



Adolescent NeuroDevelopment Study

University of California San Diego ♦ SRI International ♦ Duke University
Oregon Health & Science University ♦ University of Pittsburgh

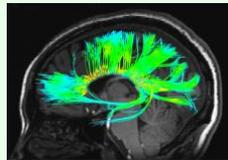
2014 Newsletter

Meet the Investigator: NCANDA-San Diego

Dr. Susan Tapert is the Principal Investigator of the National Consortium on Alcohol and NeuroDevelopment in Adolescence (NCANDA): San Diego site located at the University of California San Diego (UCSD), Department of Psychiatry. Dr. Tapert a licensed clinical psychologist, Professor of Psychiatry at UCSD, and Chief of Psychology Service at the VA San Diego Healthcare System. She has been awarded eight research grants from the National Institutes of Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse, in 2008 was honored with the APA Division 50 Distinguished Scientific Early Career Contribution Award.

NEURONS

Neurons are the way in which our body and brain communicate. Communication occurs through chemical and electrical signals.



Myelinated neurons have an outer coating of fatty cells. These fatty cells work as an insulator to increase the speed at which it can transmit signals to the brain.

Not all neurons are myelinated. Most of our myelinated neurons are in parts of the body outside of the brain. It would be pretty bad if it took a while for brain to realize that your hand is on a hot stove.



Refer a Friend!

We are looking for youth ages 12 to 21 to participate. If you know anyone who may be interested, please ask him/her to visit www.ncanda.org!

Did You Know?

During development our brains go through something called apoptosis. Apoptosis in the brain is when the brain gets rid of some unneeded cells. As we develop, the body creates millions more neurons than it actually needs. In order for the brain to work more efficiently, it removes the neurons that have not made synaptic connections.

<http://science.howstuffworks.com/life/cellular-microscopic/apoptosis.htm>

Reminder!

Please update us if your phone number, email, or address changes!
Find out more about the study at ncanda.org!



Need for Speed!

A neuron signal can instantly travel up to 120 meters a second, which is 268 mph! That is faster than the world's fastest street car at top speed, the Bugati Veyron Super Sport. <http://people.eku.edu/ritchison/301notes2.htm>



Backwards?!?

What would happen if the left side of the brain controlled the right side of the body and the right side of the brain controlled the left side of the body? Would we end up doing everything backwards?

Well in actuality the brain is already wired that way. The right side of the brain controls the left side of the body and vice versa.



"Here is this three-pound mass of jelly you can hold in the palm of your hand, and it can contemplate the vastness of interstellar space. It can contemplate the meaning of infinity and it can contemplate itself contemplating on the meaning of infinity" - Dr. Ramachandran, UCSD