

# Parenting and the Teenage Brain

Faithbridge - October 22, 2017

# By age six, the brain reaches 90% of its adult size.

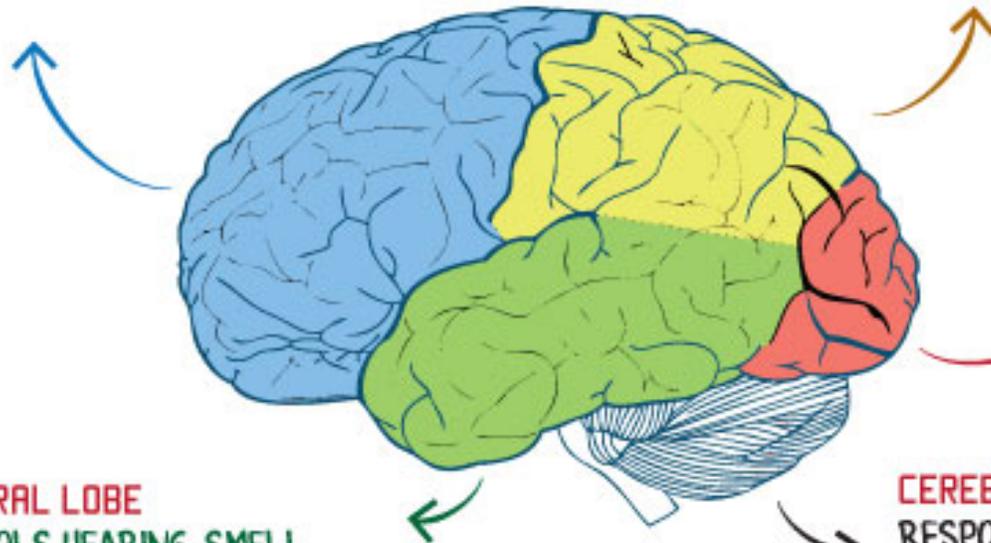
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## FRONTAL LOBE

HANDLES ALL THOUGHT AND VOLUNTARY BEHAVIOR  
MEMORY, GOAL FORMATION, ABSTRACT THINKING,  
PLANNING, AND IMPULSE CONTROL

## PARIETAL LOBE

ASSOCIATED WITH BODILY SENSATIONS  
LIKE HEAT, COLD, PRESSURE, AND PAIN  
CONTROLS TASTE, TOUCH, THE ABILITY  
TO RECOGNIZE OBJECTS, HAND-EYE COORDINATION



