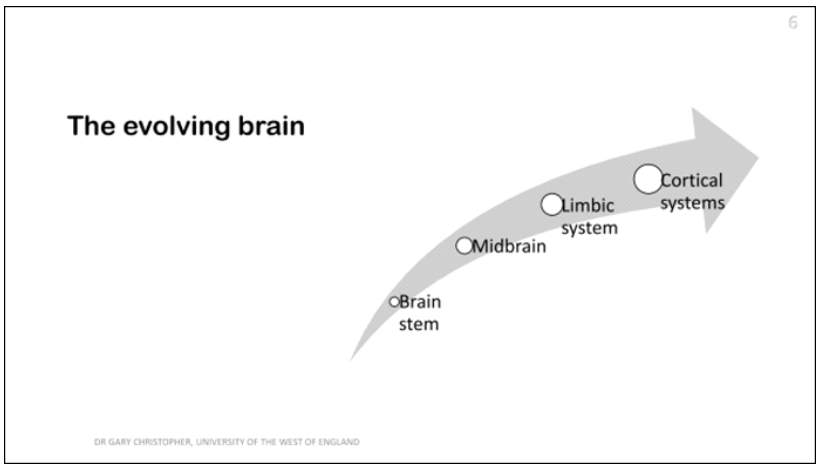
- Interneurons:
- The brain has many crevices to increase the surface area to increase the number of neurons
- All these connections are parallel

The Evoking Brain



- Brain stem: controls basic functions of the breathing
- Midbrain: allows control of different levels of activity e.g. sleepiness, alertness, sensory processing, motor processing
- Limbic system: associated with emotions and drives
- Cortical systems: interpreting information, planning etc., high order processing, has the greatest level of connections and provides the most energy, allowing us to do things with greatest efficiency
- Many feedback mechanisms that allow us to control our behaviour and allowing flexibility e.g. inhibition
- Born with basic neural patterns that allows for moving and language development, built to learn as much about the environment as possible, however considerable scope for that being affected by what we do (e.g. sculpting our behaviour and development)
- Feedback loop: interact with the environment, feed that back to the brain and connections made – no two people with the same brain.

Increasing Neuronal Connectivity

- New born baby weighs less than adult brain, increase of weight is due to rapid expansion of connections between neurons.
- These connections due to interactions with the real world.

Two complimentary processes:

- Overproduction: genetically programmed to make more and more sense of what is going on, not most efficient way of doing things.