

EVERFI

# Where to Start with Rx Drugs and Vaping

Teaching in an Epidemic



# Poll:

*How do you currently address the topics of Rx Drug Abuse Prevention and Vaping in your curriculum?*

700

I have **solid lessons** built into my instruction



I have **some lessons** built into my curriculum but I'd like to include more



I touch on it at times but I'd like **more resources**



I don't currently but I'm **interested!**

# But first, housekeeping.

## Audio

Listen through your computer speaker or by calling (415) 655-0060

**access code:**  
671-417-445

## Questions

Type in the questions box and we'll get to your questions in real time or address them during the Q&A

## Social

Find us on Twitter  
**@EVERFIK12** and use  
**#EVERFIempowers**  
when you share out

A recording will be emailed to you following the webinar.

# Today's Agenda

1

Overview and Introductions

2

*Scope of the Issues*

3

*NIDA: Teen Prevention:  
Prescription Drug Safety & Vaping*

4

*Taking Lessons to Practice*

5

Q&A



# Introductions



**Dr. Ruben Baler**

Washington, DC  
Health Science Administrator at  
NIDA



**Brian Marquis**

Washington, DC  
Public Liaison Officer  
at NIDA

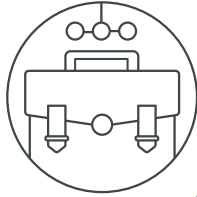


**Kimberley Timpf**

Boston, MA  
Sr. Director of Impact & Education at  
EVERFI

# Whole Child Lessons, No Cost to Educators

**Career  
Readiness**



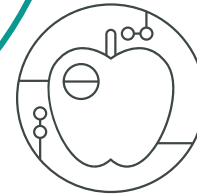
**Social and  
Emotional  
Learning**



**Financial  
Capability**



**Health and  
Wellness**



# Red Ribbon Week Toolkit

- Articles & Research
- Discussion Guides & Activities
- Online Resources
  - Prescription Drug Safety
  - AlcoholEdu
  - Mental Wellness Basics
- Extension Activities
- NIDA Resources - Vaping & E-Cigarettes
- Printables
  - Poster
  - Goals Worksheet
  - Response Poster
- Additional ways to celebrate



**Vaping & E-Cigarettes**

**Content Overview**

Although vaping and e-cigarettes are a relatively new topic to address in schools, they are impacting students significantly. This guide is designed to help you, the educator, with the background information & statistics to help you better understand and inform students. Topics covered include what "vaping" is, and why it's important to talk about it.

**Issue Background**

**What is vaping?**

Vaping is the act of using an electronic cigarette (e-cigarette). The term "vaping" refers to the vapor that is produced when using one of these battery-powered devices. These devices deliver nicotine through a liquid that contains water and flavoring, which is then transformed into a vapor through a heating process.

**Why do people, especially children and young adults, think that vaping is safe?**

There is a belief that vaping is safe because it does not contain tobacco. However, it does contain nicotine, the addictive chemical found in all types of cigarettes. Also, the liquid used in vaping comes in a variety of flavors. These flavors give the perception that vaping is less dangerous than using traditional cigarettes. Indeed, many of the vaping flavors (Bubble Gum, Fruit, etc.) had no counterparts associated to children and teens, but many have now been taken off the market.

**Dear Parent and/or Guardian,**

We are pleased to announce that we're beginning a new initiative to provide education around prescription drug abuse prevention.

**Prescription Drug Safety** is a 45-minute course powered by EVERFI that models and reinforces positive behavior around prescription drugs. This first-of-its-kind response uses expert vetted content and engaging digital activities to teach students how to:

- Differentiate between various prescription drugs
- Describe the science of addiction
- Demonstrate effective refusal techniques
- Make healthy, informed decisions when it comes to prescription medications

Studies show that the most effective prevention programs are grounded in evidence that has been valid and by existing research on prevention practice. Such an approach utilizes relevant behavior change theories and frameworks to guide program design and implementation, blending established research with innovative approaches for maximizing engagement and impact.

We are eager for your student to participate in this innovative, engaging educational experience. Please reach out with any questions.

**The Role of Parents in Preventing Teen Prescription Drug Abuse**

**87%** of students say "prescription drugs are a serious problem for teenagers these days."

**69%** of students say it's easy for teens in their neighborhood to get prescription drugs that were not prescribed to them.

**67%** of parents feel they have enough information and knowledge to discuss prescription drug use with their teens.

**71%** of parents say they "have a lot of influence on their teens' decisions to drink or use prescription drugs."

**But, only 57%** of incoming freshmen report talking with their parents about prescription drugs.

Studies show that teens whose parents discuss the risks of substance abuse with them are significantly less likely to use substances.

**Start a conversation about prescription drug abuse with your teens today.**

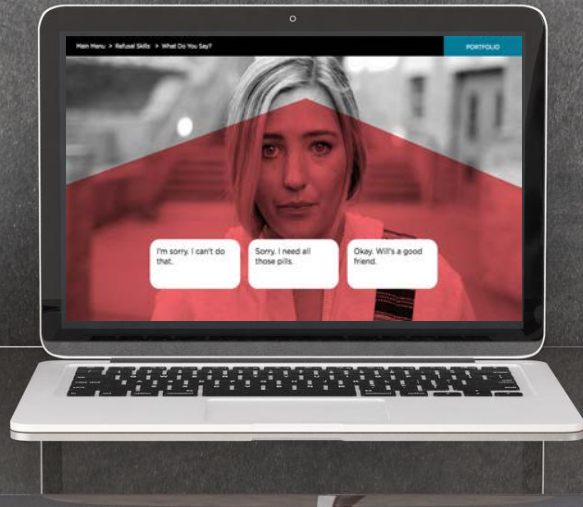
\*Numbers of 10th grade students ages 16-18. Conducted August 17, 2012. Permission by The Pew Research Center. For more info, visit: [www.pewresearch.org](http://www.pewresearch.org)

# Prescription Drug Safety

Suggested Grade Level: 9th -12th

Total Lessons: 6 lessons, 10-15 minutes each

Aligns with NHES



## At-a-Glance

*Prescription Drug Safety* is an innovative digital course that arms high school students with the knowledge and tools to make healthy, informed decisions when it comes to prescription medications.

Through interactive scenarios and self-guided activities, students learn the facts about drugs, how to properly use and dispose of them, and how to step in when faced with a situation involving misuse.

## Course Highlights

- Evidence-based, universal, public health approach to learning
- Interactive, true-to-life scenarios that reinforce key learning objectives

## Course Topics

- Opioids, stimulants, and depressants
- The science of addiction
- Misuse refusal skills
- Supporting others

Access Now:  
[everfi.com/newteacher](https://everfi.com/newteacher)



# Scope of the Challenge

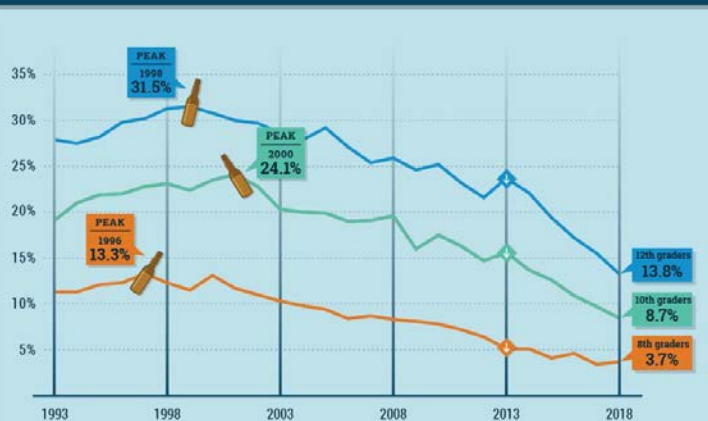
---

Kimberley Timpf



# The Good News

## BINGE DRINKING\* RATES CONTINUE DOWNWARD TREND



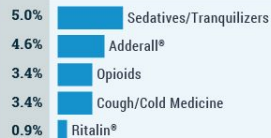
\*Binge drinking is defined as having 5 or more drinks in a row in the last 2 weeks.

**BINGE DRINKING: SIGNIFICANT DROP IN PAST FIVE YEARS ACROSS ALL GRADES.**

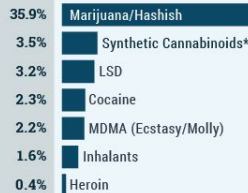
## STUDENTS REPORT LOWEST RATES SINCE START OF THE SURVEY

Across all grades, past-year use of illicit drugs other than marijuana holding steady at the lowest levels in over 20 years.

### PRESCRIPTION/OTC



### ILLICIT DRUGS



Past-year use among 12th graders

### VICODIN® VS. OXYCONTIN®



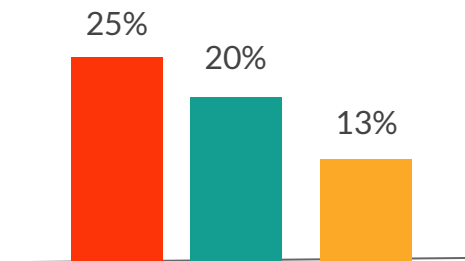
Past-year misuse of Vicodin® and OxyContin® among 12th graders has dropped dramatically in the past 15 years.

KEY  
 Vicodin®  
 OxyContin®



# Availability Highlights the Need to Stay the Course

Self-Reported Use of Common Types of Prescription Drugs *Under a Physician's Order*

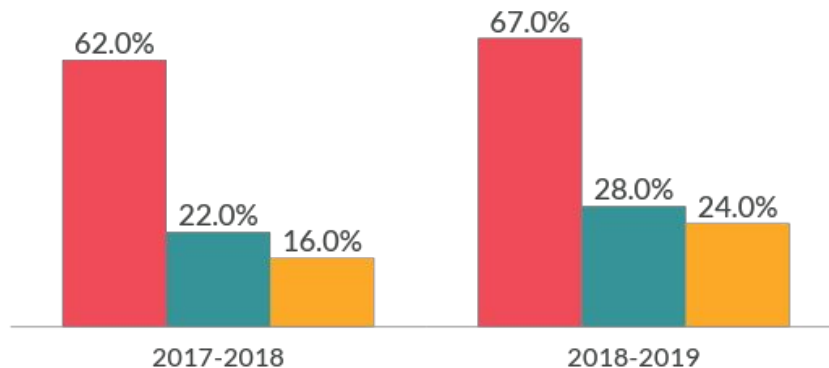


**Opiate type drugs**  
[Hydrocodone (Vicodin®),  
oxycodone (Percocet®), etc.]

**ADHD stimulants**  
[Dextroamphetamine  
(Adderall®), methylphenidate  
(Ritalin®), etc.]

**Depressants/  
benzodiazepines including**  
Diazepam (Valium®),  
alprazolam (Xanax®), etc.]

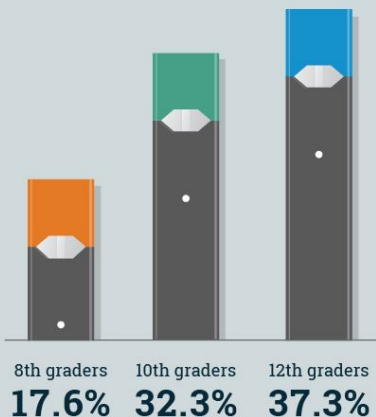
Percentage of College Students Who Have Used Common Types of Prescription Drugs *Under a Physician's Order:*



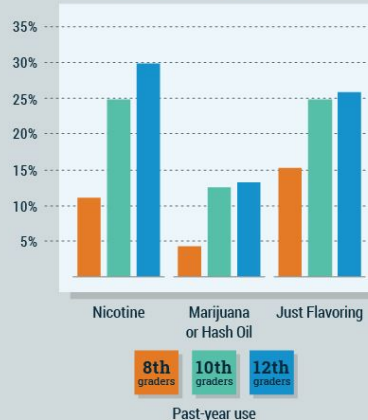
# New Challenge: Vaping and e-Cigarettes