## OCCIPITAL LOBE

CONTROLS VISION  
AND VISUAL RECOGNITION

## TEMPORAL LOBE

CONTROLS HEARING, SMELL,  
LANGUAGE SKILLS, AND SOCIAL UNDERSTANDING

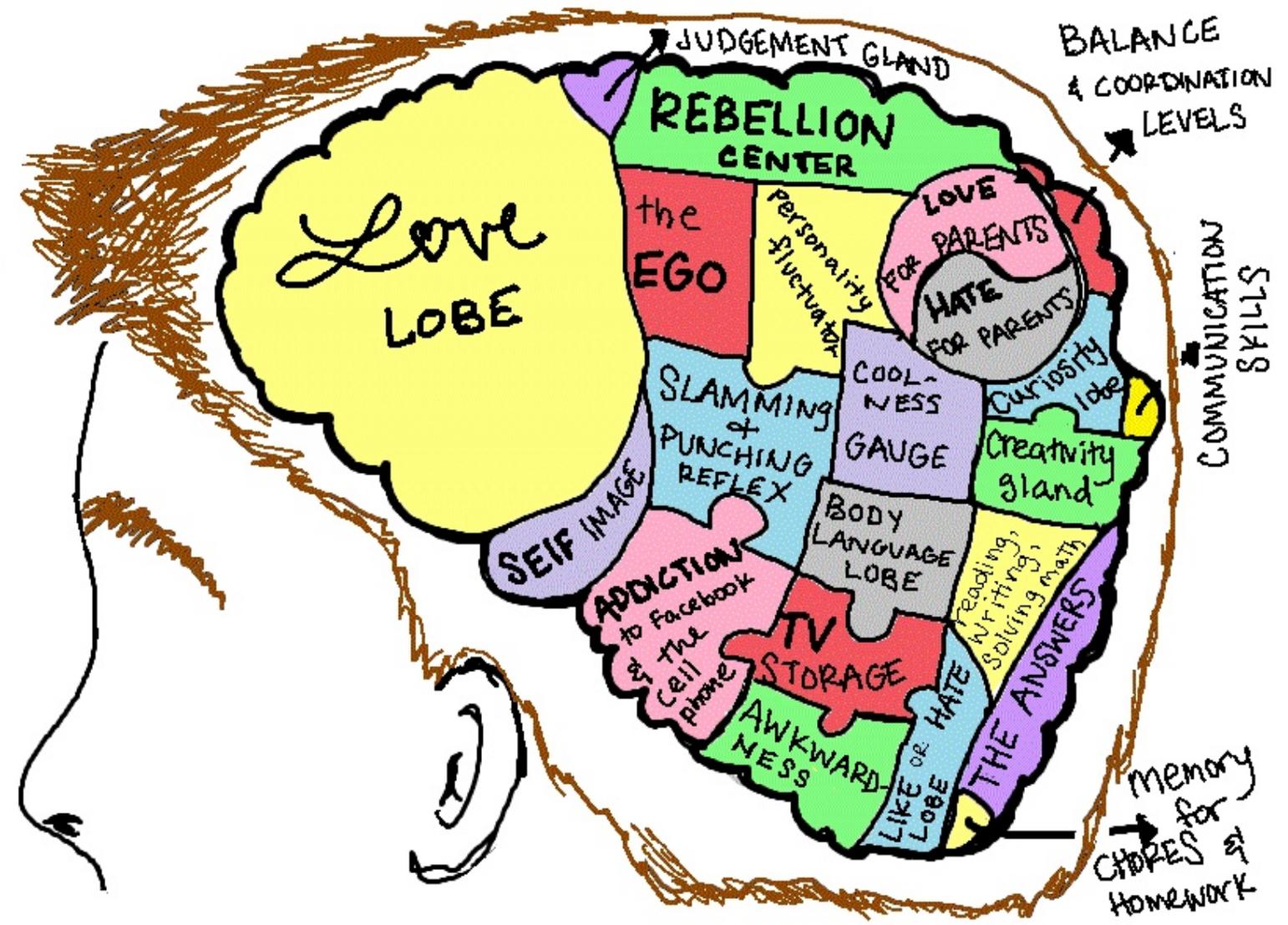
## CEREBELLUM

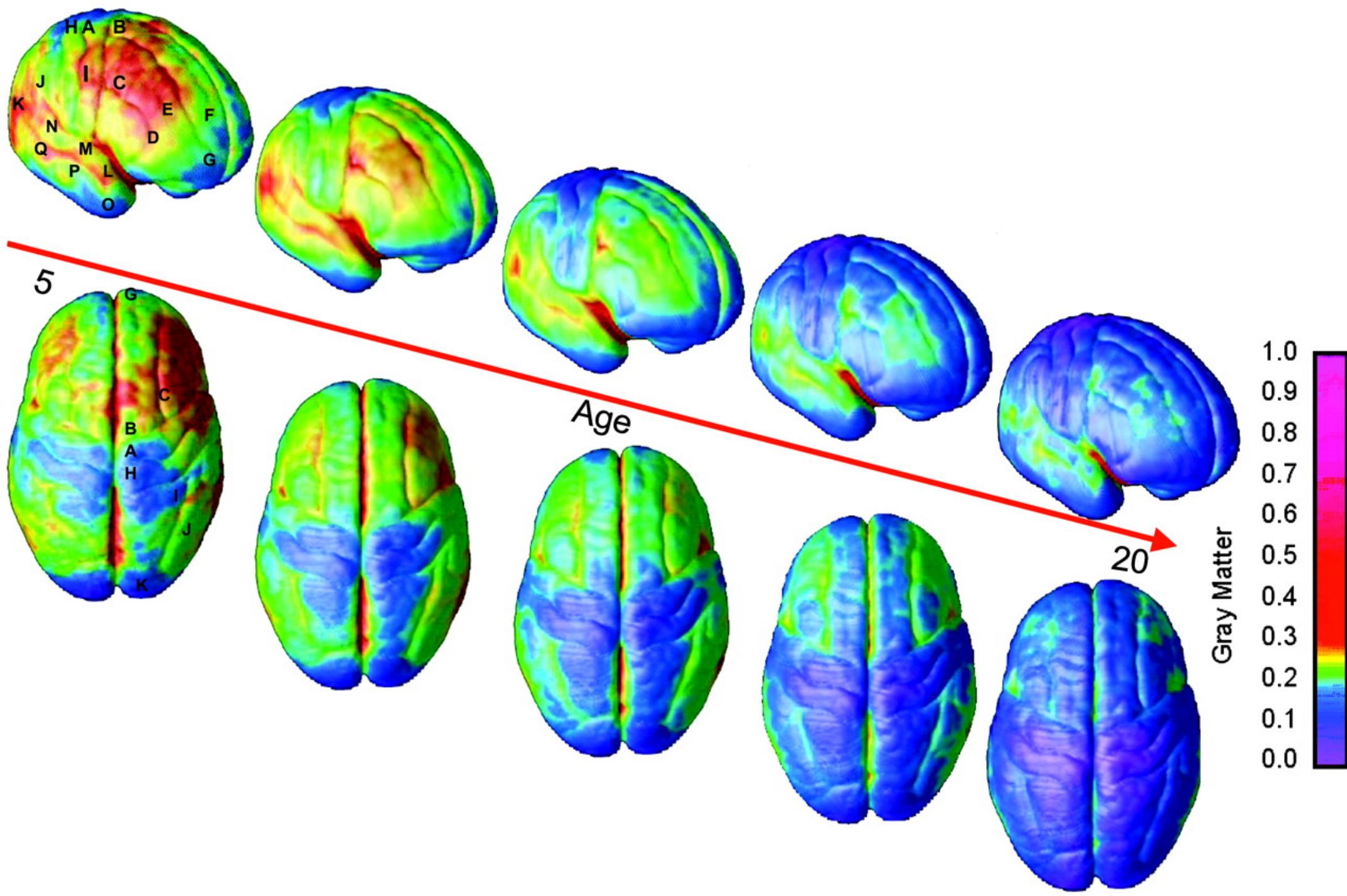
RESPONSIBLE FOR BALANCE  
AND MUSCLE COORDINATION.

