

Cornell Guided Notes

Human Anatomy & Physiology (Human Body Systems) | 2027-03-04

Name

Period

Date

Lesson

Lesson focus

Bioethics: brain data and consent

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Debate whether brain-scan data should be used to predict behavior, then post a CER. Big idea: Neuroimaging can reveal brain structure and activity, but using that data to predict behavior crosses ethical lines around consent, determinism, and civil liberties.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- neuron
- dendrite
- axon
- synapse
- neurotransmitter
- CNS
- PNS
- cerebrum

My notes, examples, and questions

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Cornell Notes - Continued

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Must-know ideas
What should I understand by the end?

- Neuroimaging modalities include MRI (structure), fMRI (blood flow as a proxy for activity), and EEG (electrical activity). None can reliably predict specific future behavior.
- Using brain data without informed consent violates the same principles as using any other medical data without patient permission.
- The tension between social utility (public safety benefit) and individual autonomy (right to privacy of thought) is a core bioethical conflict in neuroscience.

My notes, examples, and questions

Process notes
What happens during class?

- 0-5: Intro: what neuroimaging can and cannot tell us
- 5-20: Independent reading and benefit/danger list
- 20-40: John Carroll bioethics debate
- 40-55: Draft claim and strongest evidence
- 55-75: Write and post CER
- 75-80: Class share: strongest civil-liberty vs public-safety arguments

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Read the prompt: should courts or schools use brain scans to predict how a person will act?
- List two possible benefits and two dangers of predicting behavior from brain data.
- Choose a side and write a one-sentence claim with your reasoning.
- Debate in your John Carroll bioethics group and note the strongest counterpoint.
- Post a CER response on consent and brain data.

Evidence: CER - One-paragraph CER taking a position on whether brain-scan data should be used by courts or schools to predict future behavior.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- You can take a position on predictive use of brain data.
- You can weigh a benefit against a civil-liberty risk.

My notes, examples, and questions

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Lab or safety notes
What must I handle carefully?

Supplies:

- Preserved sheep brain or detailed brain model
- Dissection tray and tools or virtual brain platform
- Neuron and brain diagrams
- Nitrile gloves
- Safety goggles
- Lab notebook

My notes, examples, and questions

Summary

Today's lesson focused on Bioethics: brain data and consent. The main target was: Debate whether brain-scan data should be used to predict behavior, then post a CER. The evidence of learning is CER: One-paragraph CER taking a position on whether brain-scan data should be used by courts or schools to predict future behavior.. In my own words, the most important idea from today is:

My summary

My final question or connection