## TEENS USING VAPING DEVICES IN RECORD NUMBERS

### PAST-YEAR VAPING



### WHAT DO TEENS SAY THEY ARE VAPING?



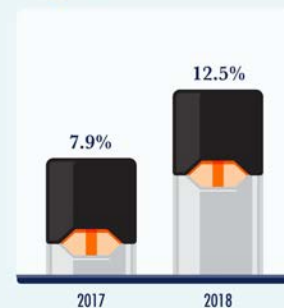
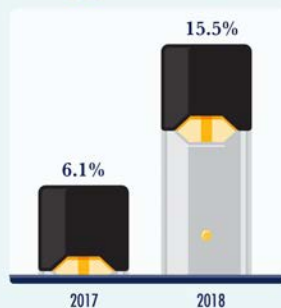
## Past month **NICOTINE VAPING** doubles among college students

2018 Monitoring the Future College Students and Young Adults Survey Results

THIS JUMP IS AMONG THE **GREATEST ONE-YEAR INCREASE** SEEN FOR ANY SUBSTANCE IN THE HISTORY OF THE SURVEY

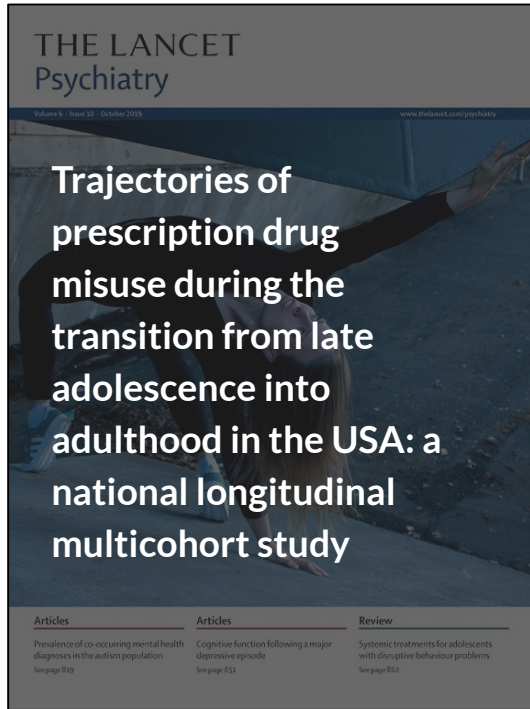
 **COLLEGE**

 **NON-COLLEGE**





# The Need to Look Beyond Individual Substances



**Key Finding:** Prescription drug misuse increases the odds of having two or more substance use disorder symptoms by age 35.

Risk factors for prescription drug misuse identified:

- High school drinking
- Cigarette smoking
- Marijuana use
- Multiple prescription drug misuse
- White race
- Not completing a four-year degree



# Preparing for Red Ribbon Week 2019 Teen Prevention: Prescription Drug Safety & Vaping

**Dr. Ruben Baler and Brian Marquis**



Consciousness

Memories

Personality





# Four things everybody should know about the brain

1. We have two brains, not one
2. They develop at different speeds
3. Brain development is like computer programming
4. Some things can compromise that programming

1

We have two brains















Pick up bits and pieces of information



process – compare – relate – assemble

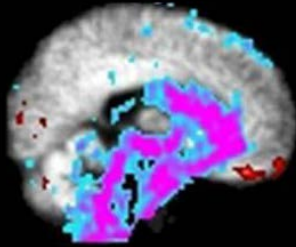


make up a story

# System 2

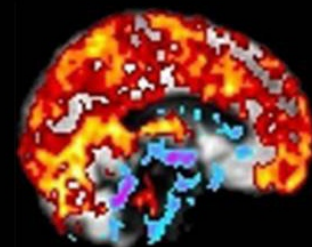
What comes next?

## System 1



Fast  
Automatic  
Short-term

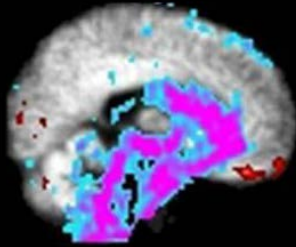
## System 2



Slow  
Conscious  
Long-term



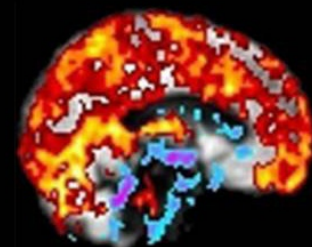
System 1



Fast



System 2



Slow



Say the color out loud:

**RED** **BLUE** **GREEN** **RED**

**GREEN** **RED** **BLUE** **GREEN**

**BLUE** **GREEN** **RED** **BLUE**

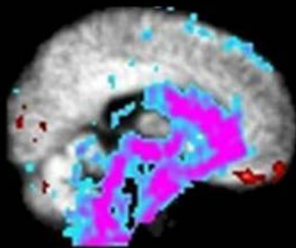
Say the color now:

**RED** **BLUE** **GREEN** **RED**

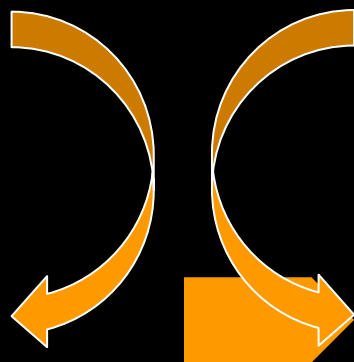
**GREEN** **RED** **BLUE** **GREEN**

**BLUE** **RED** **GREEN** **BLUE**

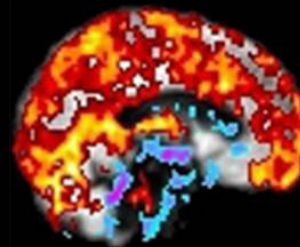
RED BLUE GREEN RED  
GREEN RED BLUE GREEN  
BLUE GREEN RED BLUE



System 1

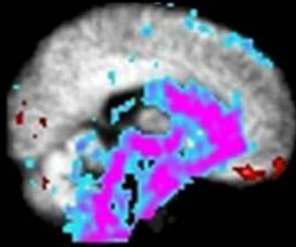


RED BLUE GREEN RED  
GREEN RED BLUE GREEN  
BLUE RED GREEN BLUE

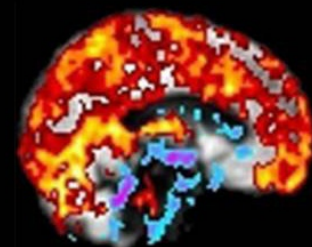


System 2

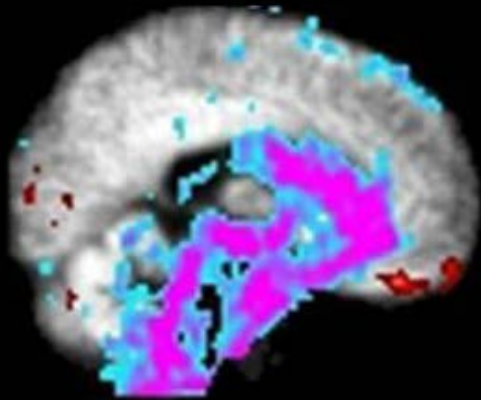
System 1



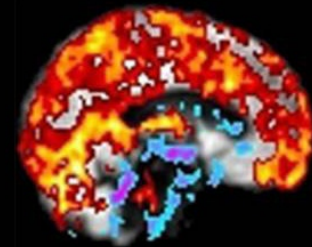
System 2



System 1



System 2

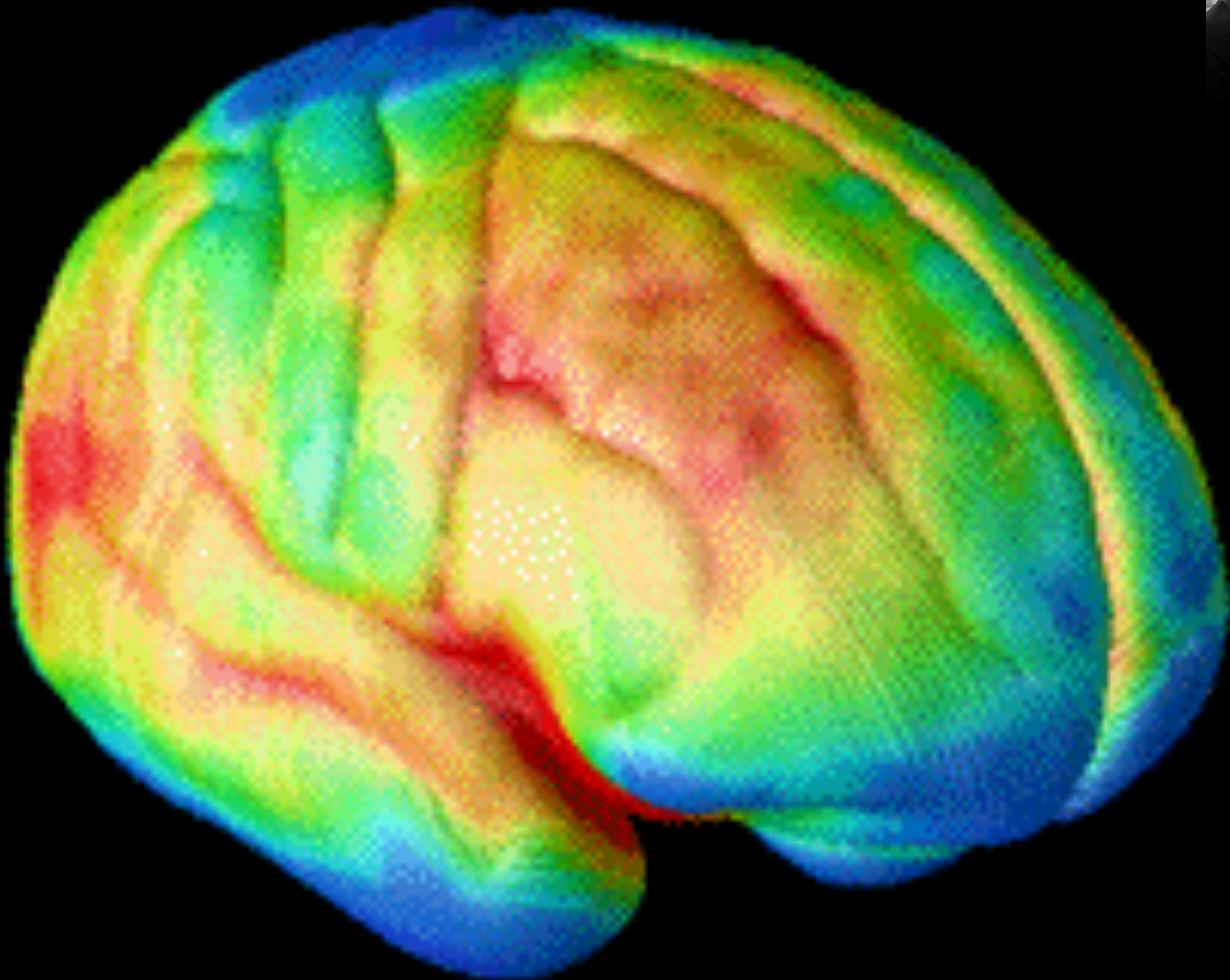
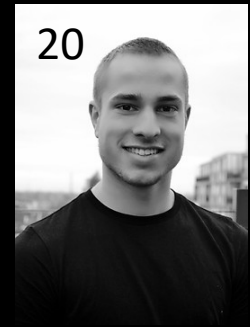


