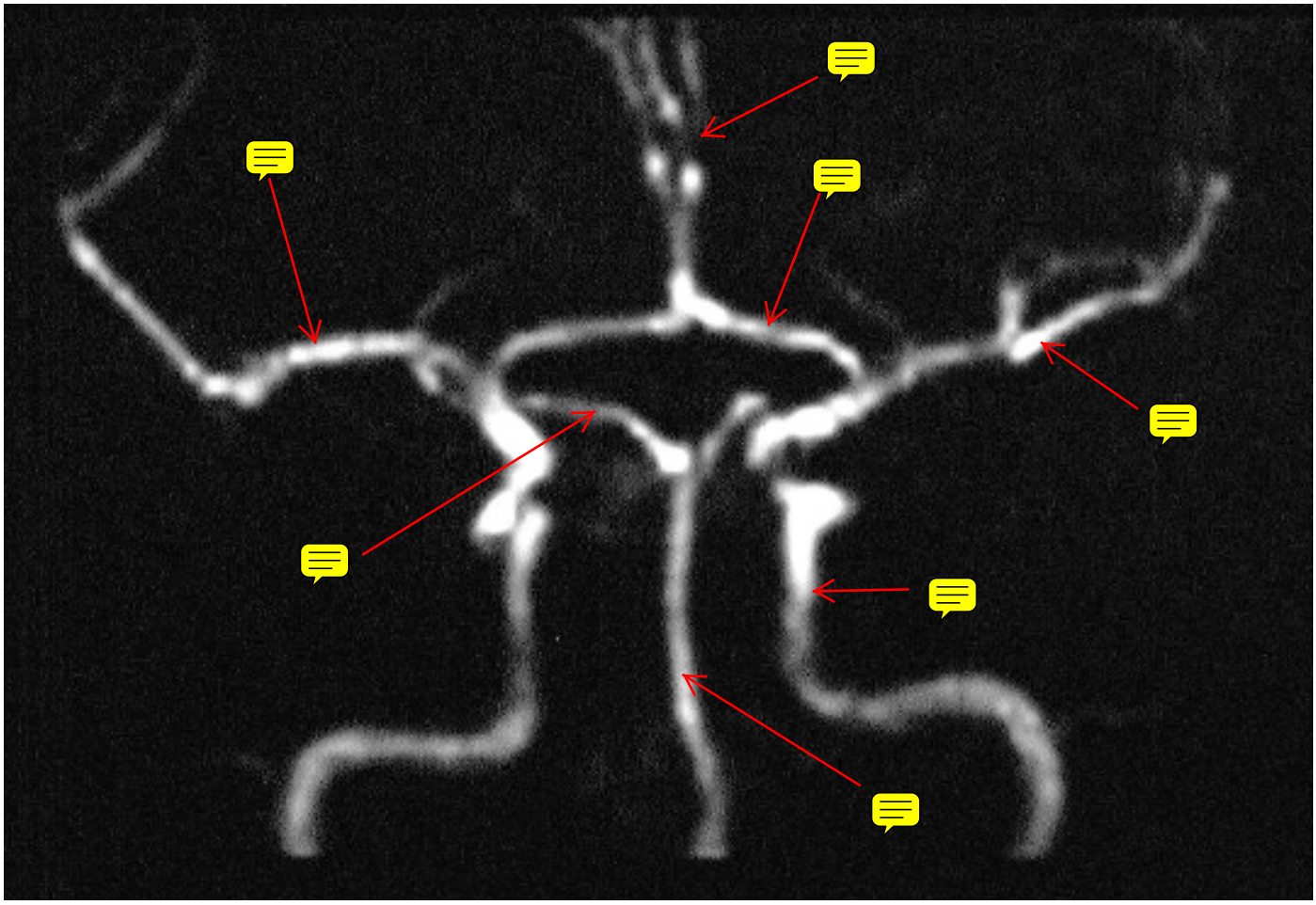
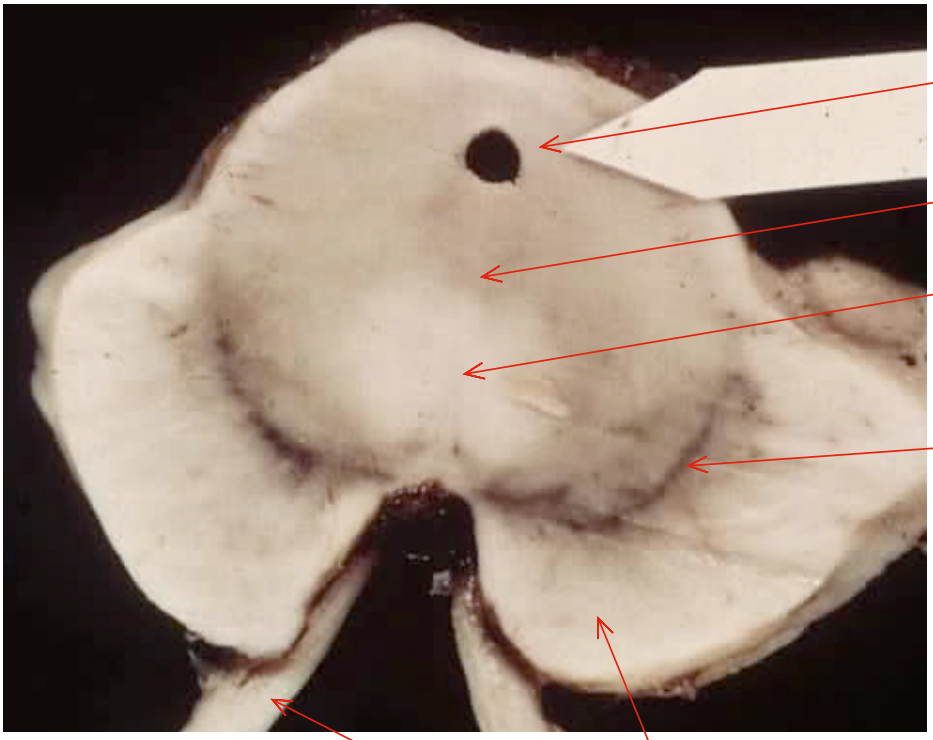




what receptors are present here?
describe the pathway this connects to.

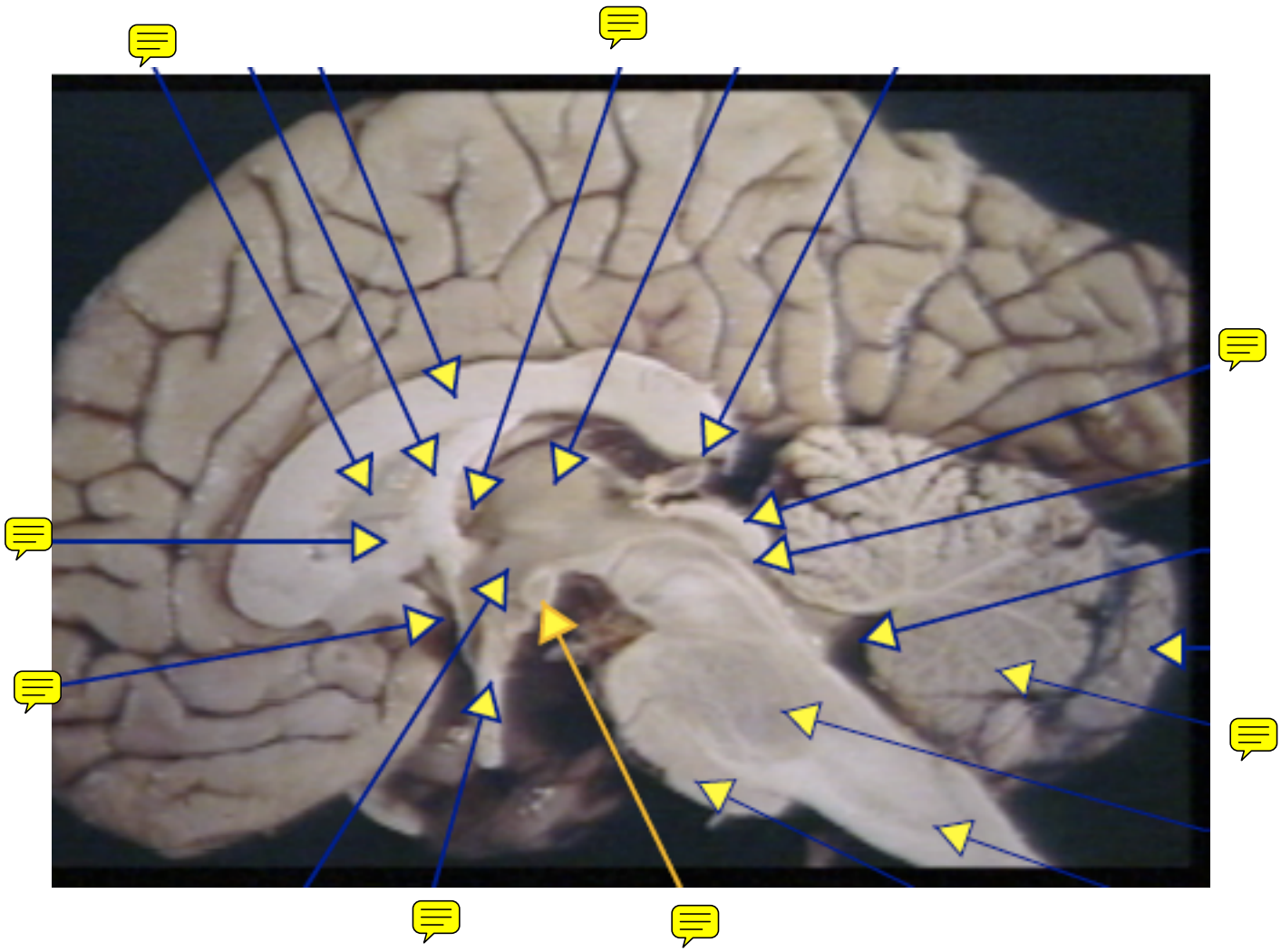
CN nucleus?

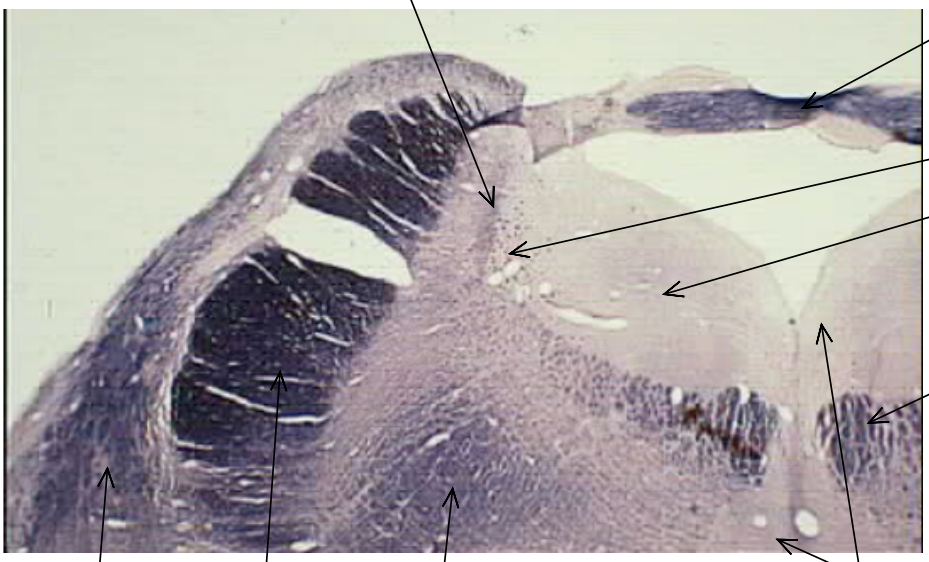
what's happening here?
where are we in relation to the red nucleus?

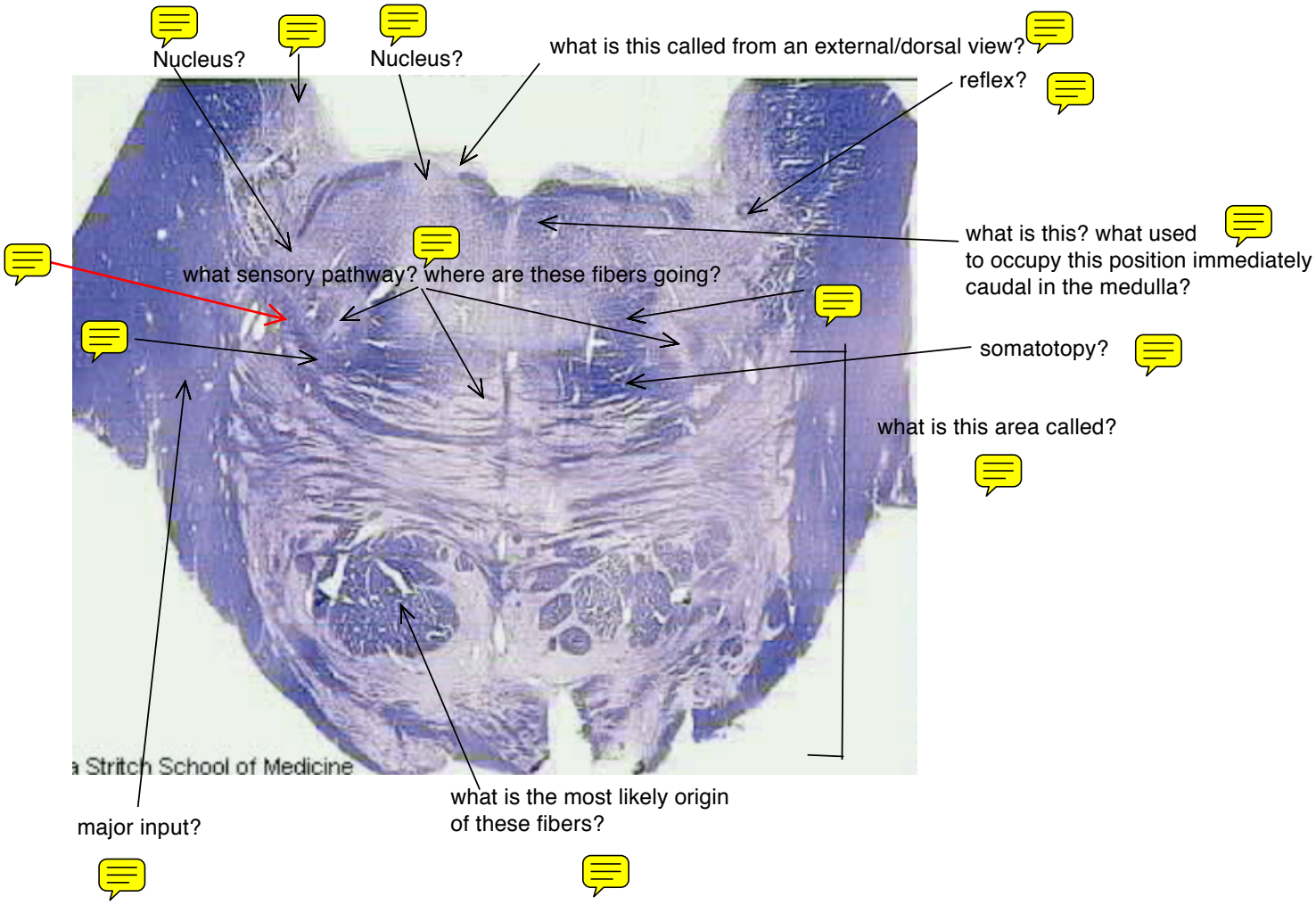
what's this? what does it produce?
what disease is associated with this?

?

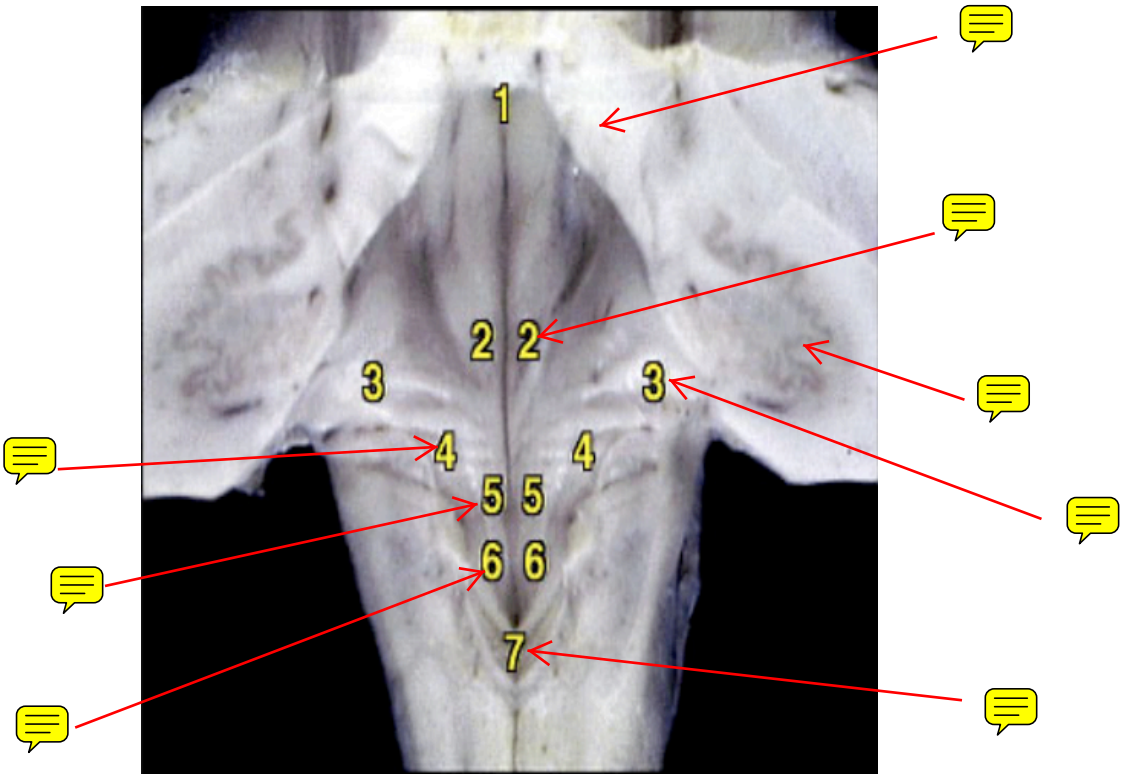
what do fibers running here connect?




Reflex? Why unique?
CN? Are the nuclei rostral or caudal to this level?
what does this produce?
what kind of receptors are found here? what would happen if you stimulated this region?
Two names for this?
what do these produce?



***Pontine infarct - causes contralateral UMN signs because the CST hasn't decussated yet, and causes contralateral cerebellar signs because the pontocerebellar fibers decussate to enter the MCP.
***Midbrain metastatic tumor or brainstem glioma = loss of CN3, red nucleus, and SCP -- ptosis, outward deviation of eye, unreactive pupil, ipsilateral cerebellar signs.


