Sleep

- Models of why we sleep
  - Adaptive process – need for animals to protect themselves
  - Restorative process – recovery for work done while awake
  - Information conservation – help us master tasks/skills we try during the day
- Sleep is a perceptual wall between the conscious mind and the outside world
- Immediately reversible

Stages of Sleep

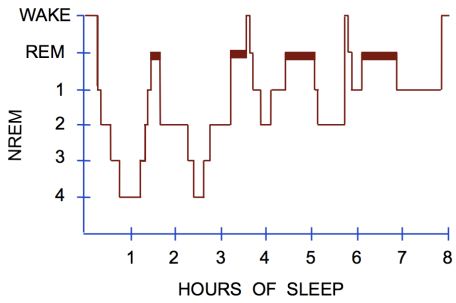
- We go through sleep cycles every 90 minutes
- First half of night focuses on NREM whereas second half is more REM sleep

NREM Sleep

- Progressive slowing down of brain activity
- Slowing in breathing and heart rate
- Decreases skeletal muscle activitiy
- Decline in blood pressure, body temperature and metabolic activity
- Release of up to 96% of daily output of growth and sex maturation hormones

REM Sleep

- Breathing and heart rate become irregular
- Blood flow to the brain increases
- Rapid eye movements
- Muscles of the body are effectively paralysed
- Majority of dreaming occurs here



Common Sleep Disorders

- Narcolepsy – day time sleepiness and paralysis in the middle of the day
- Insomnia – cannot get continuous sleep
  - Jet lag results in shifting of circadian rhythms
- Period leg movement syndrome – legs twitch every 30 seconds
- Obstructive sleep apnoea – pharyngeal airway collapses and blocks the airways
  - Periods of loud snoring and soft breathing