# Why is this important?

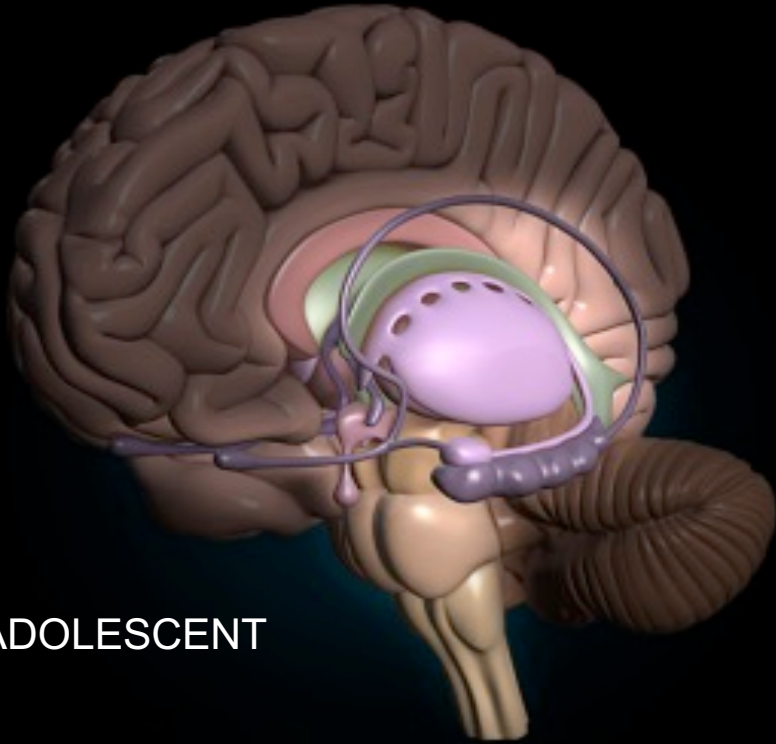
- Pros and cons of having two brains
- Where can this go wrong?
- Influence on decision making
- The systems develop at different speeds

2

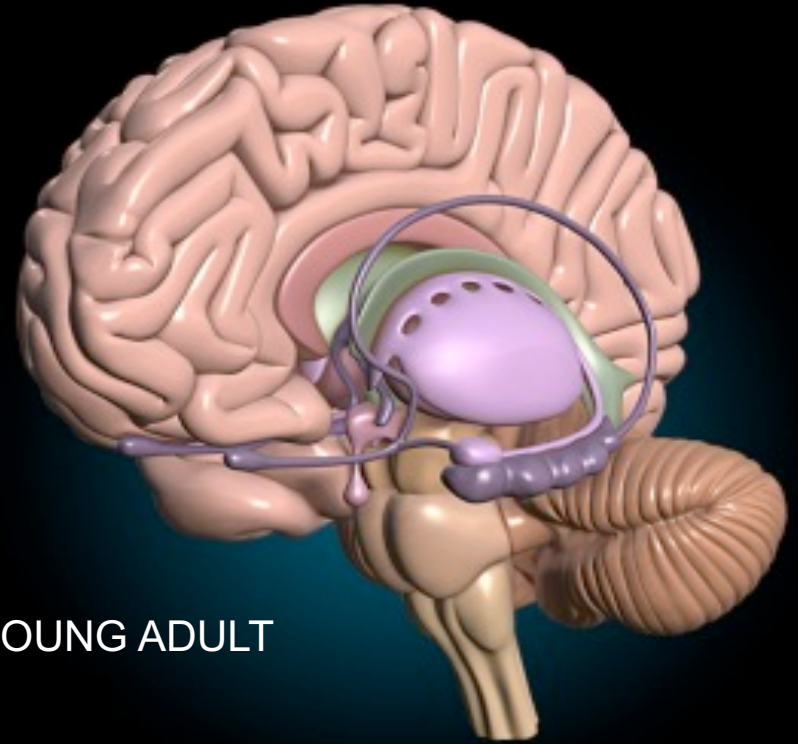
The two brains take a long time to mature fully, and they do it at different rates.







ADOLESCENT



YOUNG ADULT

System 2


System 1

DECISION MAKING

System 2

System 1

DECISION MAKING



**young people  
take risks**

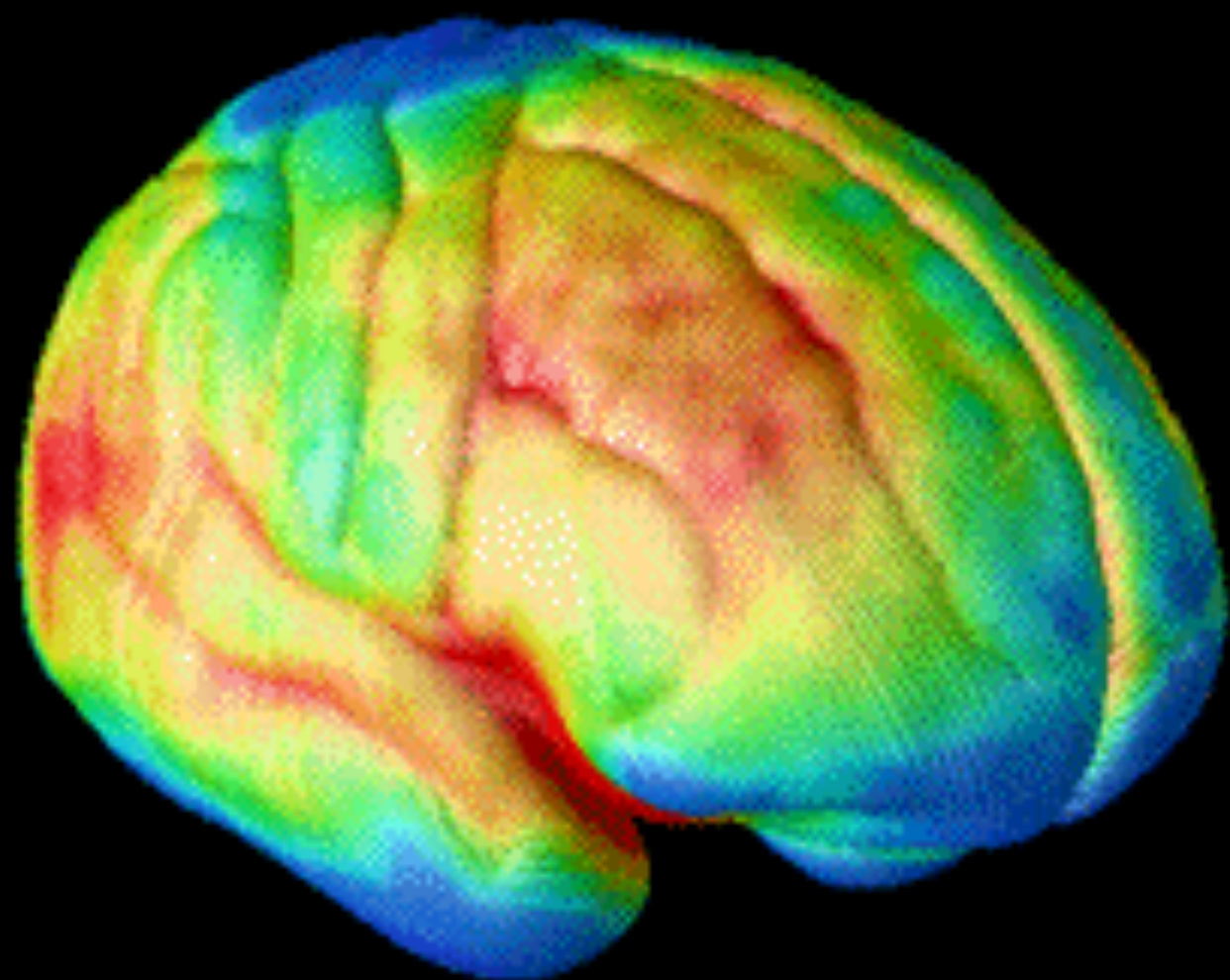
# Why is this important?

- Evolutionary roots of risk taking.
- Impact on decision making.
- Actions we can take to increase resiliency

3

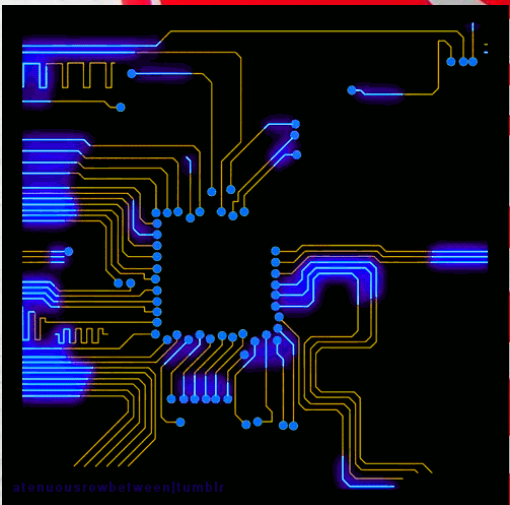
Brain development is  
Brain programming.





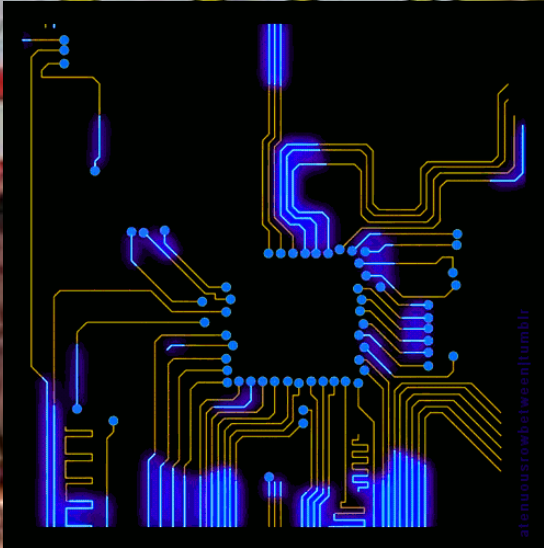






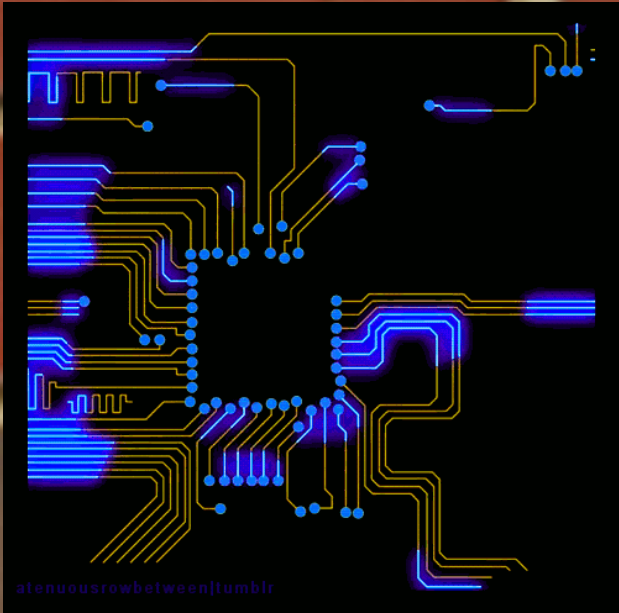
alenuousrowbetweenflumbl

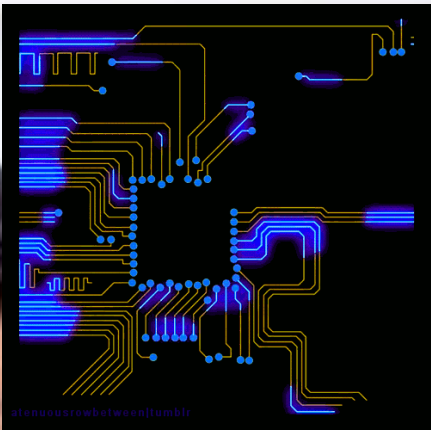




atennouscrosbetween(tumblr)







atenunusrowbetweenjumbli







# “Programming” a young brain (?)

- Short range connections (gray matter)

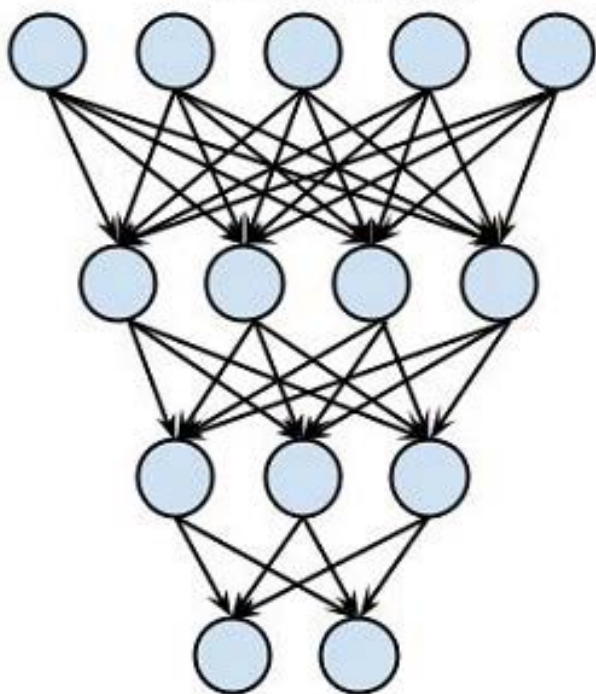


- Long range connections (white matter)





