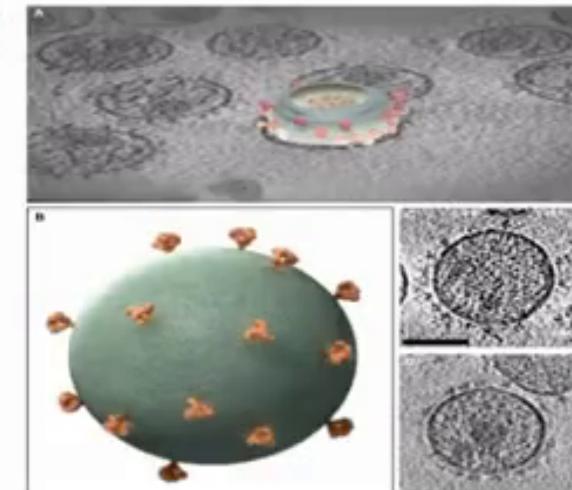
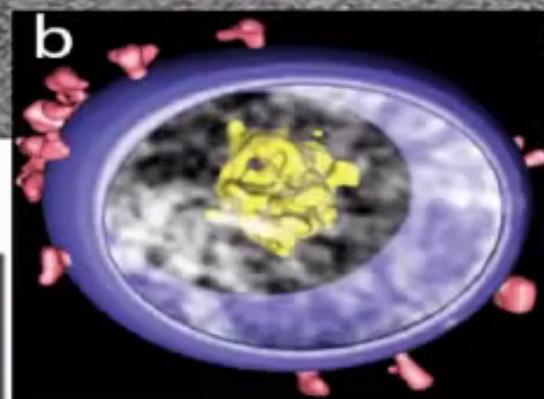


Behind the Scenes

a



b



Esophagus Detection for Cardiac Ablation