1
2 2
3
3
4
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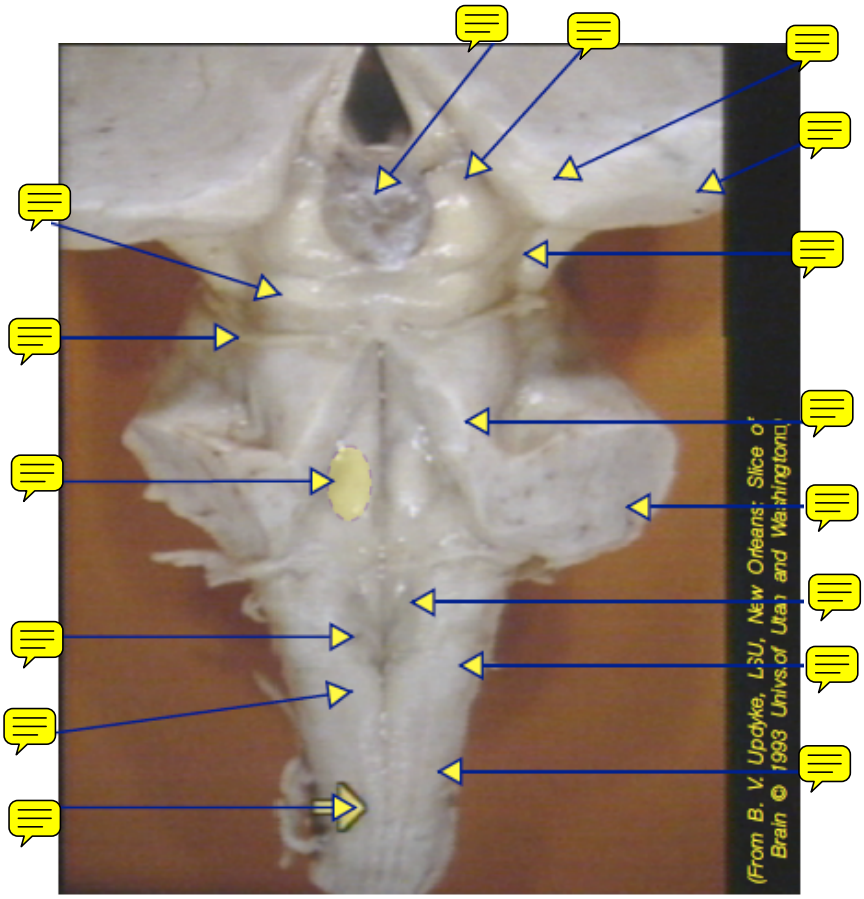
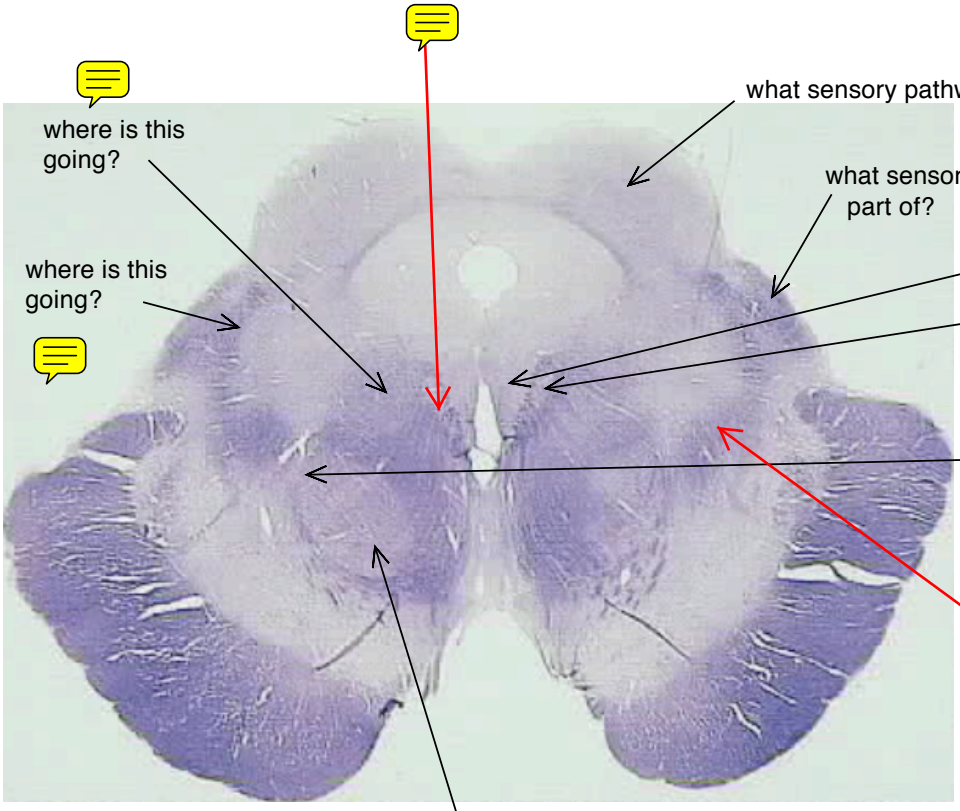
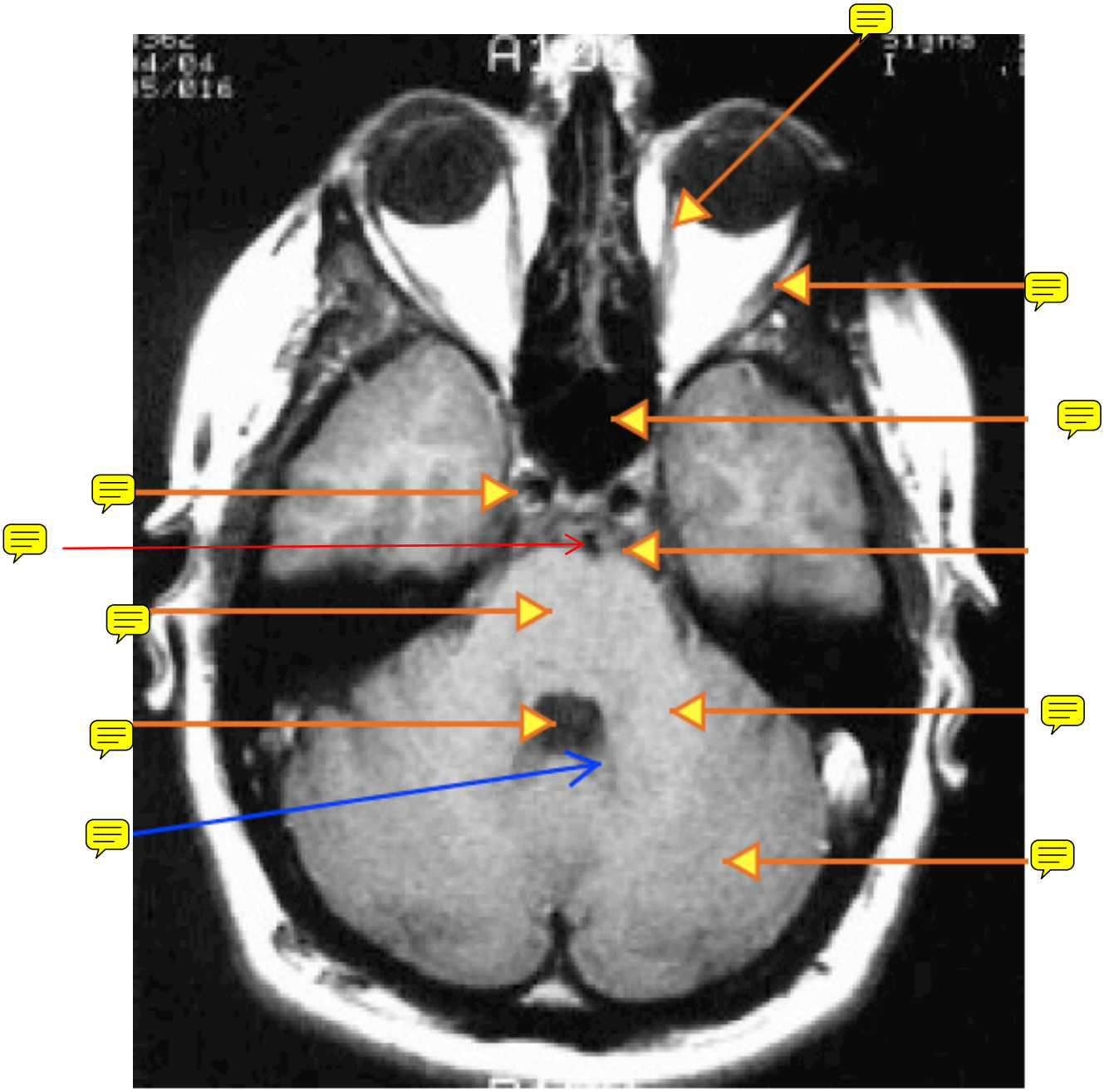
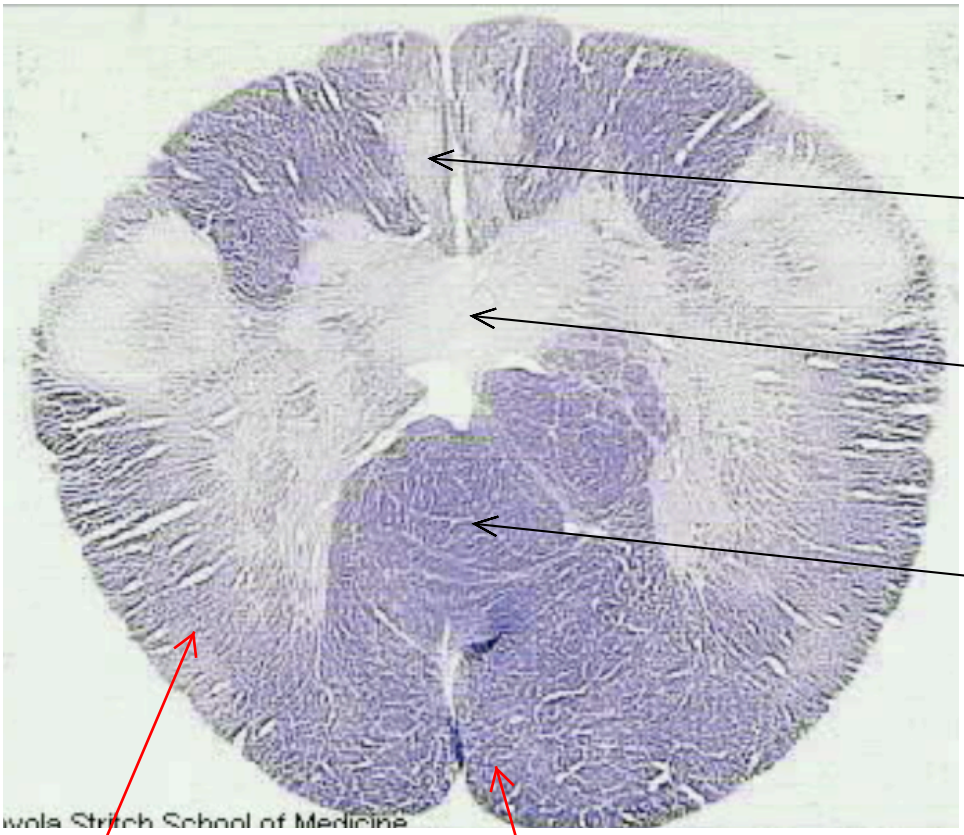
5 5
6 6
7


(From B. V. Updyke, LSU, New Orleans: Slice o
Brain © 1993 Univs of Utah and Washington)


where is this going?
what sensory pathway is this part of?
what sensory pathway is this part of?
where is this going?
motor nucleus here?
what conjugate eye movements does this nucleus help integrate?
where are these fibers, continuing around the nucleus, headed?
Afferents?
Efferents?





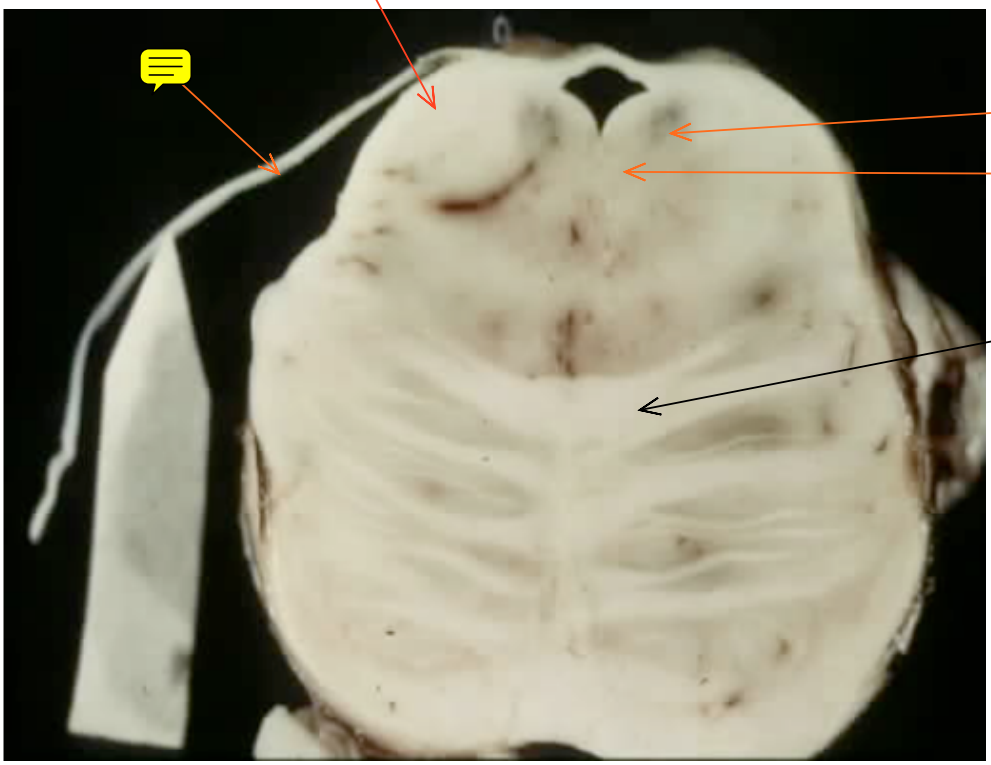
**Where are we now?

?

what's forming here?

what important medullary center is this part of?

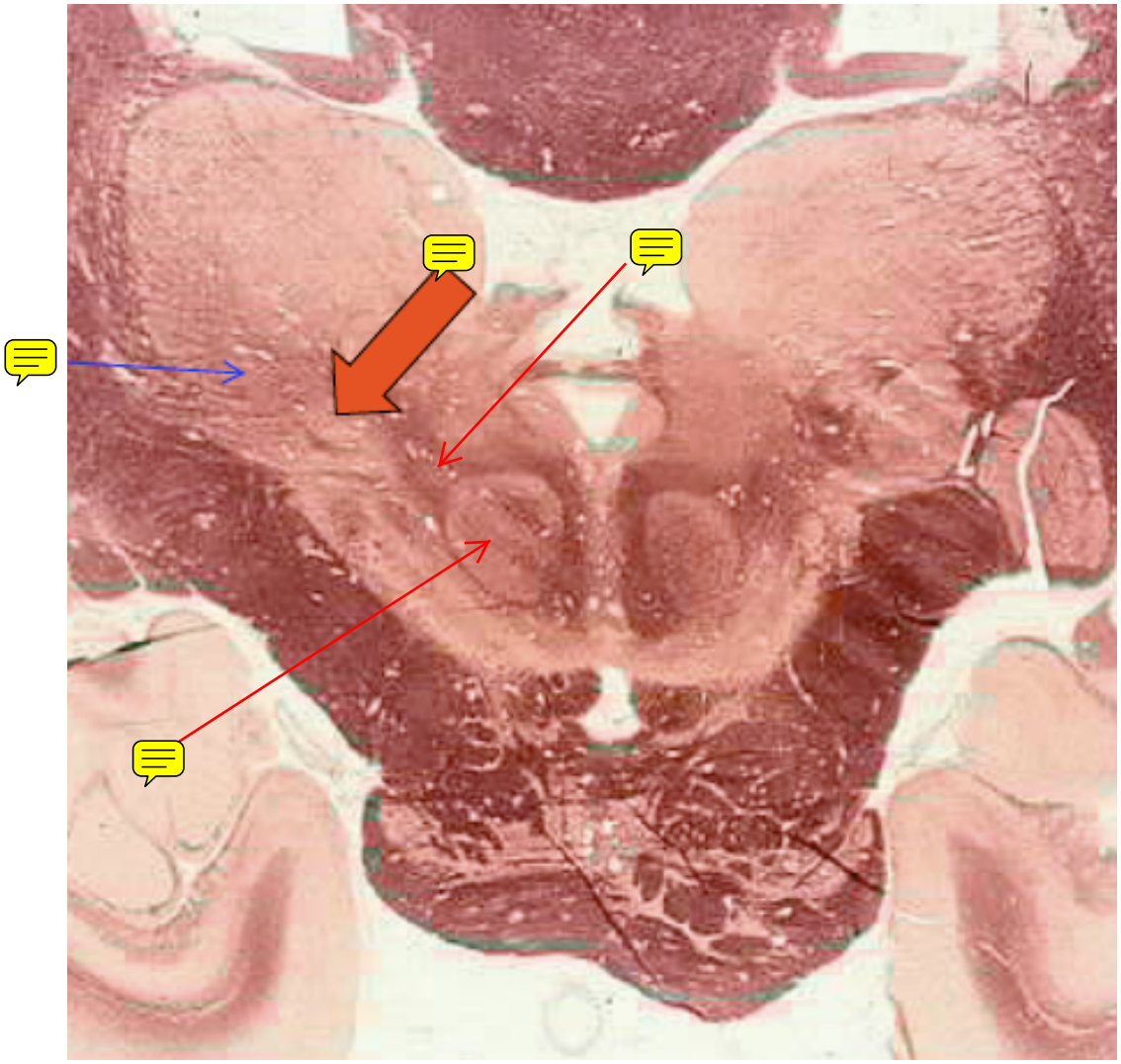
what's happening here

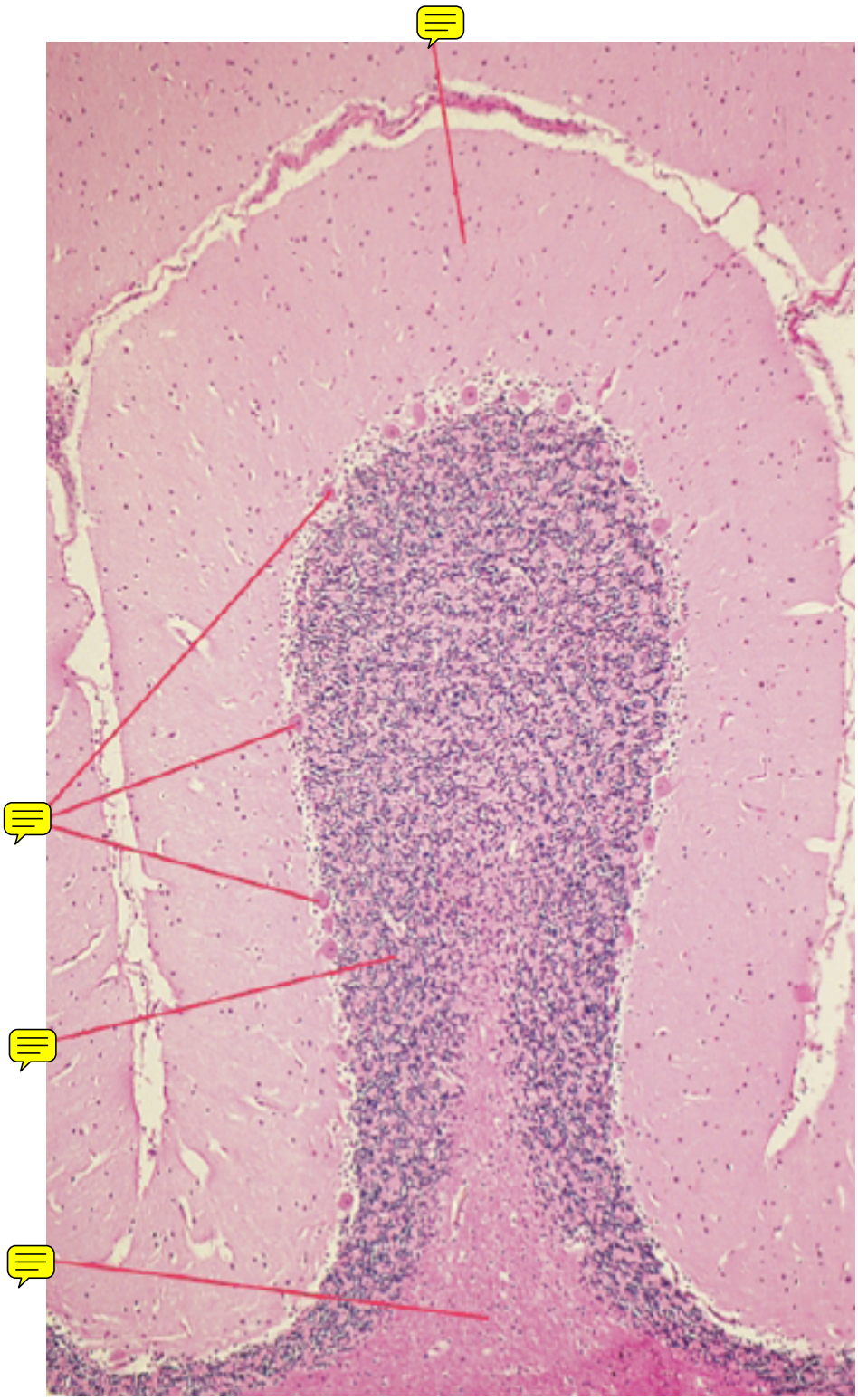


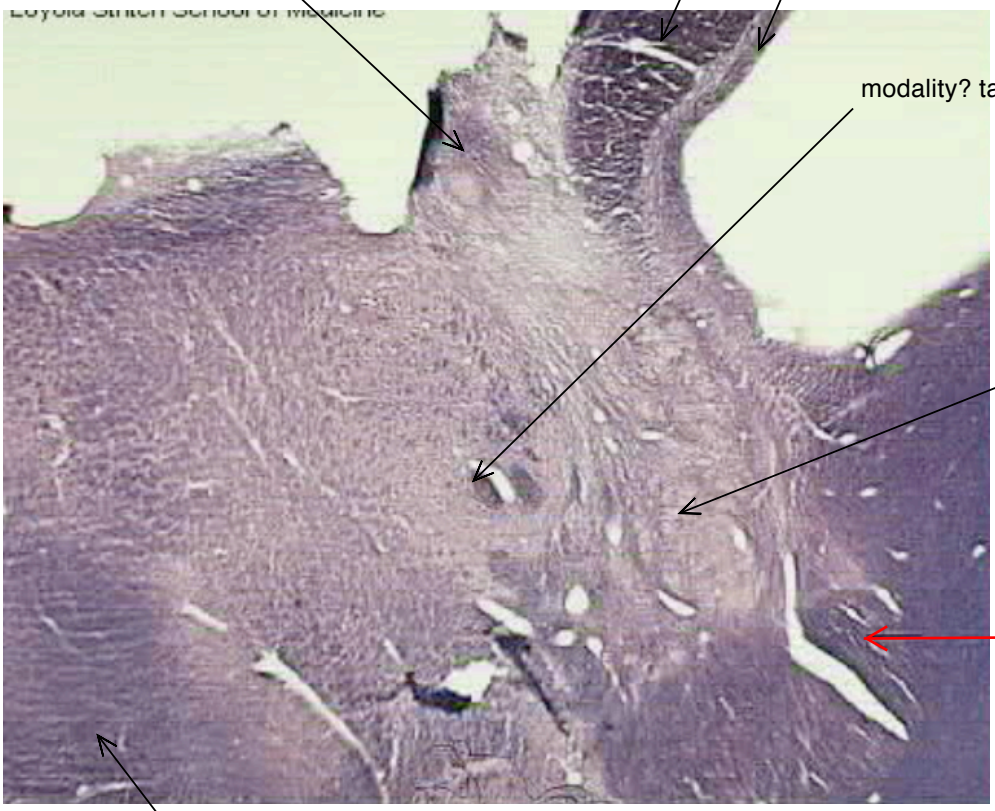
what does this produce?

what does this produce?

what kind of fibers? why do they appear white?







Reflex? Why is this nucleus unique?

origin? would cerebellar signs of a lesion here be ipsilateral or contralateral?

*What tract arises from the principle nucleus? Where does it terminate?

modality? target?

*What tract arises from the spinal nucleus of the trigeminal? Where does it terminate?

