Neurodevelopment in Adolescence

NCANDA In A Nutshell
NCANDA started in 2012 • enrolled 831 volunteers age 12-21 • funded by the National Institutes of Health • published 32 peer-reviewed papers to date, with more on the way • over 60 presentations at scientific meetings • provided training opportunities to over 40 graduate students, postdoctoral researchers, and junior faculty • find out more at ncanda.org!

Do We Have Any Volunteers?
It is well documented volunteerism provides physical and mental health benefits including:
+ Volunteering builds empathy, strengthens social bonds and self-confidence, and makes people happier.
+ Volunteering could help you earn your next job! It shows commitment, adds to your experience, and can build new skills.
+ Volunteers have lower mortality rates, greater functional ability, and lower rates of depression.
+ Giving time to others makes you feel you have more time and less wasted time.
Volunteering in research, such as the NCANDA study, may be one way to reap these rewards! https://rb.gy/ivewji

mNCANDA App
After a pilot study in 2017, we went to work implementing feedback from participants before launching this app at all 5 NCANDA sites in 2019. We are very excited to see the majority of participants complete 100% of their surveys, taking less than a minute per survey. This makes the results extremely valuable!

CBD vs THC
CBD, short for cannabidiol, is the second most studied ingredient (after THC) in cannabis, but CBD does not have impairing or euphoric effects like THC. Legality of marijuana products varies by state. In some places, CBD products may be found in grocery stores, bath and body shops, supplements stores, and even in pet products. Consumers should be aware CBD products are not approved by the FDA, and they could contain enough THC to produce a positive drug test. The FDA has issued warnings to hundreds of companies for CBD products not containing the level they claim to contain.
The first CBD prescription drug was FDA approved in 2018 to treat severe seizure disorders, however, extensive research is needed to know if CBD has medicinal use for other conditions including pain, mental illness, and drug addiction. drugabuse.gov/publications/drugfacts/marijuana-medicine

Understanding Brain Injury
Brain injury is either traumatic, when caused by external forces like assault or sports, or non-traumatic when caused by internal forces such as a stroke, infection, or toxin. Children age 0-4 have the highest rates of traumatic brain injury (TBI) followed by 15-24 year-olds.
A concussion is a mild TBI that occurs after a jolt to the head that upsets normal brain function. A direct blow to a body location other than the head can also cause a concussion.
Effects of a brain injury depend on the section (frontal, temporal, parietal, occipital lobes, brain stem, cerebellum) of the brain involved. For example, injury to the cerebellum may result in changes to balance or motor skills. Effects may include temporary loss of consciousness, but most brain injuries do not.
Symptoms may be physical (nausea, headache); cognitive (poor focus); emotional (irritability, sadness); and/or sleep disturbance (trouble falling or staying asleep). Symptoms may not appear for a few hours or days. It is crucial to seek medical attention after experiencing a brain injury, and ensure a repeat injury does not occur. www.biausa.org/brain-injury

Picking Your Brain

<table>
<thead>
<tr>
<th>D1. Type of brain imaging scan in NCANDA.</th>
<th>D2. Lobe of brain that forms decisions, judgement, emotions, etc.</th>
<th>D3. Lobe of brain responsible for many aspects of language.</th>
<th>D4. Lobe of brain responsible for sensory processing, self-awareness, orientation, etc.</th>
<th>D5. Brain region involved in regulation of sleep and wakefulness.</th>
<th>D6. Anatomical plane that divides the body into inferior and superior parts.</th>
</tr>
</thead>
</table>

Reminder!
Please let us know if your phone number, email, or address change. Visit ncanda.org!

Crossword Answer Key: