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Nervous System Practical

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NERVOUS SYSTEM PRACTICAL

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HONORS PROJECT
Meninges and Spaces on the Brain

Meninges- 3 connective tissue layers that cover the brain

1. Epidural Space
2. Dura Mater
3. Subdural Space
4. Arachnoid Mater
5. Subarachnoid Space
6. Pia Mater

Brain Meninges: Cadaver View

1. Dura Mater
2. Arachnoid Mater
3. Pia Mater

Meninges on Spine

1. Dura Mater
2. Arachnoid Mater
3. Pia Mater

(Spaces are present in spine as well)

(https://www.medicosite.com/meninges-dura-arachnoid-pia/)
Spine Meninges: Cadaver View

- Subarachnoid space
- Arachnoid mater
- Subdural space (potential)
- Dura mater

Spinal cord & meninges, posterolateral

[Link](https://sites.google.com/a/umich.edu/bluelink/curricula/first-year-medical-curriculum/sequence-1-Foundations/session-2-spinal-cord-and-peripheral-nervous-system/lablink)
Up Next: The Brain

(https://www.livescience.com/62367-this-is-your-brain-on-drugs.html)
Parts of the Cerebrum

[Brain lobes diagram](https://www.mayoclinic.org/brain-lobes/img-20008887)

[Human brain anatomy diagram](https://www.studyblue.com/notes/n/exam-3-brain-and-cranial-nerves/deck/15885449)
Longitudinal Fissure

(https://www.thedoctorschannel.com/view/electromyographic-signals-allow-for-neurological-control-of-prosthetic-leg/)
White Matter

Arbor Vitae - white matter of cerebellum (tree like shape)

Cerebral Cortex- Outermost layer of brain containing grey matter (surrounds white matter)
Basal Nuclei (aka Basal Ganglia)

(https://www.neuroscientificallychallenged.com/blog/what-are-basal-ganglia)
Up Next: The Spinal Cord and Associated Structures


White Matter

Dorsal (or posterior) horn of gray matter

Ventral (or anterior) horn of gray matter

(https://www.verywellhealth.com/spinal-nerve-root-3995372)
Dorsal root ganglion (spinal ganglion)

(https://www.verywellhealth.com/spinal-nerve-root-3995372)
Dorsal (posterior) Root

(https://www.verywellhealth.com/spinal-nerve-root-3995372)
Ventral (anterior) Root

(https://www.verywellhealth.com/spinal-nerve-root-3995372)
Spinal Nerve

(https://www.verywellhealth.com/spinal-nerve-root-3995372)
Next: Nerves

- Nerve can be abbreviated as n.

- Example: radial nerve = radial n.

[Link to 3D Model: http://www.3dscience.com/3D_Models/Human_Anatomy/Male_Systems/Male_Nervous_3.php]
Cranial Nerves

- olfactory bulb
- olfactory tract
- optic (II) nerve
- trigeminal (V) nerve
- Facial (VII) nerve

vagus (X) nerve

(https://aibolita.com/sundries/6331-cranial-nerves.html)
Phrenic n.

Subclavian vein

Pericardium

(https://yousense.info/33/02/604-phrenic-nerve-cadaver.html)
- median n. and ulnar n. endings are on the anterior side of hand (palm)

- radial n. endings are on the posterior side of hand

(http://www.assh.org/handcare/Anatomy/Nerves)
Sciatic nerve
Common fibular nerve
Tibial nerve

(https://teachmeanatomy.info/lower-limb/nerves/)
Not on practical

(https://legacy.owensboro.kctcs.edu/gcaplan/anat/Notes/API%20Notes%20M%20Peripheral%20Nerves.htm)
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