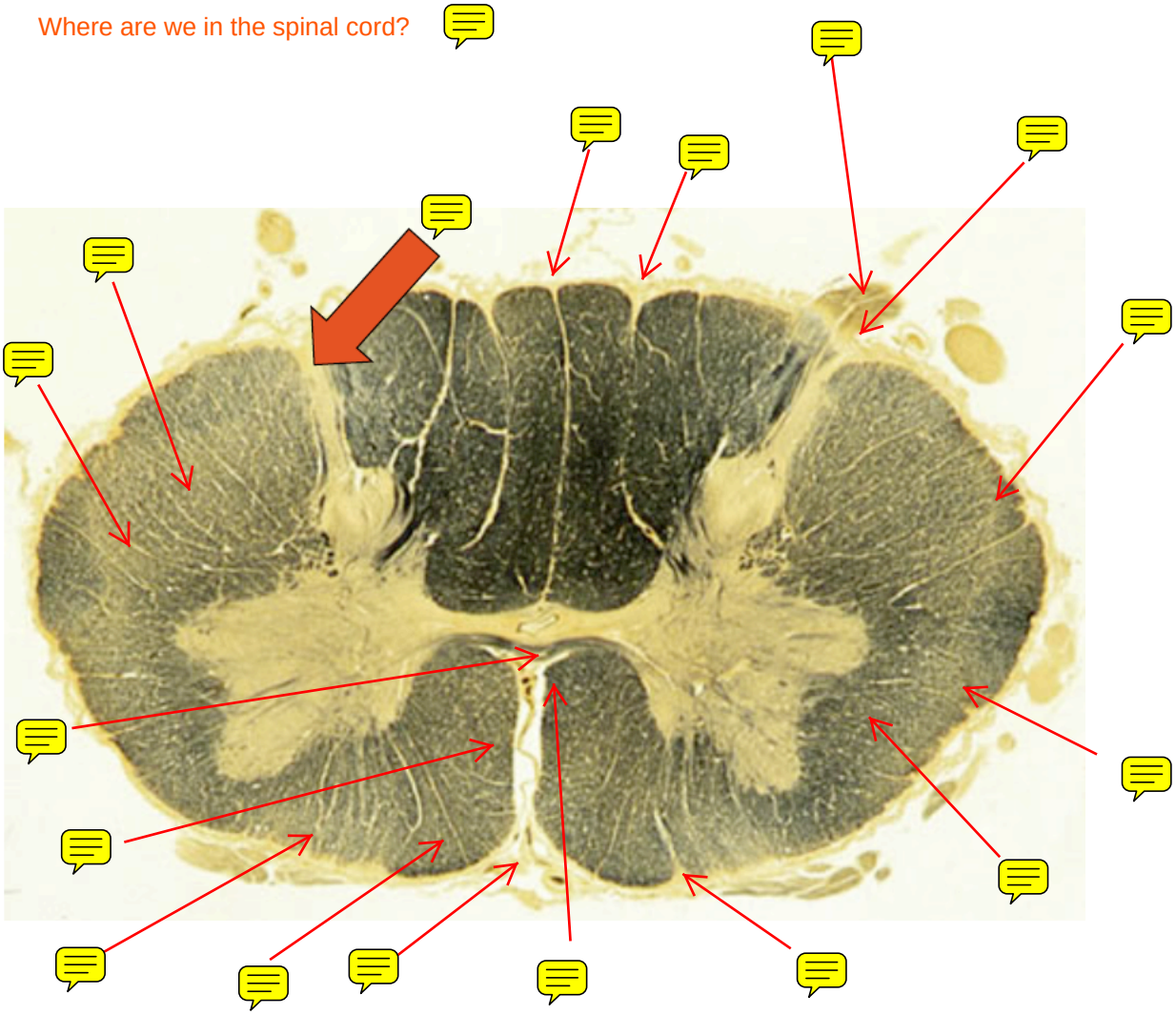
what specific structures at the end of these axon terminals detect vibration?
2 point discrimination?
are these fast or slow adapting?
encapsulated or not?

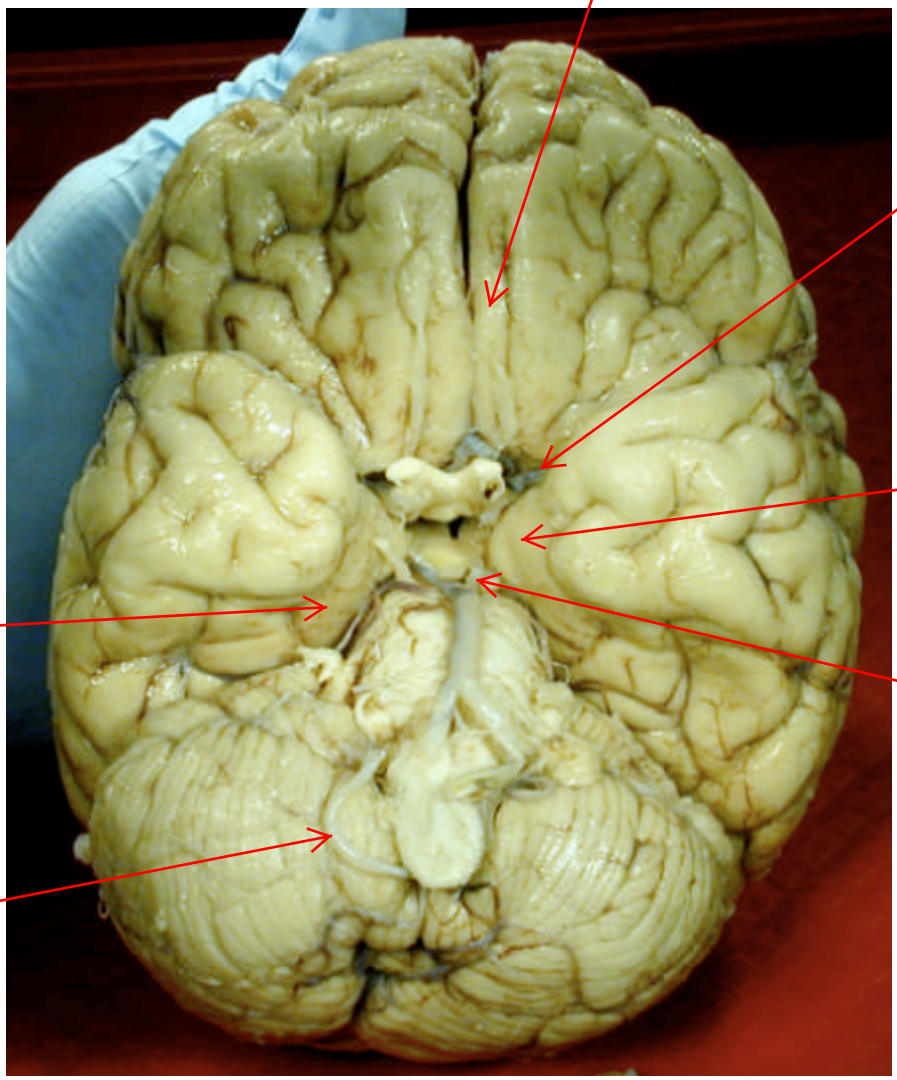
what two structures does this connect?

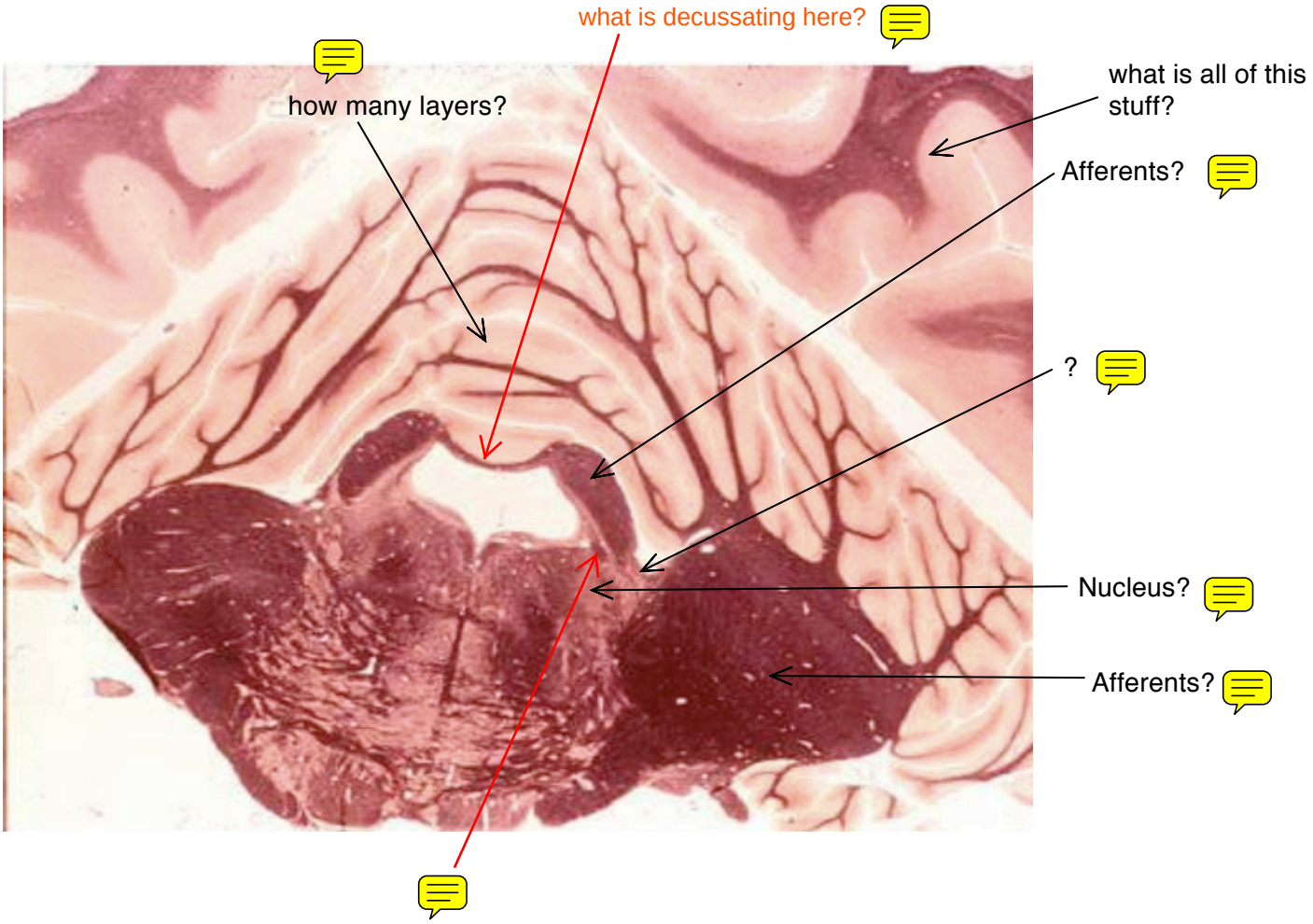
***Trigeminal Neuralgia - anything compressing the trigeminal nerve --- ie the SCA can irritate it... or a tumor (slow progression with more symptoms arising later).