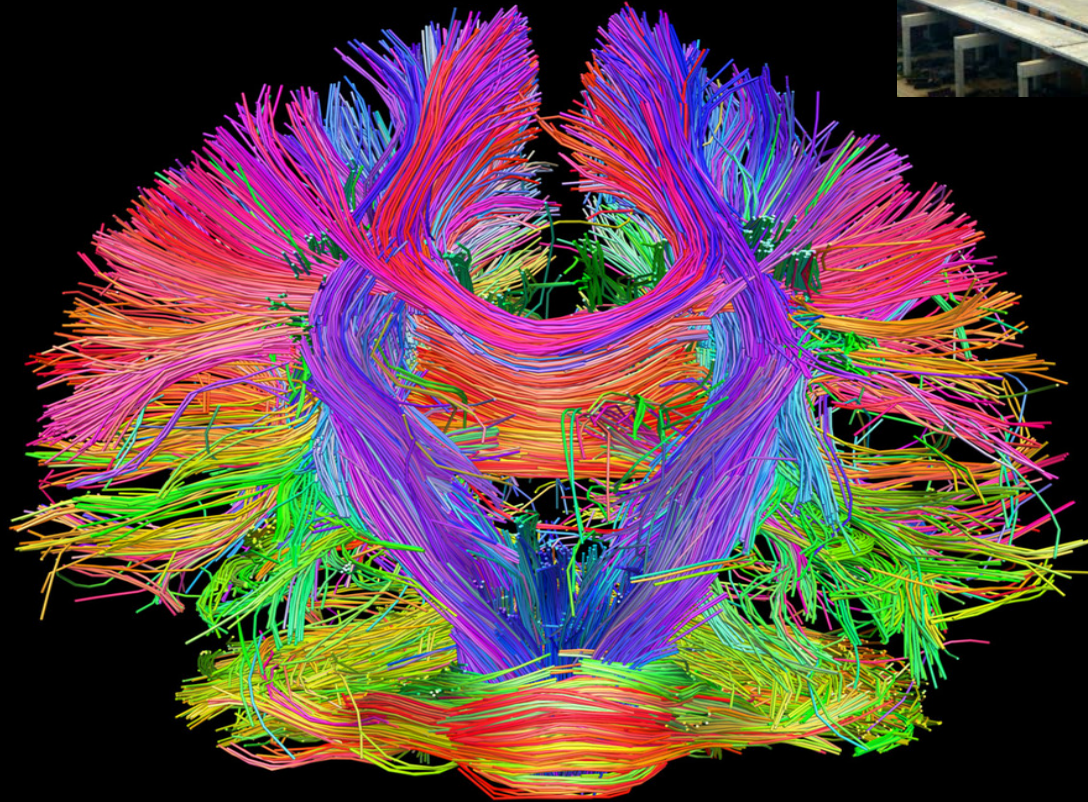
before pruning



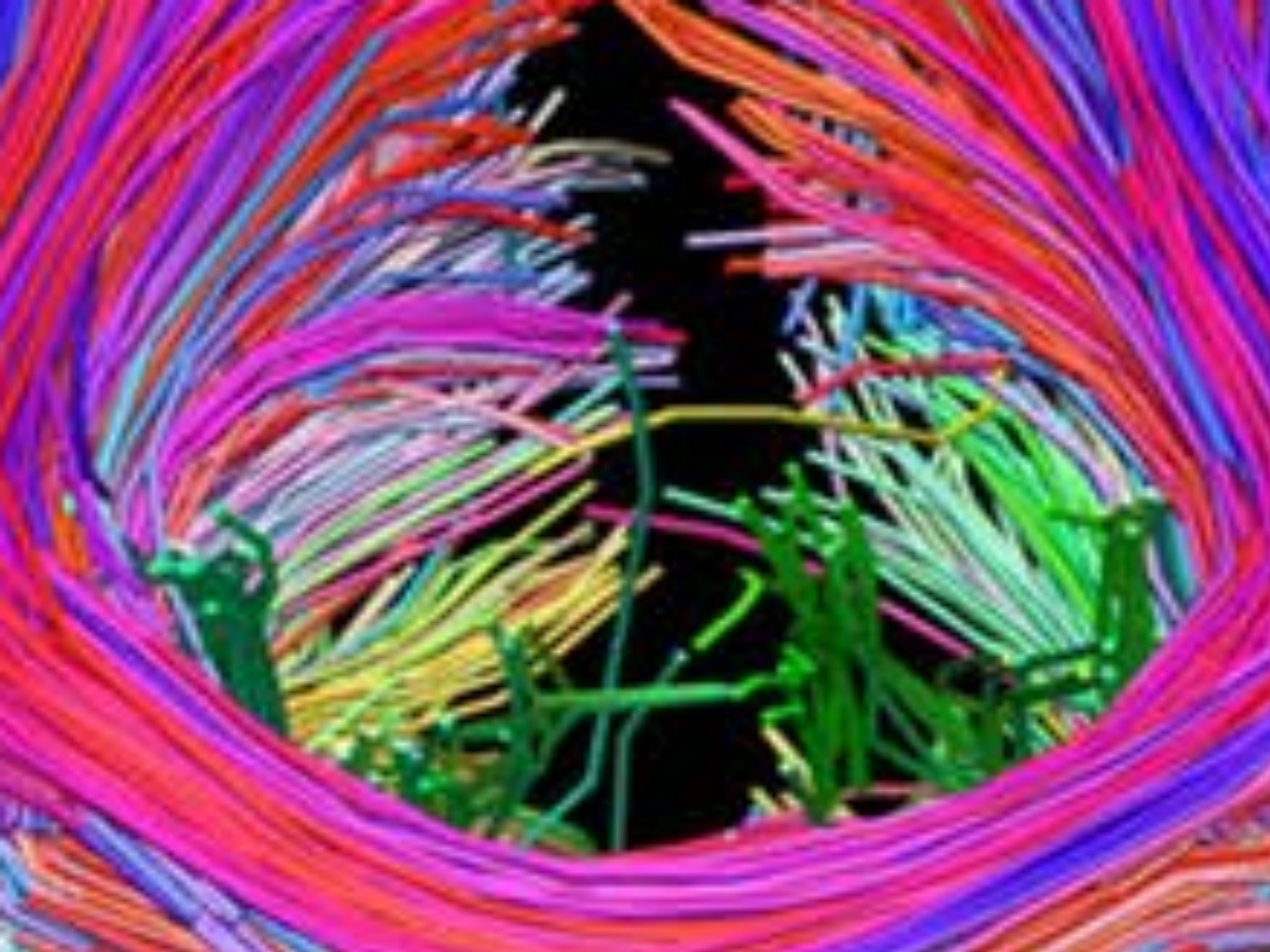




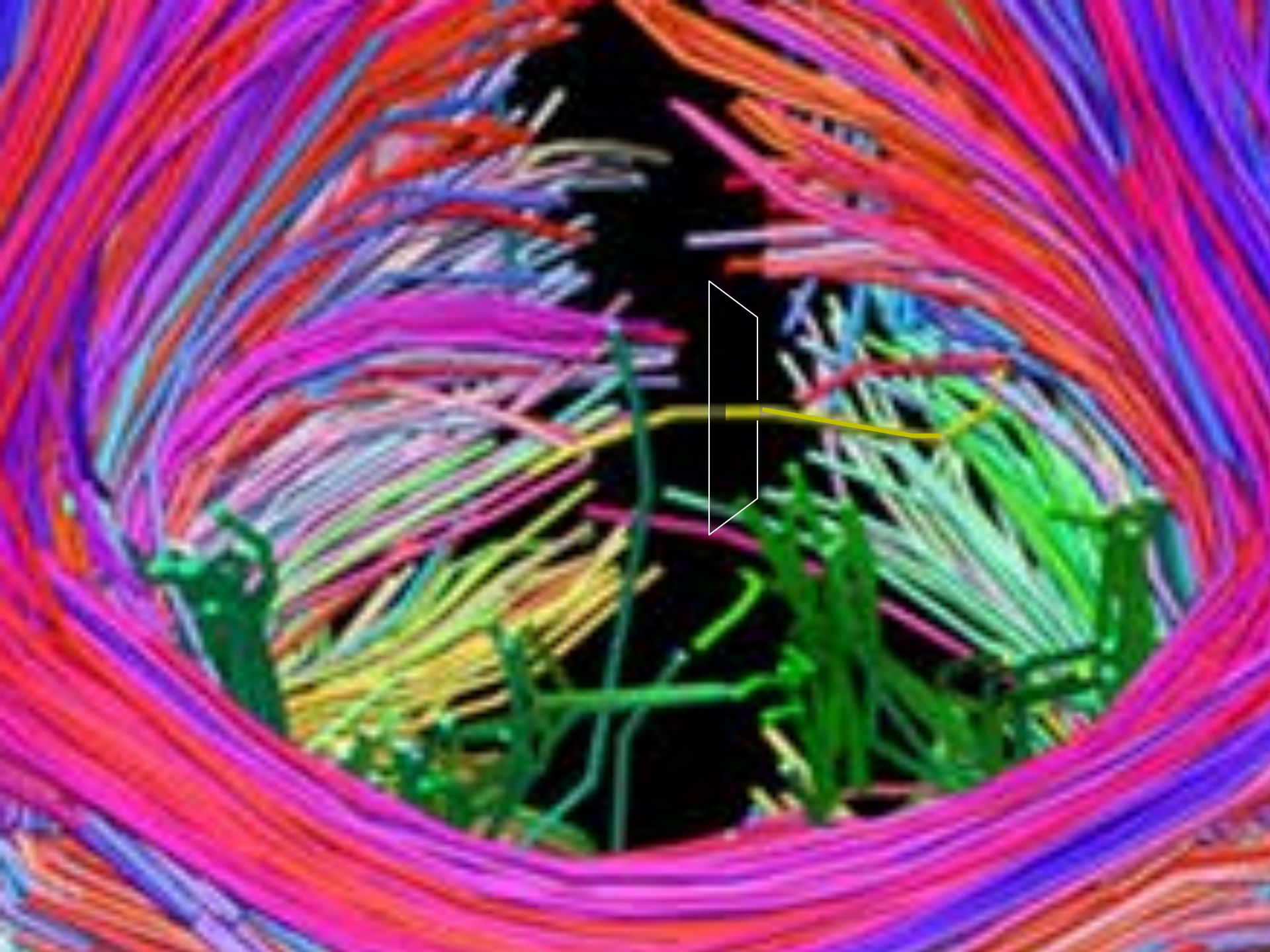
# Information Highways



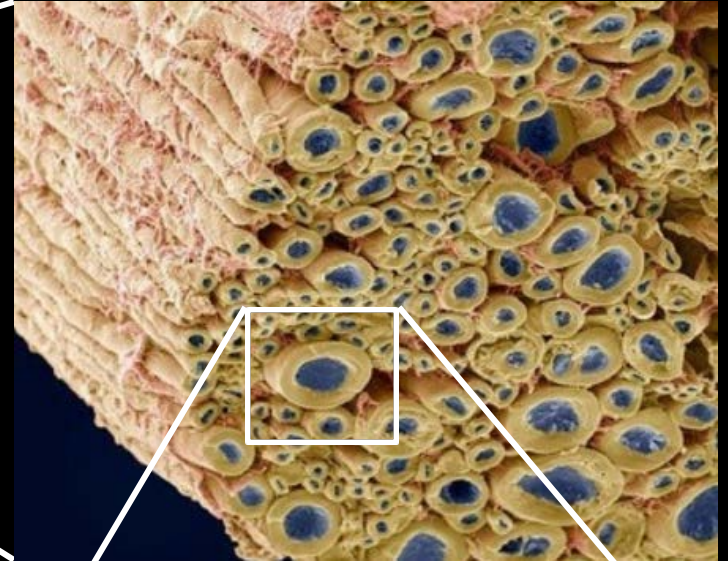
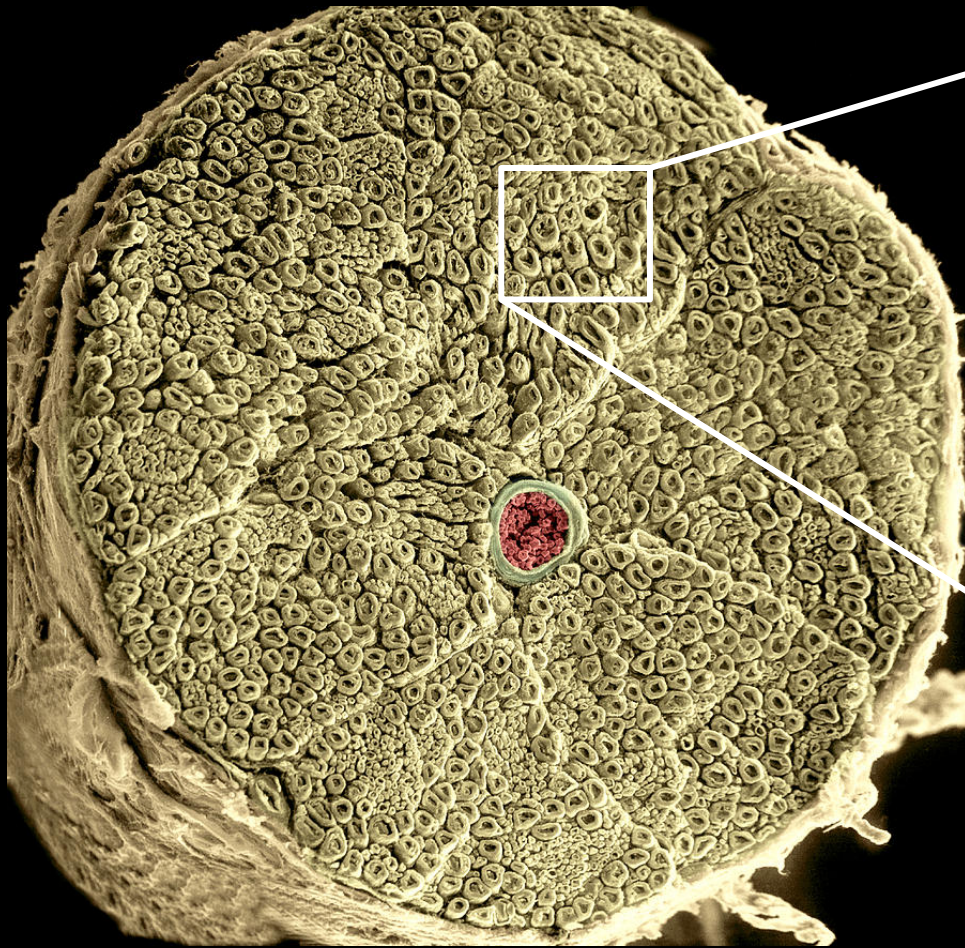










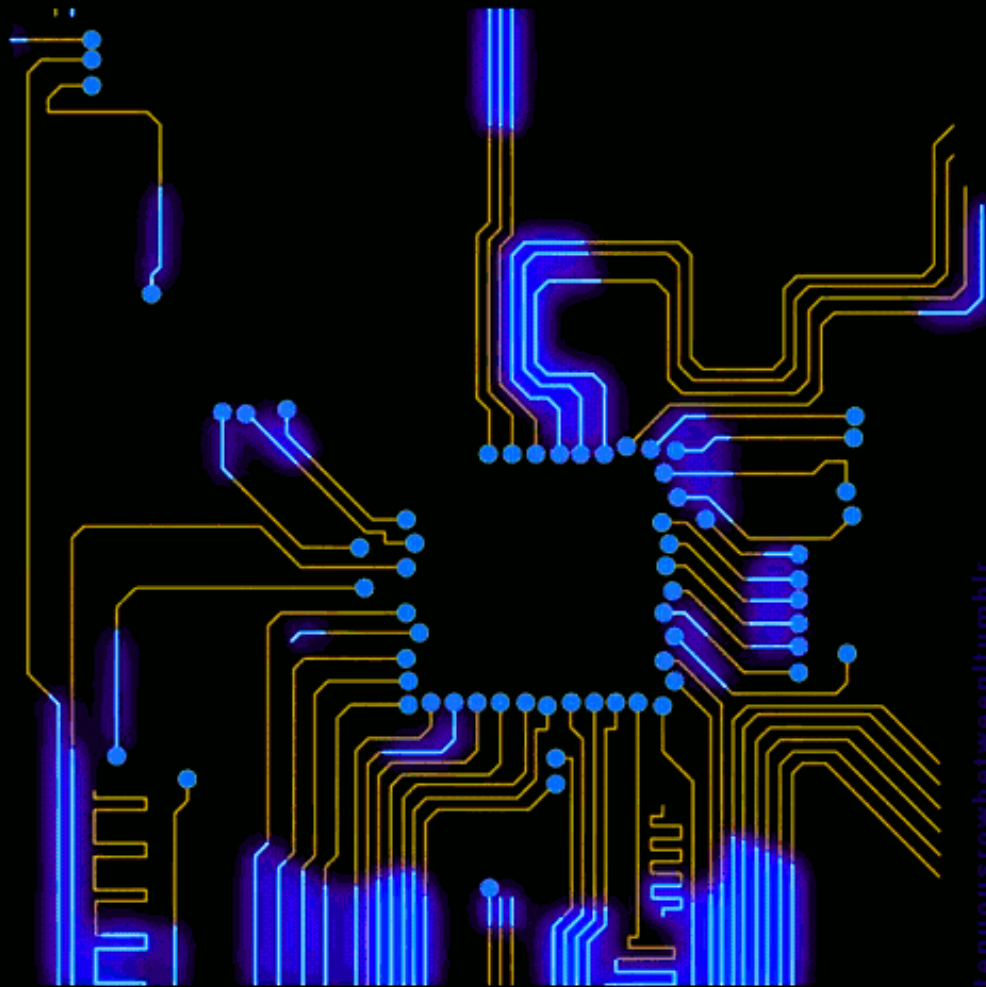


Speeds of between  
2 mph (pain) and 200 mph (movement)  
Depending on the type of fiber.



3000x increase in bandwidth during adolescence



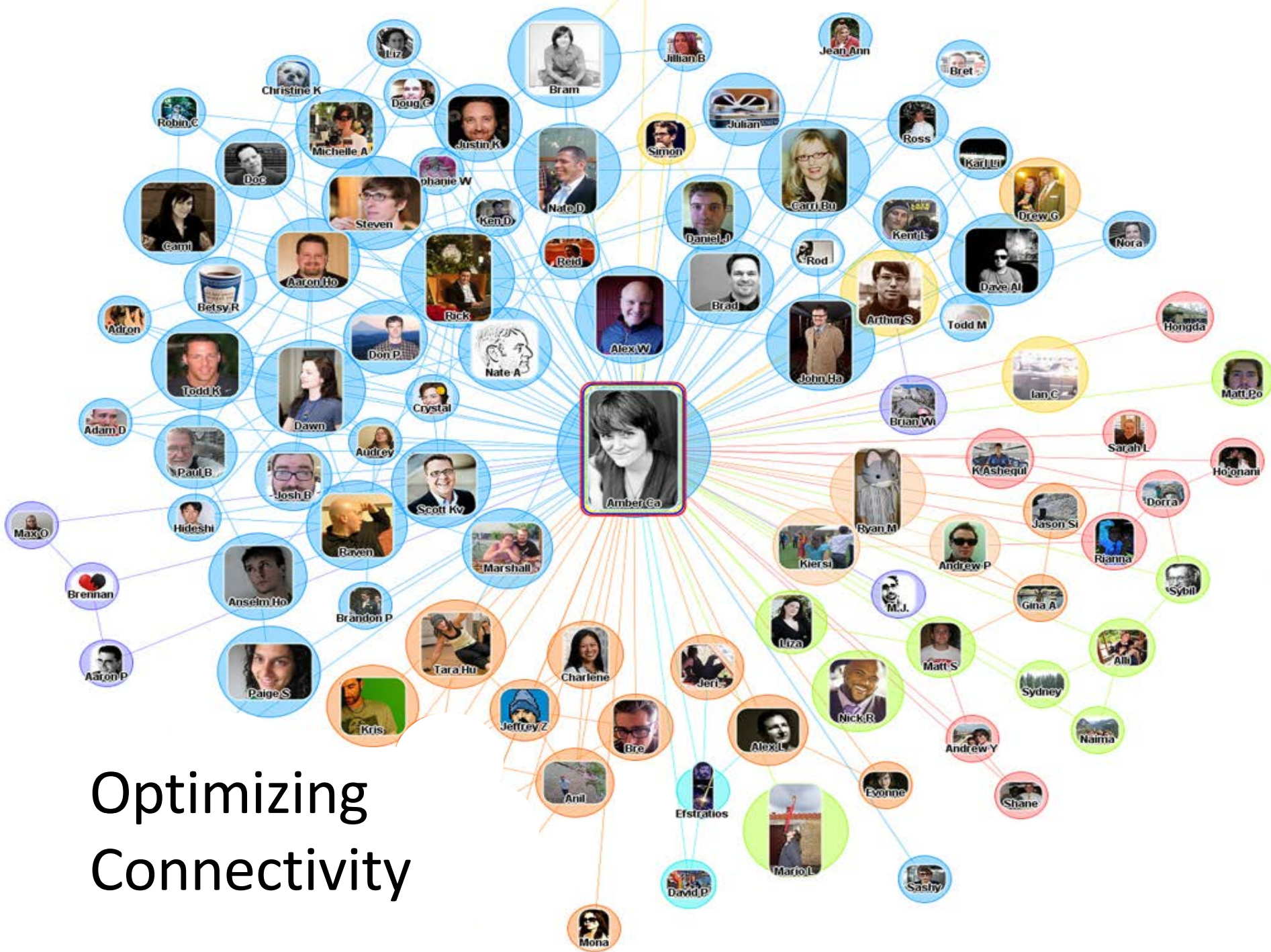


atenuousrowbetween|tumblr

Meaningful  
connectivity

Increasing  
Bandwidth





# Optimizing Connectivity

## 1G

1980s

Data rate:  
2 Kbps

First wireless cellular technology. Enabled basic voice service. Demand for cell phones became widespread.

## 2G

1990s

Data rate:  
64 Kbps

Shift to digital technology. Enabled text messaging and, with 2.G connectivity, e-mails and web browsing, too.

## 3G

2000s

Data rate:  
< 2000 Kbps

Enter smartphones and video calls. Prices of mobile devices skyrocket.

## 4G

2010s

Data rate: < 1 Gbps

Designed primarily for data. Mobile device users start to adopt the "anytime, anywhere" appetite for media consumption.

## 5G

2020s

Data rate:  
> 1 Gbps  
(estimated)

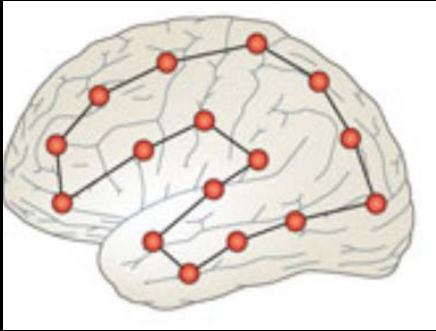
Expected to support a hyper-connected future of seamless Internet, "always-on" gadgets for round-the-clock monitoring and smart city networks.

