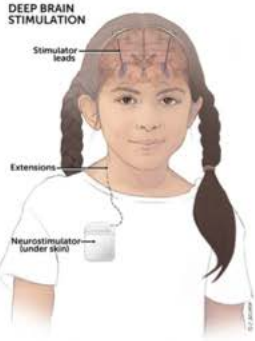
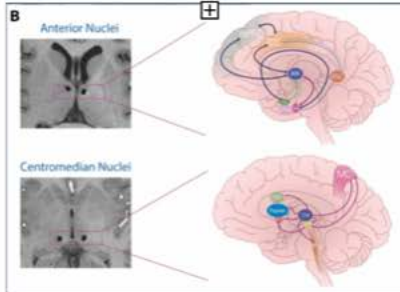


# Deep Brain Stimulation (DBS): an Option for Seizures in GRI Kids

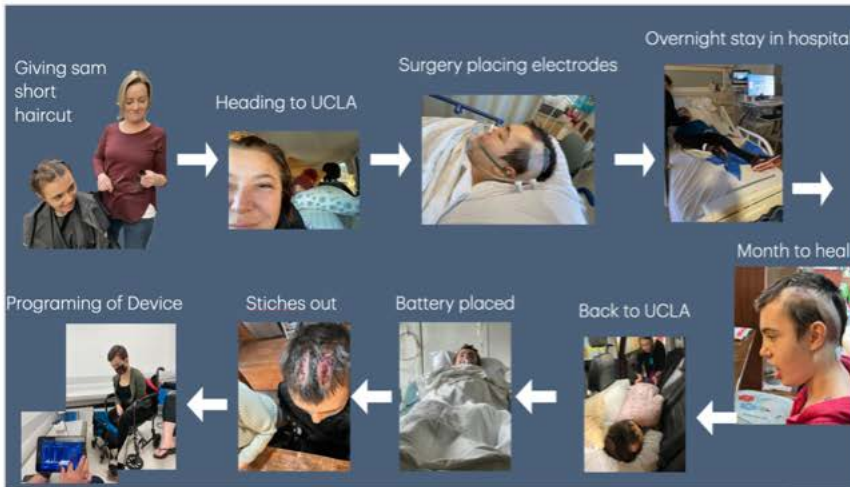


- Very long safety track record; used since the 1990s for various uses;
- over 150,000 people have one in right now
- Reversible
- Modulation is adjustable to each patient
- Relatively low risk of neurological deficit from surgery (.5%) Infection rate 5%
- FDA and European Union approved for epilepsy (In US covered by Insurance)

Electrode placement in Anterior Nuclei (ANT) interrupts partial seizures with or without secondary



Electrode placement in Centromedian (CNT) Nuclei interrupts Generalized seizure networks



## OUTCOMES

- best effects are on disabling, multifocal epilepsy as well as temporal lobe epilepsy (involvement of Papez circuit).
- it takes time for efficacy to build up (vs. DBS in movement disorders).
- seizures may intensify upon initiation of stimulation.