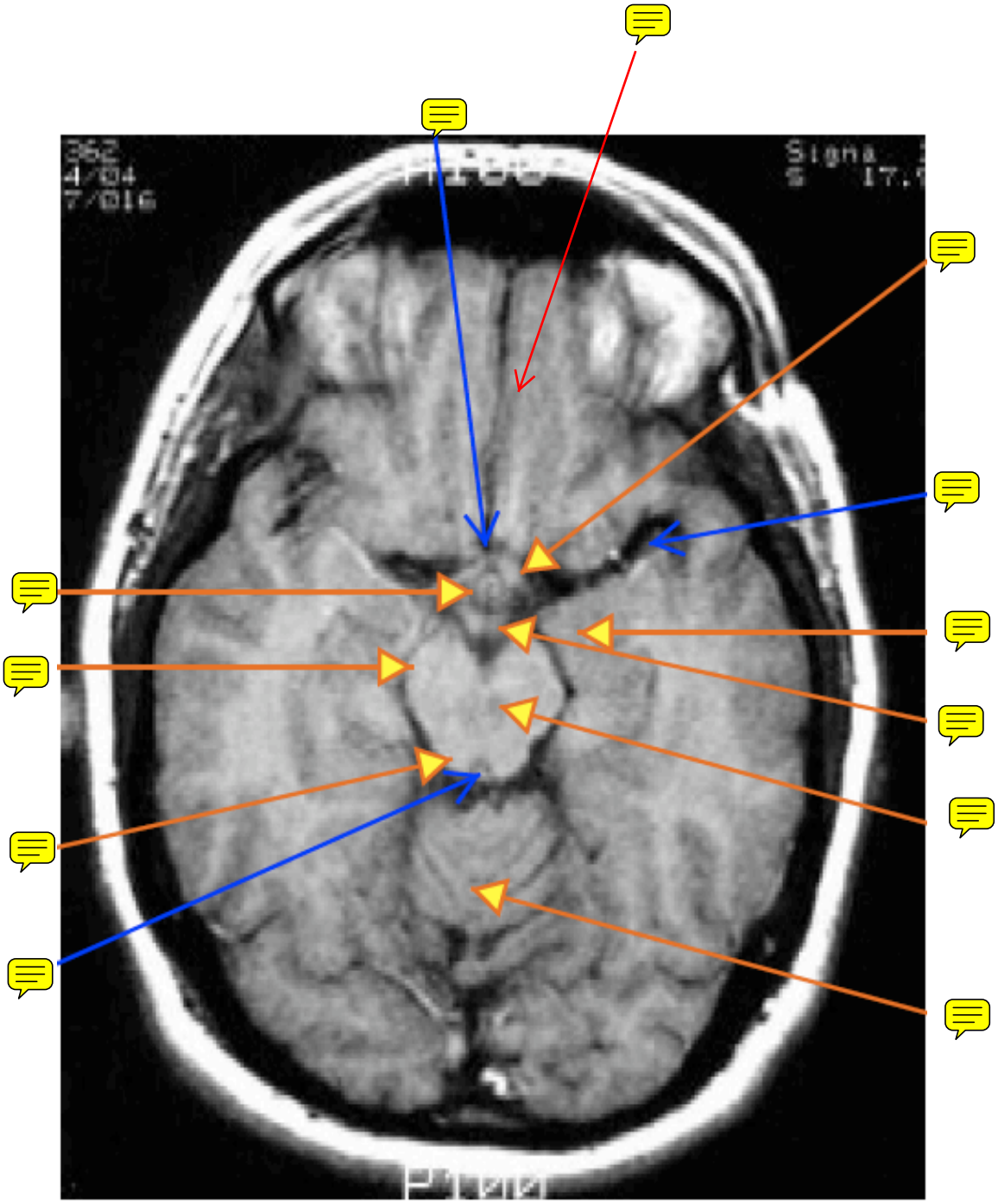
•Lightning-like pain in the cheek, often triggered by touching the face.

Where are we in the spinal cord?

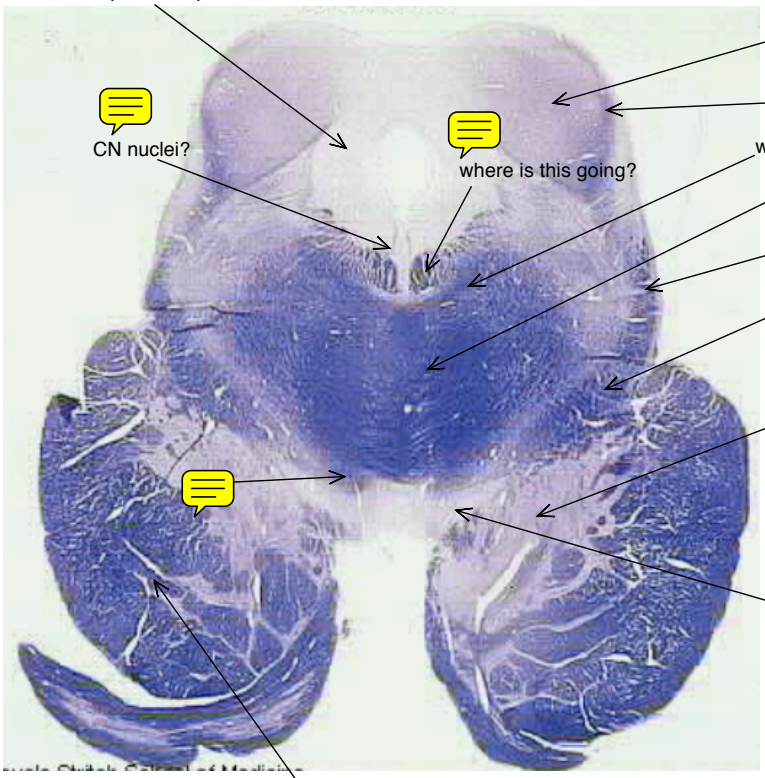



Arises from what gyrus?


what is decussating here?
how many layers?
what is all of this stuff?
Afferents?
?
Nucleus?
Afferents?


Signa

what receptors are present here?



what sensory modality runs in fibers here? what brodmann area does this ultimately project to? what cerebral lobe? what named gyrus?

describe this pathway

CN nuclei?

where is this going?

what is this connecting?

what is happening here?

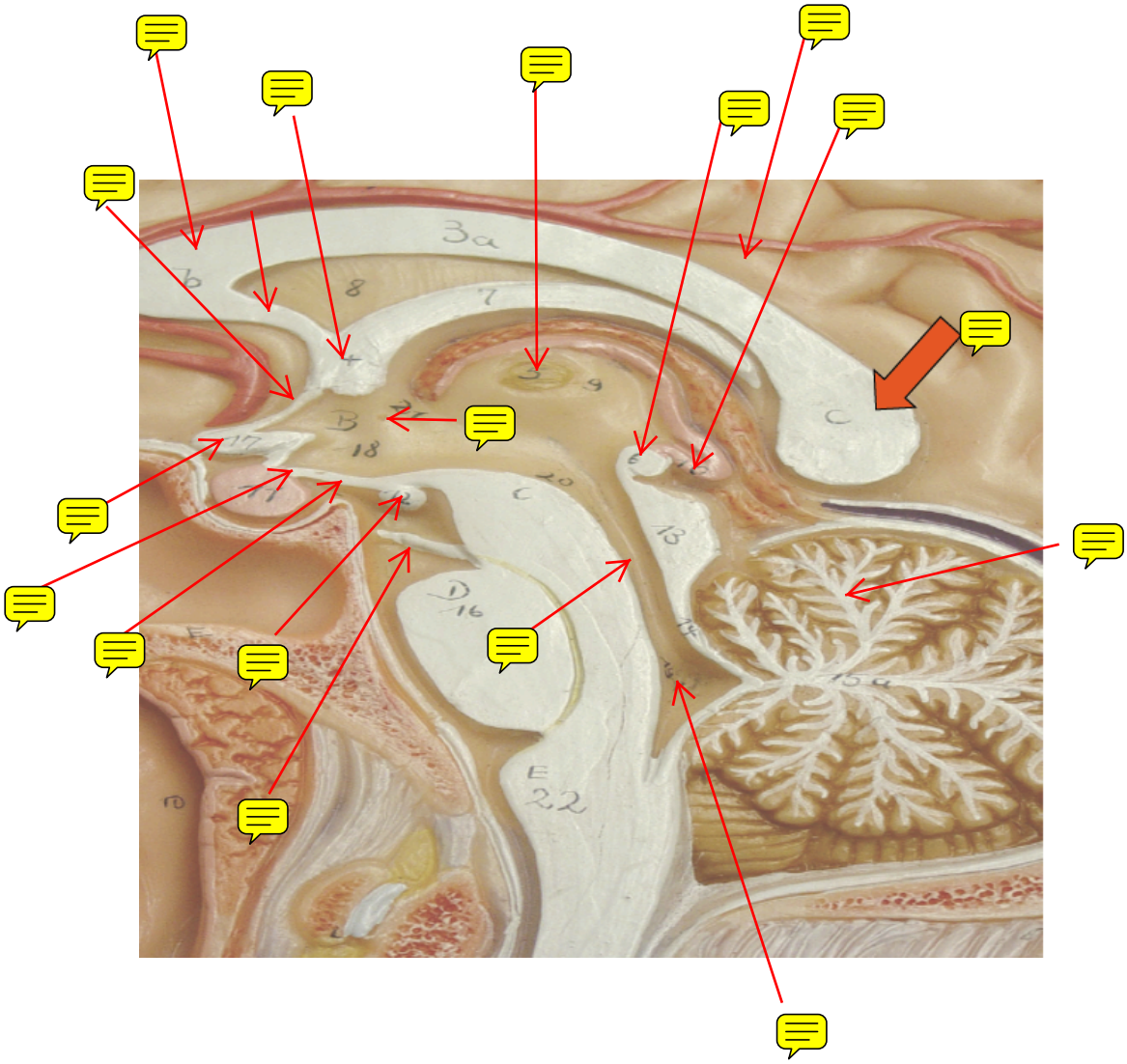
where is this going?

somatotopy?

what's this stuff?
what does it produce?
what disease is it associated with?

BONUS:
what nuclei are found here?
what do they produce?

what fibers are located in the middle of this?

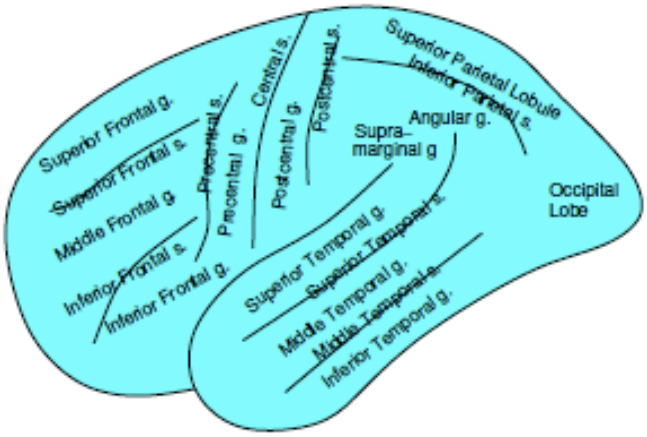

3a
B
C
D
E
22

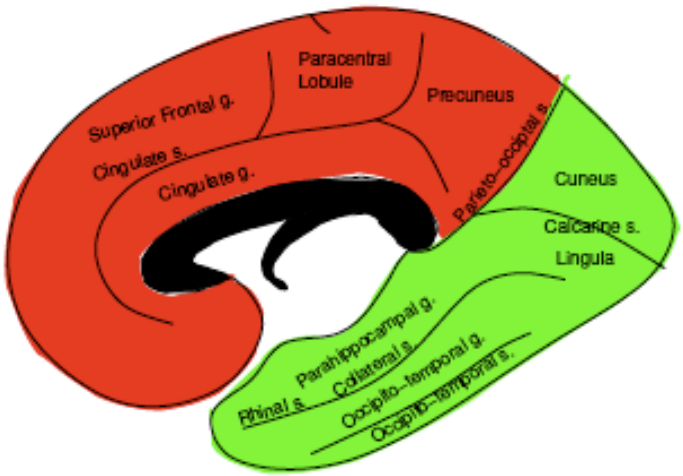
**where are we?

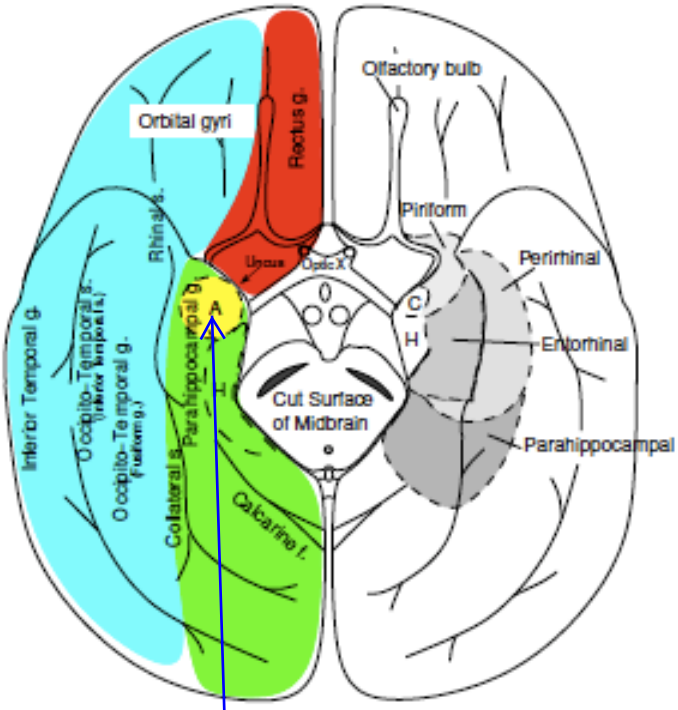
what is becoming what here?
functionally, what is this replacing?
what lamina is this?

Nucleus of what CN located here?
What lamina is this?

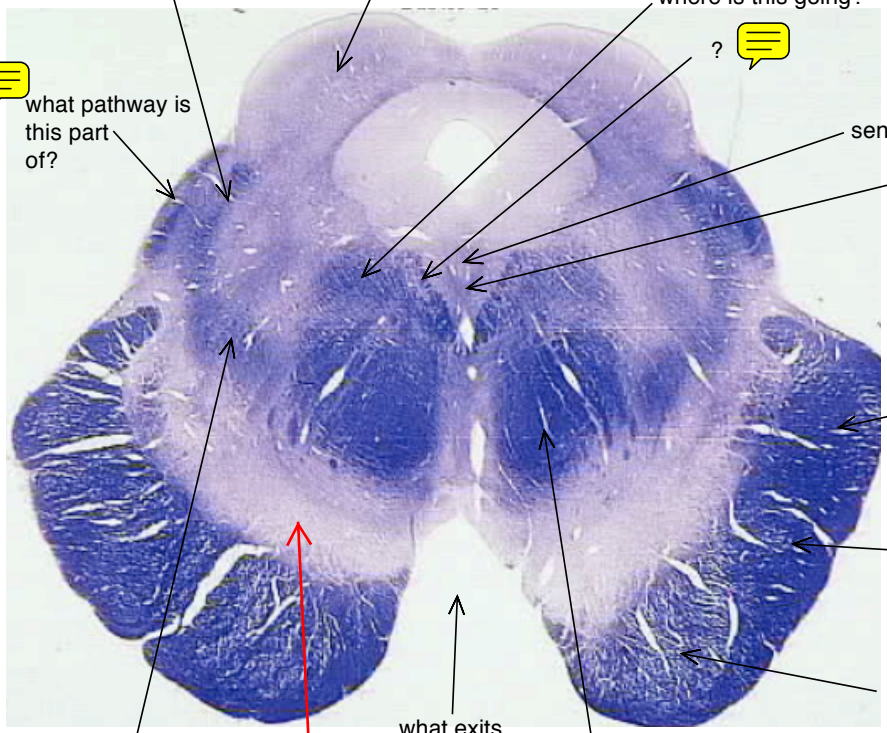
Cerebral Circulation Territories



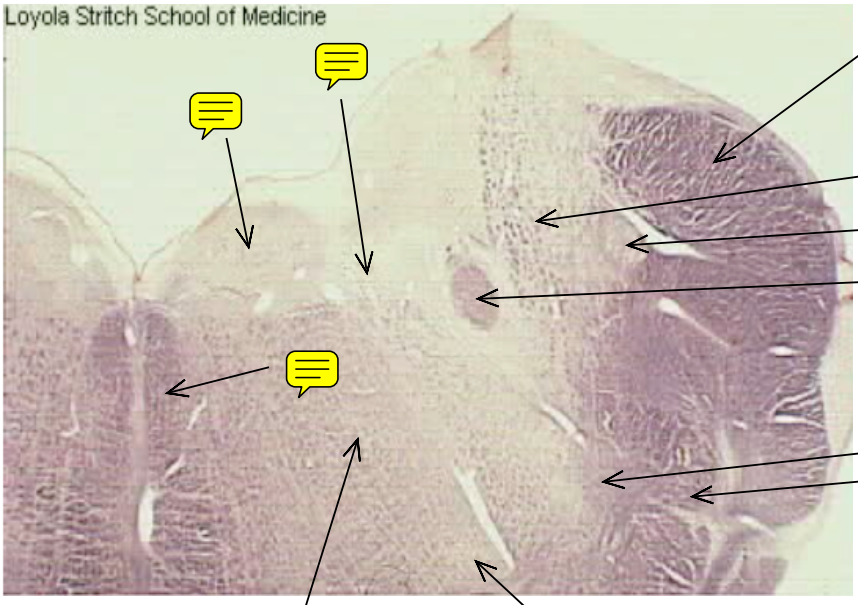




What artery supplies the uncus?



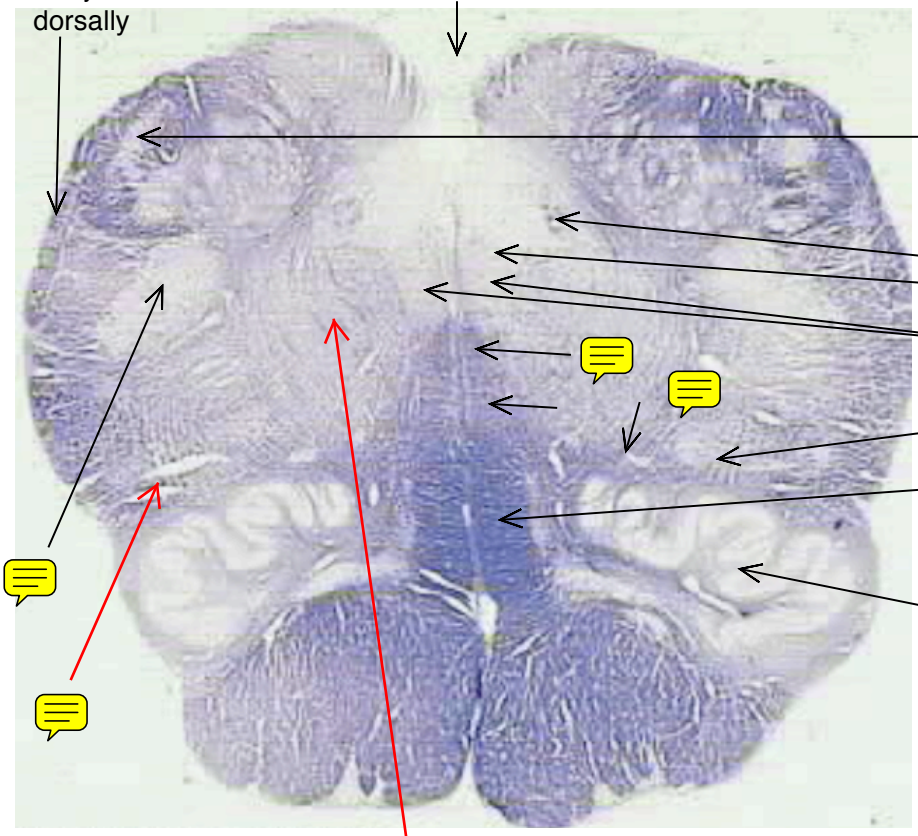
Note: Weber Syndrome "Medial Midbrain Syndrome" -- Occlusion of Posterior Cerebral Artery causes loss of ipsilateral CN3 and contralateral hemiplegia (due to damage to ipsilateral cerebral peduncle)