# Increasing Bandwidth

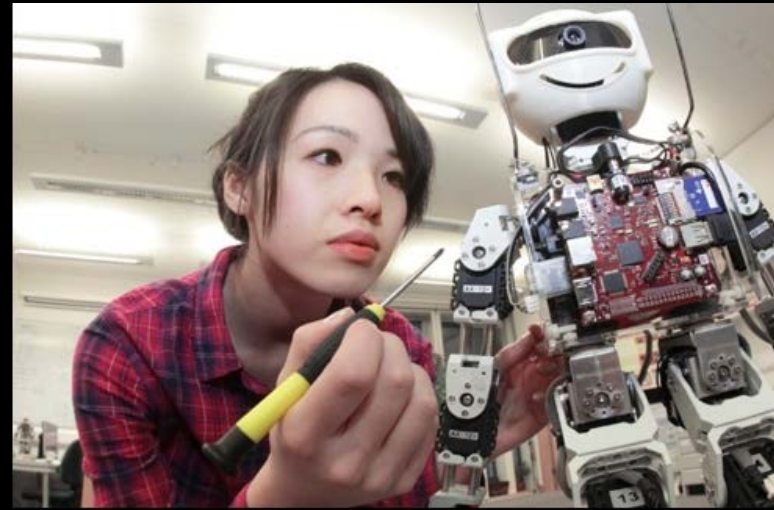
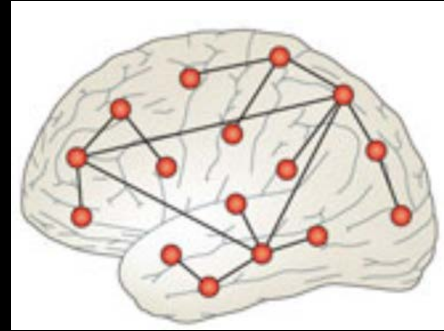


# Optimizing Connection and Increasing Bandwidth are Goal Neutral...

## Narrow Horizons



## Expand Horizons







malnutrition      sleep deficits      physical      FOMO  
bullying      drug use      abuse      emotional      chronic pain  
neglect



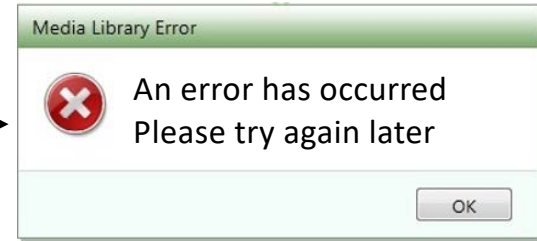
# The effects of keyboard scrambling are time dependent

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
Drive C: is mounted as local directory c:\games\

C:\>cd
C:\>dir
.                <DIR>          03-02-2012 13:29
..               <DIR>          01-01-1980 0:00
KEDM             <DIR>          03-02-2012 13:28
0 File(s)       0 Bytes
3 Dir(s)        262,111,744 Bytes free.

C:\>cd kered
C:\KERED>dir
.                <DIR>          03-02-2012 13:28
..               <DIR>          03-02-2012 13:29
..               <DIR>          03-02-2012 13:29
KESM04.SIB      659,024 01-02-1992 13:40
FILE_ID.ID2    344 01-02-1992 13:40
INSTALL.EXE    142,494 01-02-1992 13:40
0 File(s)       0 Bytes
3 Dir(s)        262,111,744 Bytes free.

C:\KERED>install
```

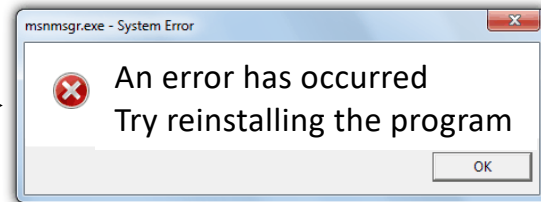


```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
Drive C: is mounted as local directory c:\games\

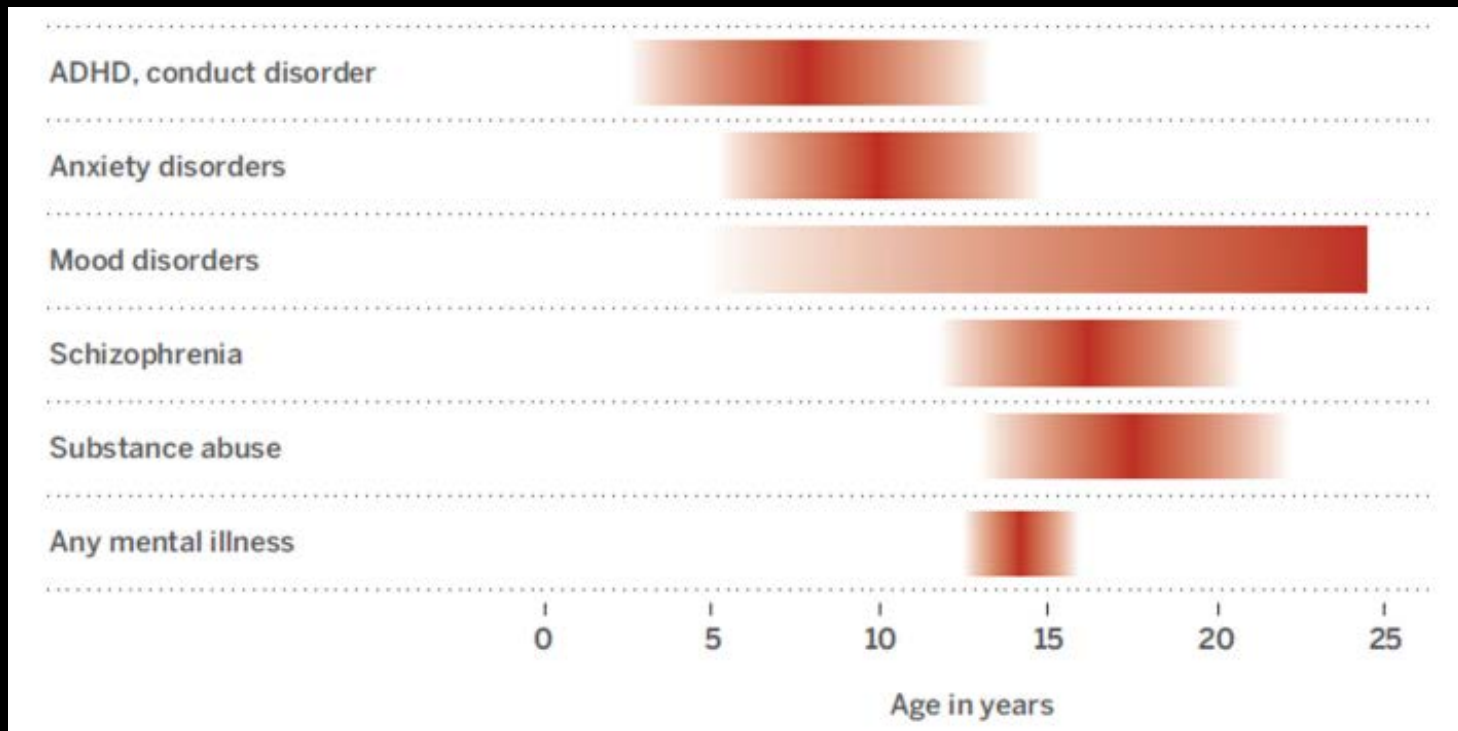
C:\>cd
C:\>dir
.                <DIR>          03-02-2012 13:29
..               <DIR>          01-01-1980 0:00
KEDM             <DIR>          03-02-2012 13:28
0 File(s)       0 Bytes
3 Dir(s)        262,111,744 Bytes free.

C:\>cd kered
C:\KERED>dir
.                <DIR>          03-02-2012 13:28
..               <DIR>          03-02-2012 13:29
..               <DIR>          03-02-2012 13:29
KESM04.SIB      659,024 01-02-1992 13:40
FILE_ID.ID2    344 01-02-1992 13:40
INSTALL.EXE    142,494 01-02-1992 13:40
0 File(s)       0 Bytes
3 Dir(s)        262,111,744 Bytes free.