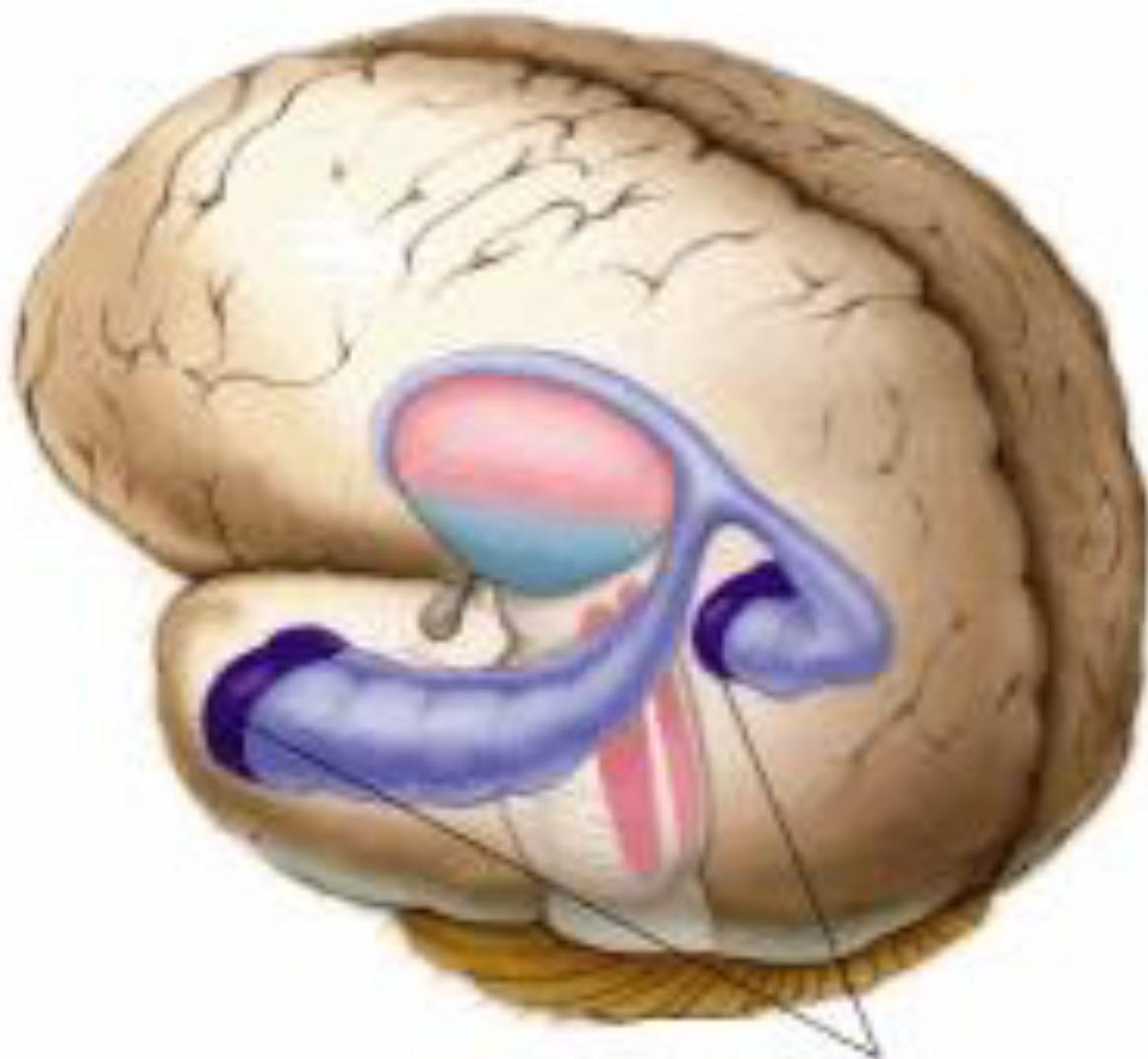
**Teen  
Brain  
Under  
Construction**



# THE AVERAGE TEENAGE BRAIN



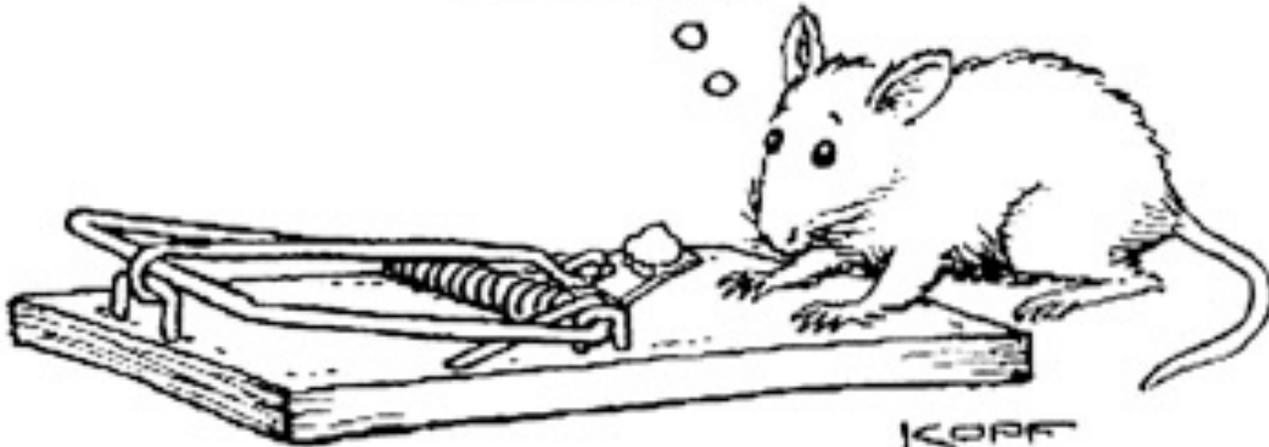




**Amygdala**

# TEEN-AGE MOUSE

I CAN TOTALLY  
GET AWAY  
WITH THIS!





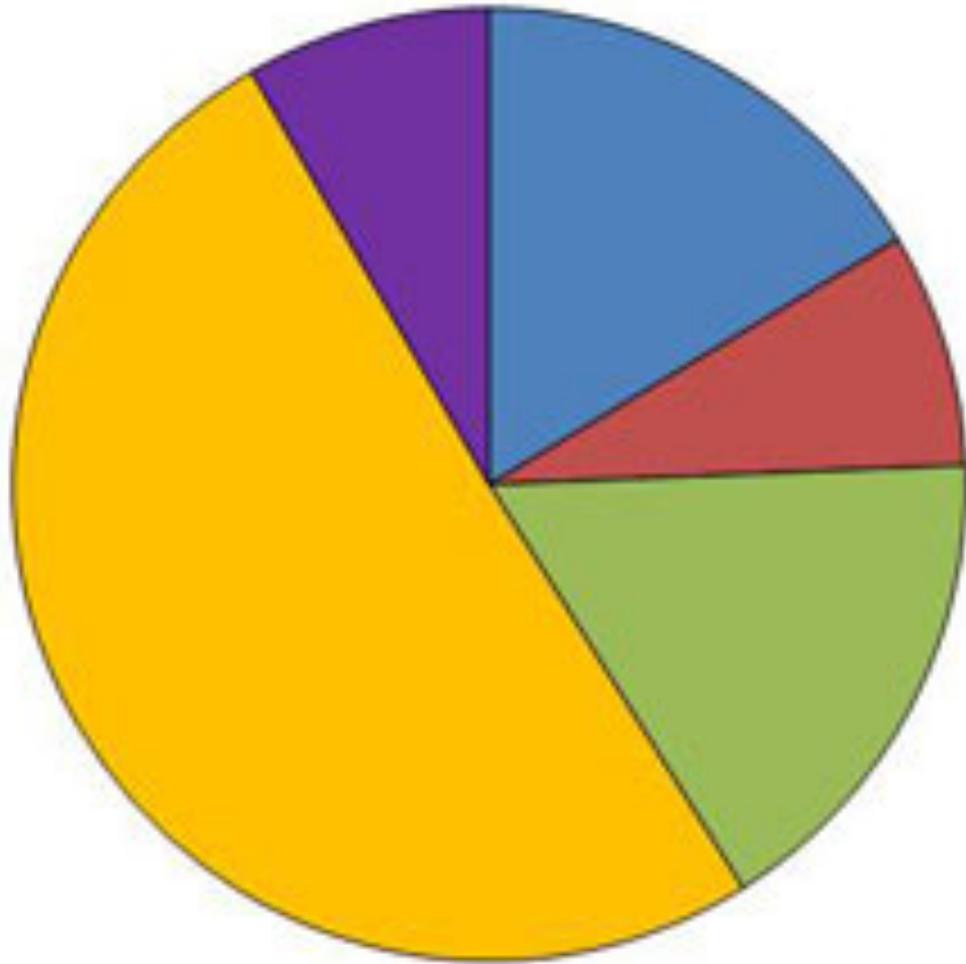
**NEURONS THAT FIRE  
TOGETHER WIRE TOGETHER**

**NEURONS OUT OF SYNC FAIL TO LINK**



# Brain tree





- Sports
- Religious Activities
- Homework
- Watching TV
- Hanging Out



Where i live.

While your child's brain is developing, they might:

- ▶ take more risks or choose high-risk activities
- ▶ express more and stronger emotions
- ▶ make impulsive decisions.

# You can help by:

- ▶ encouraging positive behavior
- ▶ promoting good thinking skills
- ▶ helping your child get lots of sleep

## Other strategies:

- ▶ Let your child take some healthy risks.
- ▶ Help your child find new creative and expressive outlets.
- ▶ Talk through decisions step by step with your child.
- ▶ Provide boundaries, and opportunities for negotiating those boundaries.

## Other strategies:

- ▶ Use family routines to give your child's life some structure.
- ▶ Offer frequent praise and positive rewards
- ▶ Be a positive role model
- ▶ Stay connected with your child.
- ▶ Talk to your child about their developing brain.

Tender  
plants  
need  
protection!



