Location

➢ Forms part of cerebral cortex
➢ located in the medial temporal lobe and under the cortical surface
➢ 2 hippocampi
➢ Part of the Limbic System
  ○ emotions, memories and arousal (or stimulation).
Hippocampus Role

- Formation of new long-term memories
- Navigation/Spatial Orientation
- Connects emotions through smell & sound
- Declarative/Explicit, or relational memory
What Causes Damage

❖ Prolonged Stress
❖ Depression
❖ Post Traumatic Stress Disorder (PTSD)
❖ Head Trauma (Really nasty Concussions, Car Crashes, etc.)
❖ Hypoxia
❖ Encephalitis
❖ Epilepsy
❖ Aging
Symptoms of Damage to the Hippocampus

- Amnesia
- Inability to form new memories
  - when or where a situation occurred (episodic)
- Disorientation
- Reduced Hippocampal Volume
Associated Diseases

A Faulty or Damaged Hippocampus may lead to the development of various conditions/diseases such as

- ALZHEIMER’S
- SCHIZOPHRENIA
- ANTEROGRADE AMNESIA
- CUSHING’S
Can the damage be undone?

- Medications
- Cognitive therapy

“Imagine having to win over the girl of your dreams... every friggin’ day.”

“Just keep swimming.”
References


References


References


The Journal of Neuroscience Society for Neuroscience. (n.d.). Retrieved February 05, 2016, from http://www.jneurosci.org/content/19/12/5034


Alternative Class Involvement

Face Memory Game (30, 20, 10)

https://faculty.washington.edu/chudler/java/facemem.html