C:\KERED>install
```



# One in five adolescents have a mental illness that will persist into adulthood



# Why is this important?

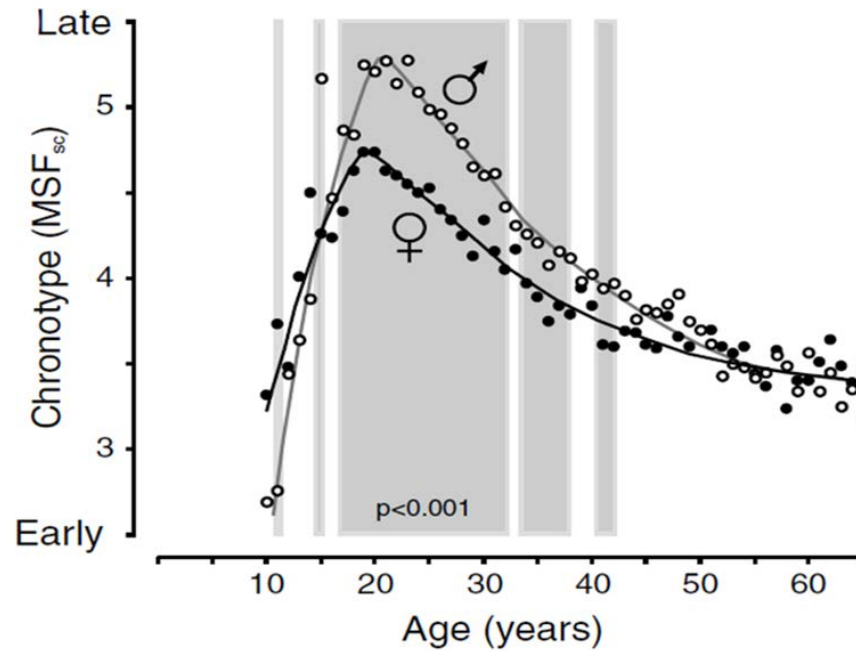
- Empowering knowledge
- Adopt proactive role in your development
- Learn about the many things that can scramble your keyboard: cell phones, lack of sleep, drugs...

4

There are many things that can harm the programming or how it runs.



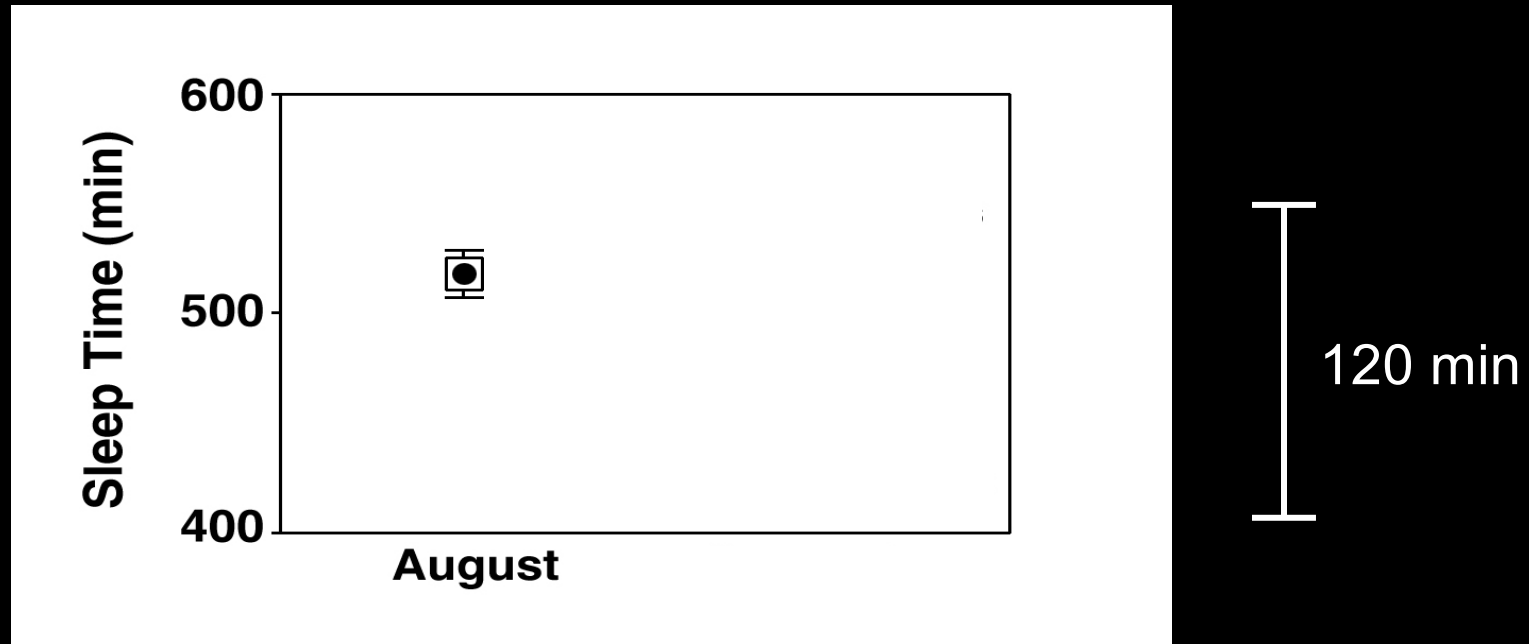
# Sleep pattern changes as you grow older



7 8 9 10 11 12 1 2 3 4 5 6 7 8

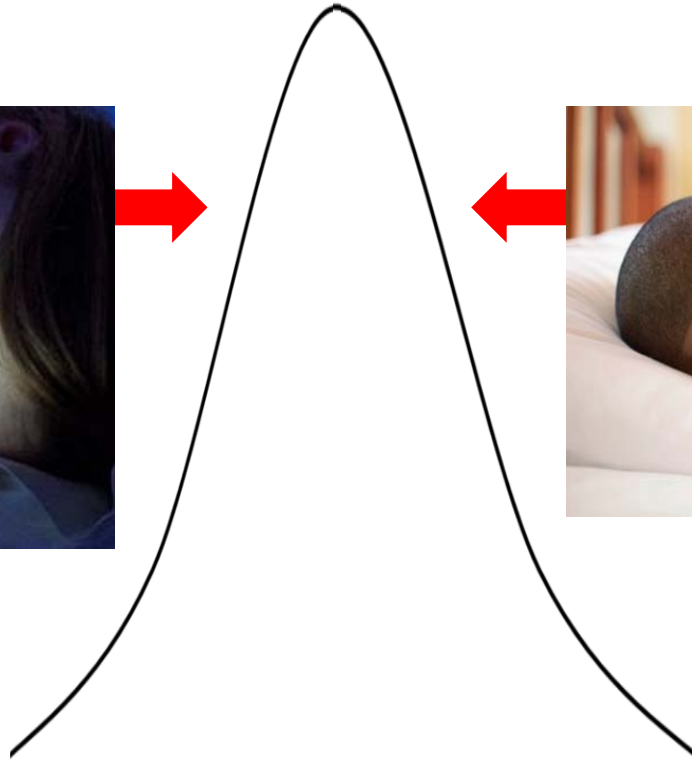


# Current High School Start Times Contribute to Sleep Deprivation Among Adolescents.









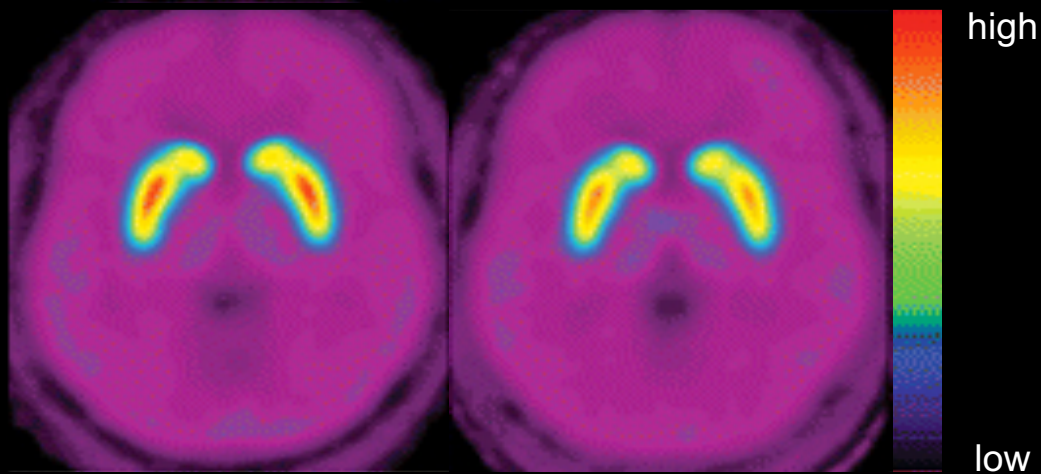
Dusk

6 hours

Dawn

# Effect of Sleep Deprivation on Dopamine Receptor Availability

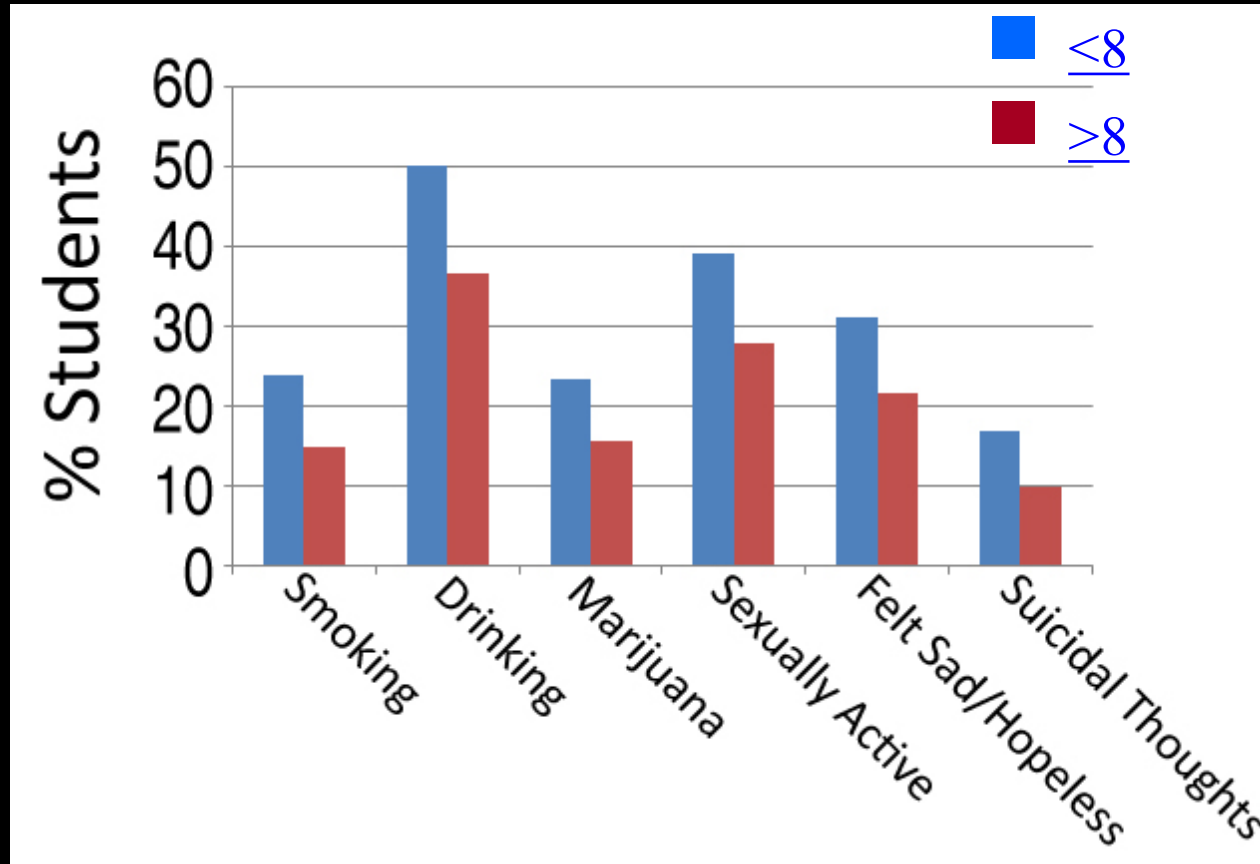
[11C]raclopride



Non-Sleep  
Deprived

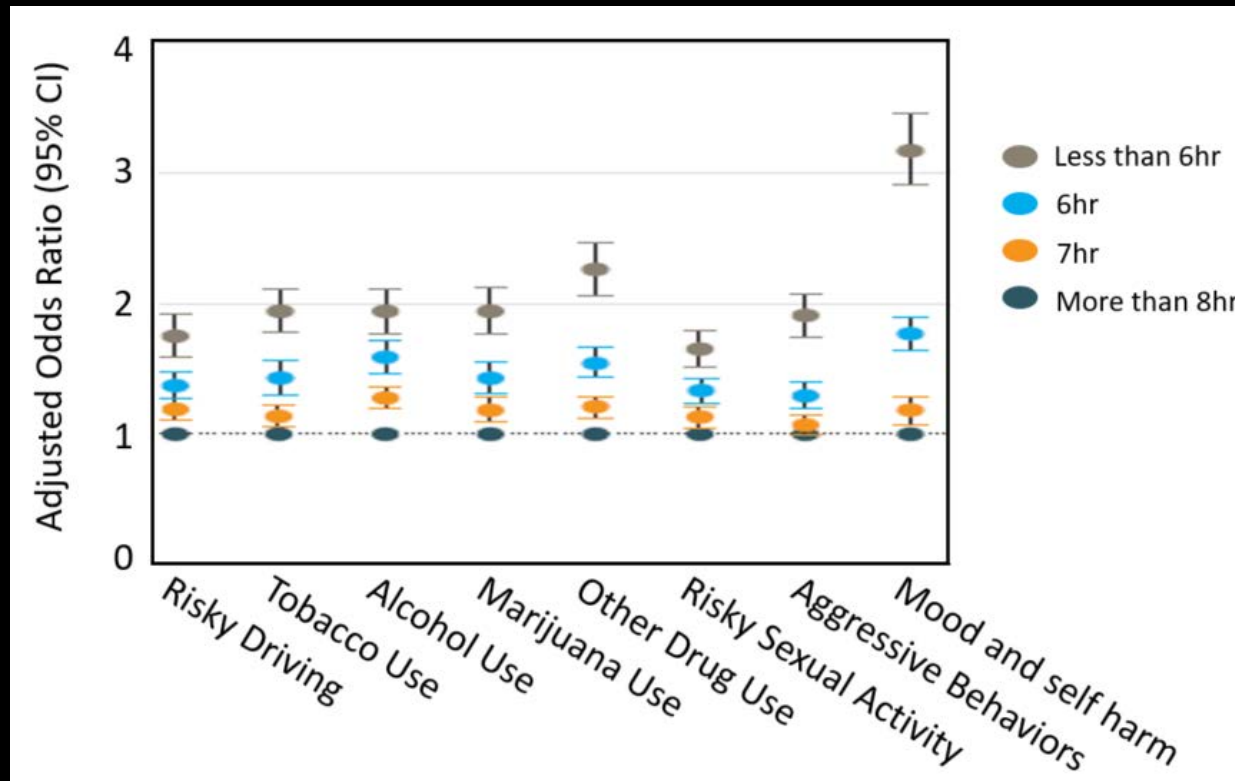
Sleep  
Deprived

# Self-Reported Hours of Sleep and Selected Health-Risk Behaviors



CDC, 2008. Youth risk behavior surveillance, 2007  
McKnight-Eily, Preventive Medicine, 2011

## Dose-Dependent Associations Between Sleep Duration and Unsafe Behaviors Among US High School Students (YRBS 2007-2015)



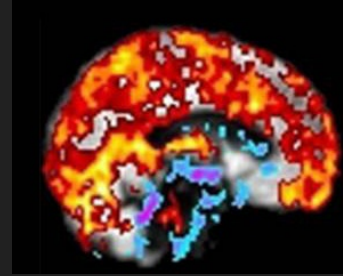
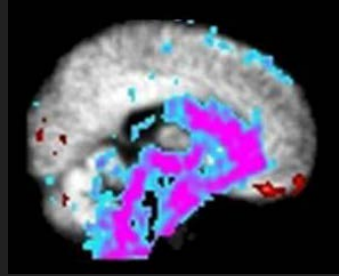
70% of high school students average less than 8 hours of sleep, falling short of the 8 to 10 hours that adolescents need for optimal health.

# Why is this important?

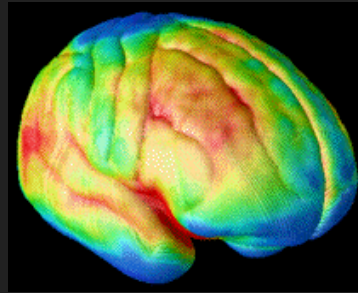
- Learn to recognize threats to the brain's program.
- Fight back against neuromarketing.
- Design brain-conscious environments.

# to recap...

1



2



3



4







# Join NIDA for the 10<sup>th</sup> Anniversary of *National Drug & Alcohol Facts Week*®







**POLL:**

**Are you familiar with *National Drug And Alcohol Facts Week*<sup>®</sup> (NDAFW)?**



**POLL:**  
**Have you participated in NDAFW?**



# Getting Involved is Easy and Fun



Access NIDA's toolkits for activity ideas on specific topics.



Hold educational events.



Hold virtual events.



Create contests and scavenger hunts.



# Use NIDA's Planning Toolkits and Online Resources

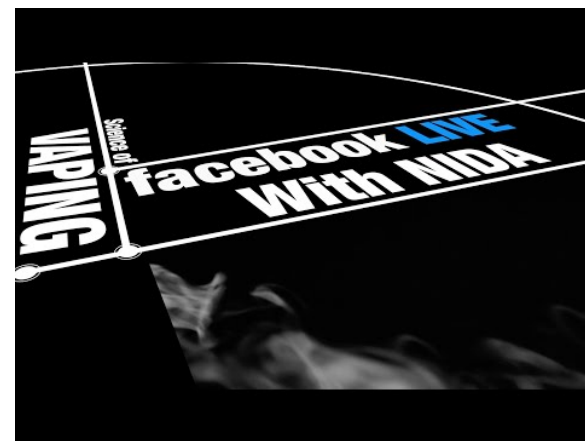


## Toolkits for specific topics:

- Tobacco, e-cigarettes, and vaping
- Opioids
- Alcohol
- Marijuana

## Toolkits include:

- Activity ideas and games
- Statistics about youth drug use
- Resources such as the National Drug & Alcohol IQ Challenge
- Infographics, blog posts, and multimedia resources





# Five Steps to Hosting an Event

1. **Form** your planning team.
2. **Plan** your NDAFW event.
3. **Register** your event.
4. **Secure** the science.
5. **Promote** your event!

Learn more at  
[teens.drugabuse.gov/NDAFW](https://teens.drugabuse.gov/NDAFW).





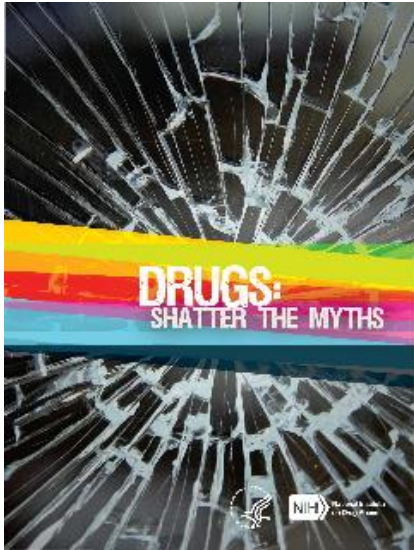


# Activity Inspiration

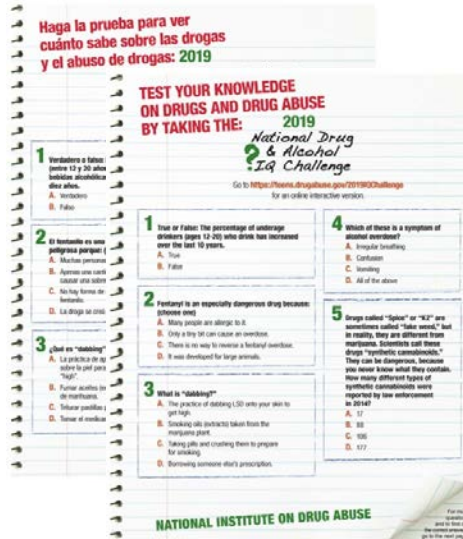
- Host a town hall or speaker event.
- Develop a graffiti wall with drug facts.
- Share facts via the morning announcements.
- Create a photo booth.
- Organize dress-up days tied to shattering the myths.
- Host a door decorating contest.
- Chalk drug and alcohol facts on outdoor walkways.
- Use the IQ Challenge as an evaluation tool.



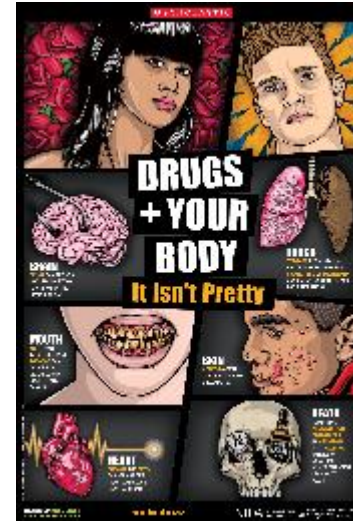
**Be creative and have fun!**



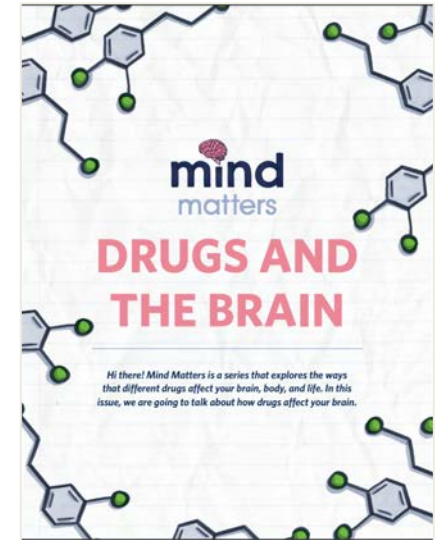
*Drugs: Shatter the Myths* booklets



National Drug & Alcohol IQ Challenge activity



*Drugs + Your Body: It Isn't Pretty* posters



*Mind Matters* series

And don't forget about our dozens of free, online resources.  
Order today at [teens.drugabuse.gov/order](https://teens.drugabuse.gov/order).