# WE ARE MADE FOR PLEASURE

- ▶ God placed Adam and Eve in a garden with lots to enjoy
- ▶ The name of the place – Eden – means “pleasure”
- ▶ There, they could be naked and unashamed

# PLEASURE AND PAIN

- ▶ Our brains are wired to pursue pleasure and avoid pain.
- ▶ Porn provides pleasure and numbs pain.

# NEUROTRANSMITTERS AND SEXUALITY

- ▶ Dopamine - reward
- ▶ Testosterone - attraction (lust)
- ▶ Adrenaline - excitement
- ▶ Serotonin - feeling good
- ▶ Oxytocin and vasopressin - bonding and commitment

## WHY IS PORN SO ALLURING?

▶ Psychologist Al Cooper identified three factors :

It is -

- ▶ **accessible**
- ▶ **affordable**
- ▶ **anonymous**

# EARLY EXPOSURE IS A KEY FACTOR

- ▶ The young heart and mind are extremely vulnerable.
- ▶ Most guys who struggle were exposed to pornography before the age of 16.
- ▶ This is why monitoring activity and having controls on devices is so important.

# Looking at porn is deadly

- ▶ D - desensitization
- ▶ E - escalation
- ▶ A - Addiction
- ▶ D - dysfunction and degrading behaviors

# DESENSITIZATION

- ▶ Looking at pornography desensitizes us to aberrant behavior, diminished respect and even violence.
- ▶ As we overstimulate our dopamine receptors, we lose the ability to enjoy simple pleasures.

# DESENSITIZATION

- ▶ *Having lost all sensitivity, they have given themselves over to sensuality so as to indulge in every kind of impurity, and they are full of greed.*
  - Ephesians 4:19 NIV

# ESCALATION

- ▶ To get the same intensity of pleasure and stimulation, the images and activities naturally progress to achieve the desired result.

# ESCALATION

- ▶ Death and destruction are never satisfied, and neither are human eyes.  
- Proverbs 27:20

# ADDICTION

- ▶ As with alcohol, some are more prone than others to compulsive overuse. Over time, the brain becomes hyper-responsive to stimuli and craving ensues.
- ▶ Shame drives addiction and addiction adds shame.

# ADDICTION

- ▶ Pathways in the brain are reinforced with use, and become increasingly automatic.
- ▶ *I do not understand what I do. For what I want to do I do not do, but what I hate I do.* - Romans 7:15

# DYSFUNCTION

- ▶ Those who use porn habitually report increased incidence of erectile dysfunction, difficulty achieving orgasm, and lack of arousal with access to a real person.
- ▶ As with other compulsive behavior, executive function declines.

## Dopamine Pathways

## Serotonin Pathways

Frontal cortex

Striatum

Substantia nigra

### Functions

- Reward (motivation)
- Pleasure, euphoria
- Motor function (fine tuning)
- Compulsion
- Perseveration

