What is the anatomic basis of the differences between short-term and long-term memory?

Short term memory lasts from a few seconds to a few minutes and occurs in the hippocampus, mamillary bodies and thalamus. Long term memory is short-term memory that has been used repeatedly, solidifying it in your brain.

Describe the differences between movements in patients with Parkinson's disease (rest tremor) and cerebellar ataxia (intention tremor).

In Parkinson's disease, the muscles are tightly clenched due to low levels of dopamine and high levels of acetylcholine in the basal ganglia. The patient has trouble forming expressions, moves slowly and has spasms in certain extremities when not moving those areas. Cerebullar ataxia, on the other hand, also causes difficult movement, but because the patient has lost coordination, and often displays an “intention tremor”, meaning a series of wild over-corrections when trying to pinpoint an exact location.