

## EEG

- electroencephalography
  - electrical activity in the brain
- electrical activity is measured in frequencies that look like small waves
  - Alpha Frequency (8-12Hz) - cognition
  - Beta Frequency (13-30Hz) - motor

## Coherence

- measure of connectivity
- EEG + EMG - connectivity between brain and muscle

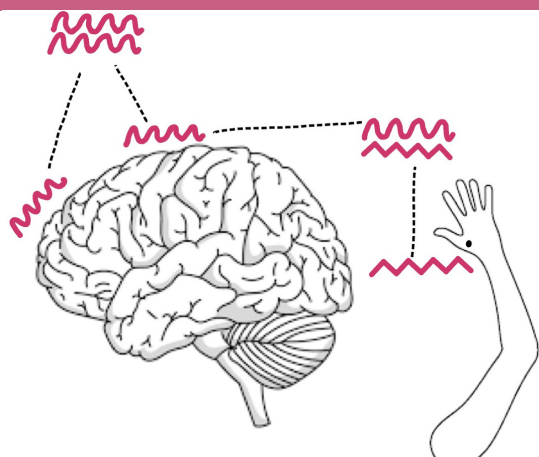


# Understanding Connections Between Brain and Muscle

We examined people who were young and did not have a stroke.

When they had more connection between brain areas for thinking and moving, they had less connection between brain and muscles.

This provides us with a comparison for what happens after a person has a stroke, when cognition may be affected.



## Electrodes

- small microphones that show electrical activity on computers
- not painful



## EMG

- electromyography
  - electrical activity in muscles

## Cognition

- thinking, learning, memory, and attention
- these skills are important for movement