# Tools for Educators and Counselors



The screenshot shows the website interface for the National Institute on Drug Abuse for Teachers. At the top left is the NIH logo and the text "National Institute on Drug Abuse for Teachers Advancing Addiction Science". A red button in the top right corner says "Have a drug problem— need help?". Below the header is a navigation bar with links for "Teens", "Teachers", "Parents", "Drugs & Health Blog", and "National Drug & Alcohol Facts Week®" along with a search icon. The main content area features a blue banner with the title "Lesson Plan and Activity Finder" and a text box stating: "Find FREE science- and standards-based classroom lessons and multimedia activities on teens and drugs – all funded or created by NIDA." Below the banner are filters for "Drug Type" (set to "All Drug Types") and "Related Topic" (set to "All Related Topics"). The main heading is "Teens Drug Facts" with a "PRINT" button. The content is organized into four categories, each with an icon and a list of drug types: "Alcohol" (Booze, Brew, Liquor), "Anabolic Steroids" (Juice, Roids), "Methamphetamine (Meth)" (Chalk, Crank, Crystal, Fire, Glass, Go Fast, Ice, Speed, Tina), and "Prescription Drugs" (Barbs, Candy, Oxy, Percs, Reds, Speed, Tranks, Vikes). A fifth category, "Prescription Depressant Medications", is partially visible at the bottom.

Visit [teens.drugabuse.gov/teachers](https://teens.drugabuse.gov/teachers) for free tools and resources from NIDA.



# Get Your Event on the Map!



**NDAFW registration opens soon.**



# NIDA's Here to Help



## NIDA is at your service! We can:

- Help you generate ideas, register, and plan your event.
- Connect you with a scientist.
- Provide the materials you might need.

Email Brian Marquis at [drugfacts@nida.nih.gov](mailto:drugfacts@nida.nih.gov).

Mark your calendar for **March 30 to April 5, 2020.**

Follow NIDA on social!



## Newsletter

Sign up to receive *National Drug & Alcohol Facts Week*® updates.

**SIGN UP NOW**

10  
YEARS OF

**ADVANCING  
ADDICTION  
SCIENCE**



**NDAFW in Nigeria—Events aimed at reaching up to 40,000 teenagers**



**Ohio's Metro High School students toured the office of Ohio AG Mike DeWine and brought attention to NDAFW**



**NOYS-BACODA Signature Event**



**High school students from Chandler, Arizona showed off how they want to Shatter the Myths® during NDAFW**





# Taking Lessons to Practice: *Implementing Prevention Lessons*

---

Kimberley Timpf

# Implementation Strategies

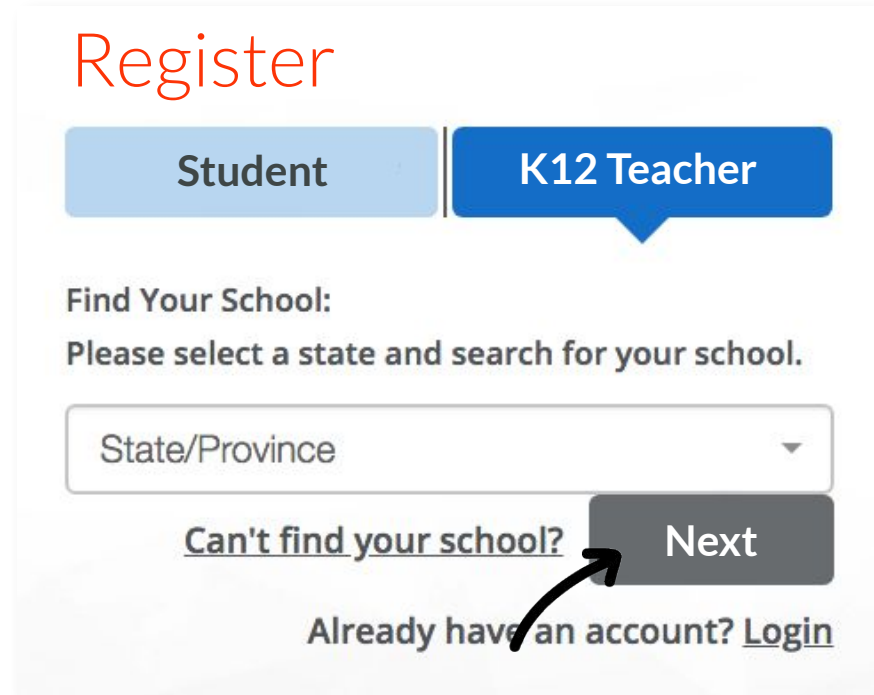




# Register

[everfi.com/newteacher](https://everfi.com/newteacher)

- ▶ Find Your State
- ▶ Enter Your School



The screenshot shows the registration interface for K12 Teachers. At the top, the word "Register" is written in red. Below it are two buttons: "Student" (light blue) and "K12 Teacher" (dark blue). The "K12 Teacher" button is highlighted with a white speech bubble. Underneath, the text "Find Your School:" is followed by the instruction "Please select a state and search for your school." A dropdown menu is present with "State/Province" and a downward arrow. Below the dropdown, there is a link that says "Can't find your school?" and a dark grey button labeled "Next". A black arrow points from the "Next" button to the "Login" link in the text "Already have an account? Login".

Register

Student | K12 Teacher

Find Your School:  
Please select a state and search for your school.

State/Province

[Can't find your school?](#) **Next**

Already have an account? [Login](#)

# Q & A

# Next Steps

## Learn

Visit [everfi.com/PDS](https://everfi.com/PDS) to review Rx drug safety lessons.

Visit [everfi.com/k12-courses](https://everfi.com/k12-courses) to review all offerings.

## Get Started

Register for an account at [www.everfi.com/newteacher](https://www.everfi.com/newteacher)

Pick a lesson to tackle this Red Ribbon Week

## Share

Share with colleagues.

Share about your class on social media - tag @EVERFIK12 and/or use #EVERFIempowers