Nucleus accumbens

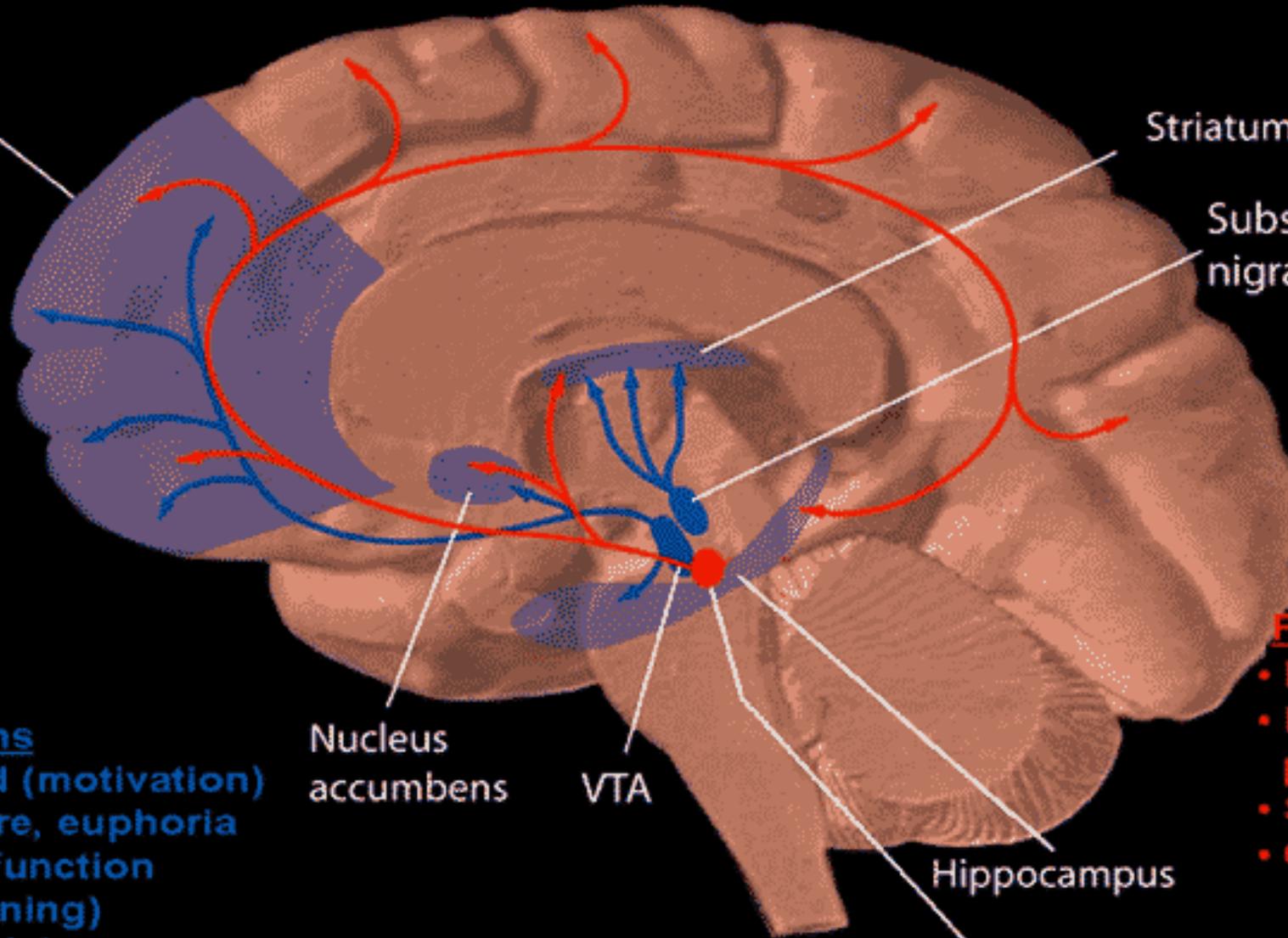
VTA

Hippocampus

Raphe nucleus

### Functions

- Mood
- Memory processing
- Sleep
- Cognition



# DYSFUNCTION

- ▶ *You, my brothers and sisters, were called to be free. But do not use your freedom to indulge the flesh; rather, serve one another humbly in love.*  
- Galatians 5:13

# DEGRADING BEHAVIORS

- ▶ Some who become addicted and experience escalation, desensitization, and dysfunction will act out sexually with internet hookups, sexting, casual sex, massage parlors, affairs and prostitution.

# DEGRADING BEHAVIORS

- ▶ *Although they claimed to be wise, they became fools and exchanged the glory of the immortal god for images made to look like a mortal human being...*
- ▶ *Therefore god gave them over in the sinful desires of their hearts to sexual impurity for the degrading of their bodies with one another.*

Romans 1:22-24

# RENEWING THE MIND

- ▶ *Therefore, I urge you, brothers and sisters, in view of God's mercy, to offer your bodies as a living sacrifice, holy and pleasing to God—this is your true and proper worship. Do not conform to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is—his good, pleasing and perfect will.*

Romans 12:1,2

# RENEWING THE MIND

- ▶ Plasticity
- ▶ Pruning
- ▶ Repentance
- ▶ Redirection - (Sublimation)
- ▶ Reinforcement - “neurons that fire together, wire together”

# RENEWING THE MIND

- ▶ What we set our minds on determines our mindset.

# RENEWING THE MIND

- ▶ *“The eye is the lamp of the body. If your eyes are healthy, your whole body will be full of light. But if your eyes are unhealthy, your whole body will be full of darkness. If then the light within you is darkness, how great is that darkness!”*  
- - Matthew 6:22.23