Neuroscience and Neurosurgery

NINDS Summer Internship Program
Career Symposium
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Neuroscience: Research and Clinical Practice
Human episodic memory system

Cortical Association Areas

Prefrontal Cortex

Medial Temporal Lobe

Epilepsy
- 1% of the population
- 1/3 drug resistant
- Similar regions
- Surgical treatment

Hippocampus

Pre-surgical Localization

Epileptogenic Zone
Area of cortex whose removal will lead to seizure freedom
Intracranial human recordings for epilepsy

Network

Local

Neuronal


Paired Associates Verbal Episodic Memory Task

Encoding period
Single unit recordings from the human cortex

My Career Path

• Do what you enjoy and what is interesting
• Cut across disciplines
My Career Path

- Take the opportunities you come across

Zaghloul KA, et al 2004
My Career Path

- Your previous experiences do not constrain you, but they can inform you.

Zaghloul KA, et al 2009
My Career Path

• You need a team
My Career Path

• Personal
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