

Limbic System, emotional and memory brain

Forms the core of the brain between the cortex and brainstem
Involved in instinctive behaviours, emotions, basic impulses and drives
Such as sex aggression pleasure survival ect

Amygdala- assesses info for emotional significance, adds emotion to memories i(t is key in long-term memory storage because it gives memories meaning)
Part of the fear response, hard-wired ANS response linked through the hypothalamus (strong emotional like fear causes a strong ANS response)
Higher heart rate=higher breathing rate, adrenaline
Nuclei of the amygdala are affected by sex hormones therefore they are different in the sexes (different feeling emotions)

Hippocampus- major memory formation and recall
Passes working memory (prefrontal cortex) to long-term memory areas in the cortex
Linked to hypothalamus and amygdala therefor emotional content is linked to memories
Damage to Hippocampus:
Does not effect short term memory

2 types of amnesia

Anterograde

Can't make new memories

Retrograde

Can't recall

Hypothalamus and Tegmentum

Bodily reactions and major dopamine centers (drive) motivation behind behaviour

Damage to these:

Difficulty getting pleasure in life

Addictions (alcohol, gambling, eating, drugs)

Mammillary Bodies

Important for memory formation (objects) and memory recall

Fornix

Connection between mammillary bodies and hippocampus

Cyngulate Gyrus

Sensory associations to memories