Helpful Definitions

Brain Development

- 1) Neuro: anything related to the nerves or nervous system
- 2) Neuroscience: the study of the nervous system including the brain
- 3) Neuropsychology: the study of how we think, feel and behave
- 4) Neurodevelopment: the process by which the brain and nervous system grows and develops, starting from when a baby is in the womb
- 5) Neurodevelopmental stages: the stages of development from womb to adulthood. Our talk today will focus on the Adolescent Stages from ages 10-18+ years old.
- 6) Neuroplasticity: the brain's ability to learn and to form new connections throughout life
- 7) Neurotypical: used to describe someone that is following "typical" brain development
- 8) Neurodiverse: having a brain that works differently from the average or "typical" person (a common neurodiversity would be someone diagnosed with Autism or ADHD).

Brain Learning

Pre-Frontal Cortex: the front part of the brain that is responsible for executive skills.

Executive Skills: the collection of skills that allow you to set and accomplish goals, learn from past decisions, solve problems and manage your emotions. <u>Click here for list of Executive Functions</u>.

Myelination: the change or maturation of certain nerve cells which allows the nerve impulses to travel faster. When people practice skills regularly, nerve cells grow and mature, making the skill easier to do. The brain does not differentiate between "healthy" skills or "unhealthy" skills. The more you practice something, the better you will be.

Pruning: the process of removing unused or weak connections between brain cells. It helps the brain work more efficiently. For example, if you learn an instrument as a child, but don't practice, you will "prune" the skill of being able to play.

Hormones: chemicals that coordinate different functions in the body. Starting at 7-8 years old, the body begins to produce the hormones that are responsible for the changes of puberty. Teenage hormones are the chemicals that cause the physical growth and sexual development that will carry teens into adulthood.