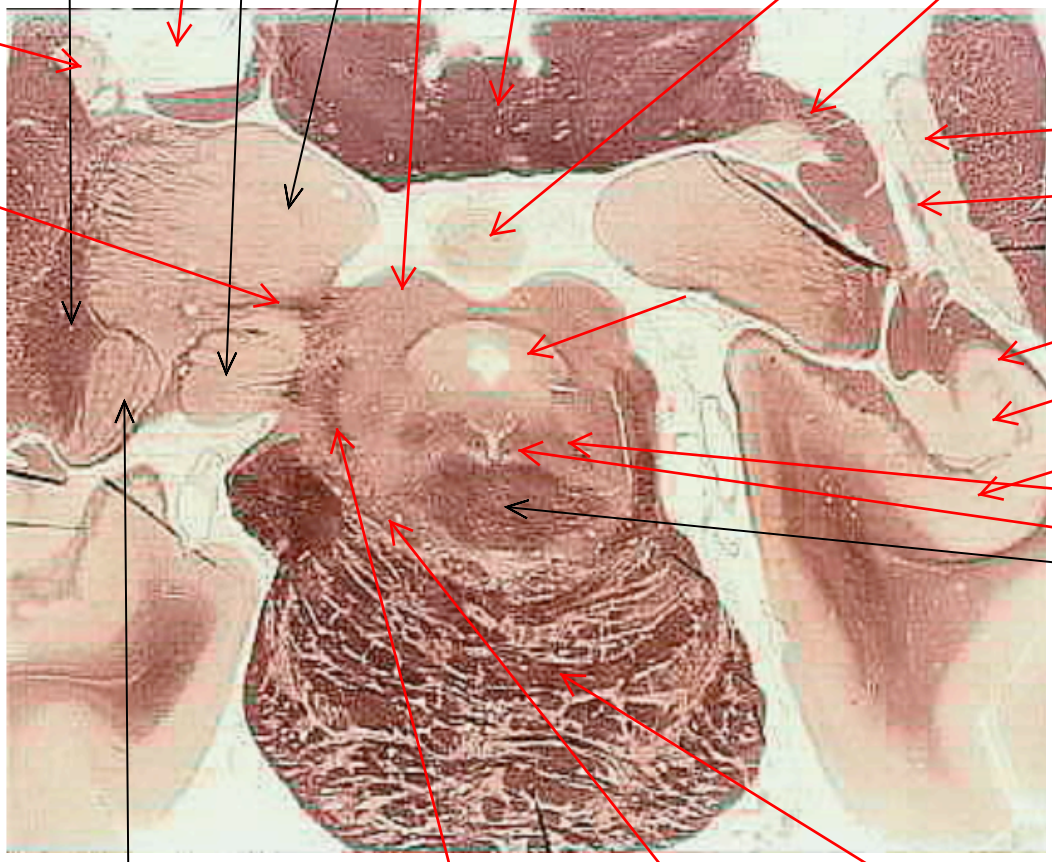


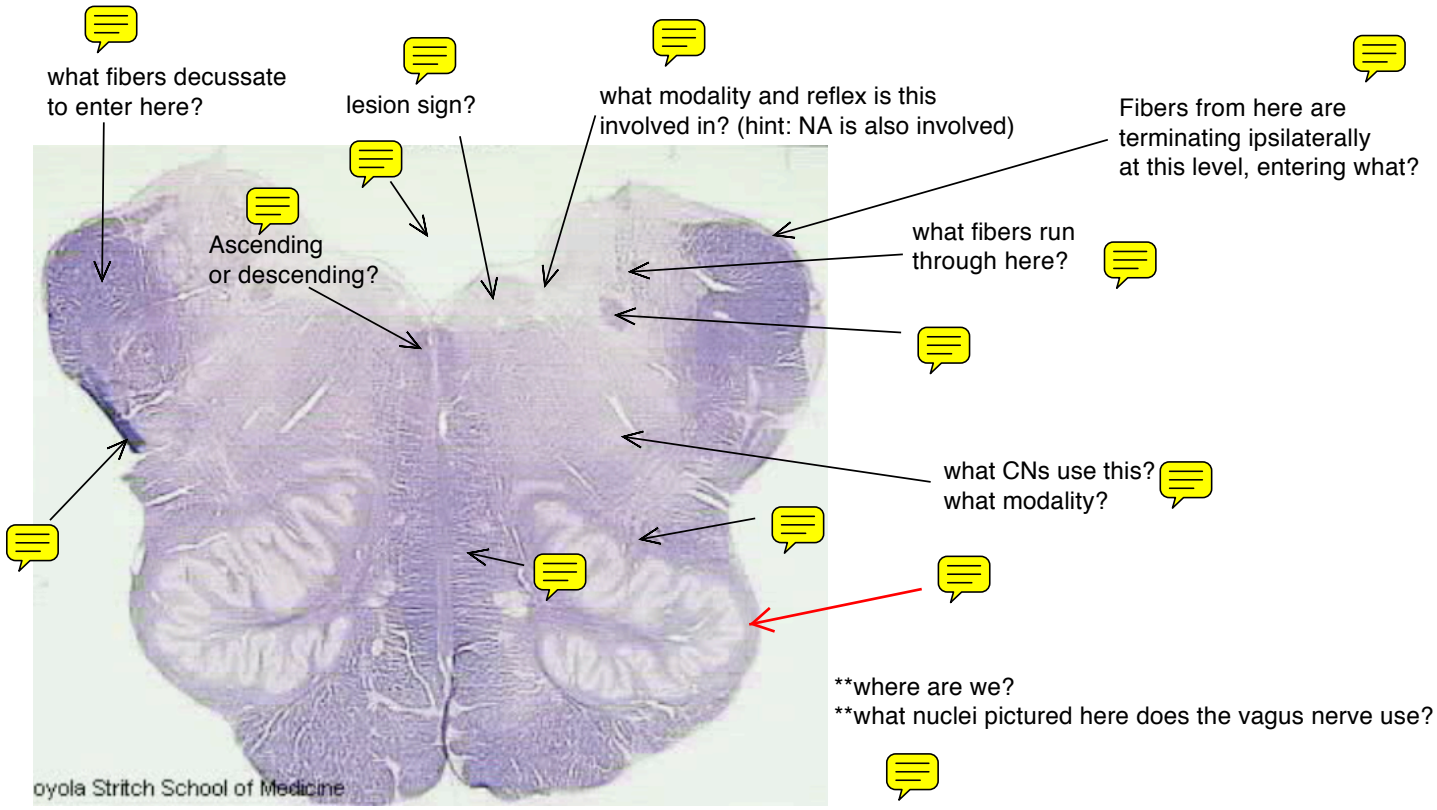
where does this project to? via what?
what kind of sensory info does it receive?

what are some of the
functions of this diverse
array of fibers?

what reflex is this involved in?
what CN's use this?
what are its sensory modalities?


this just moved dorsally
**where are we?
what's forming here?
what will it become?
where does it terminate?
?
Nucleus? Modalities?
Nucleus? Modalities?
what's forming here?
efferents?

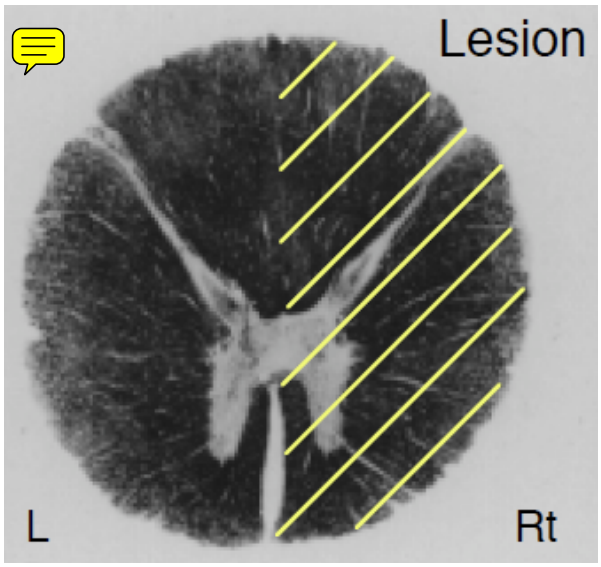

Two names for these?
?
?
General function?
Leaky or impermeable blood vessels?
Termination?
Where are we?
Ends where?
Axons from which tract?
Termination?
what's happening here?
what sensory pathway is this part of?
Modalities?
Termination?

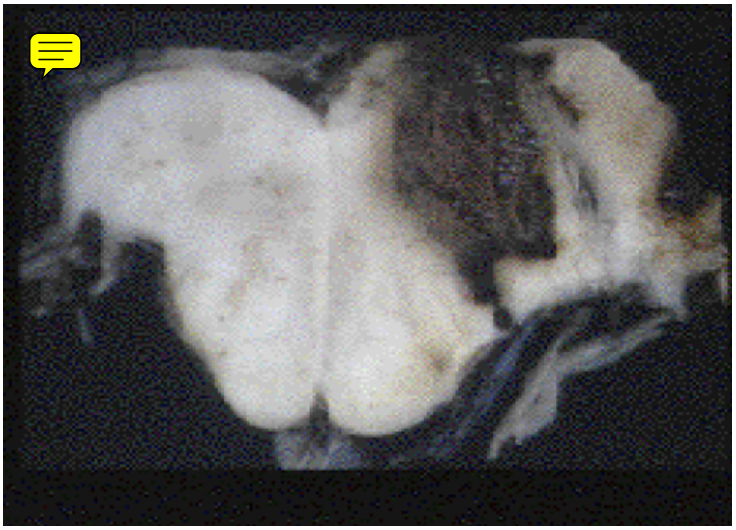


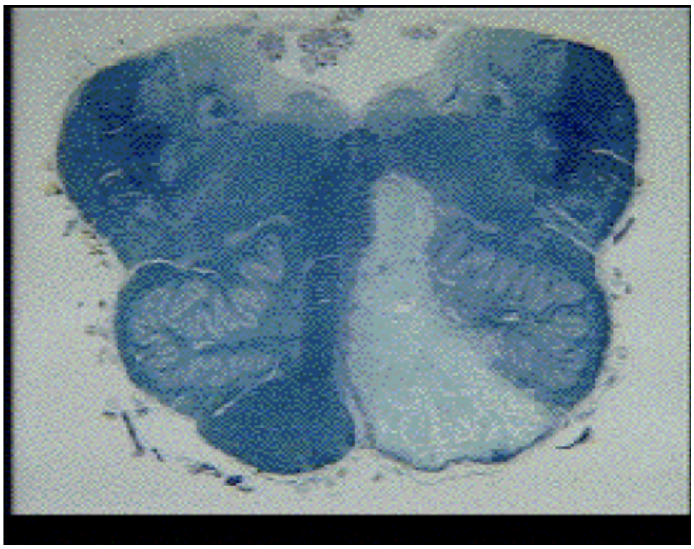
***Wallenberg Syndrome - Classic "crossed-brainstem disorder" - PICA supplies blood to this level, and an occlusion (of it or the vertebral) produces hoarseness (10), ptosis (HAT), nausea/dizziness/dysmetria (ICP), IPSLATERAL LOSS OF PAIN/TEMP ON FACE (Spinal 5 Tract), CONTRALATERAL LOSS OF PAIN/TEMP BODY (spinothalamic tract).

***Medulloblastoma - most common primary central nervous system tumor that arises in childhood -- presents with dizziness, headaches and double vision.

***Medial Midbrain / Weber Syndrome - Posterior Cerebral Artery occlusion
Signs:
•Ipsilateral CN 3 lesion - outward deviation of eye on this side
•Contralateral hemiplegia (cerebral peduncle involved)

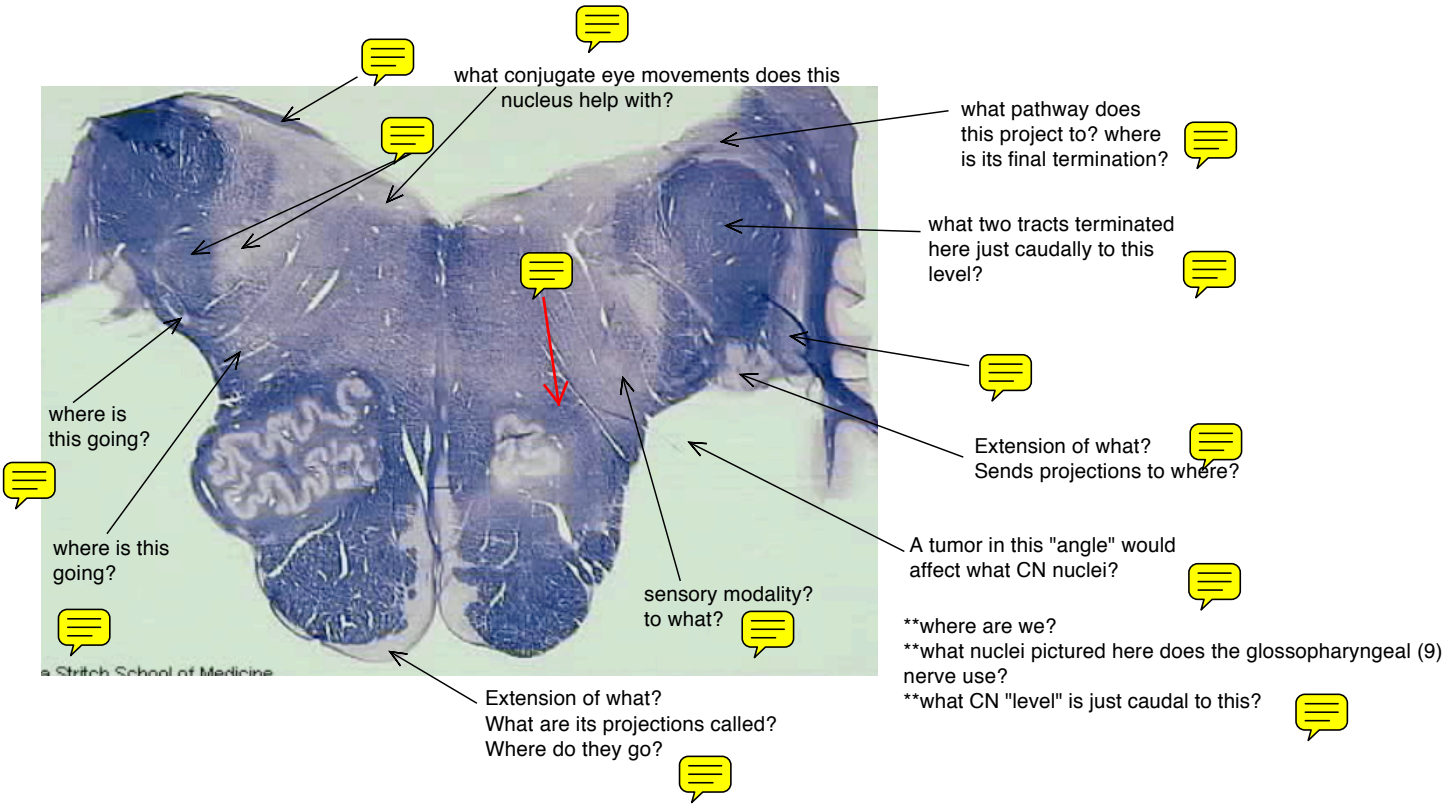






**Note: Loss of dorsal columns = +Rhomberg sign

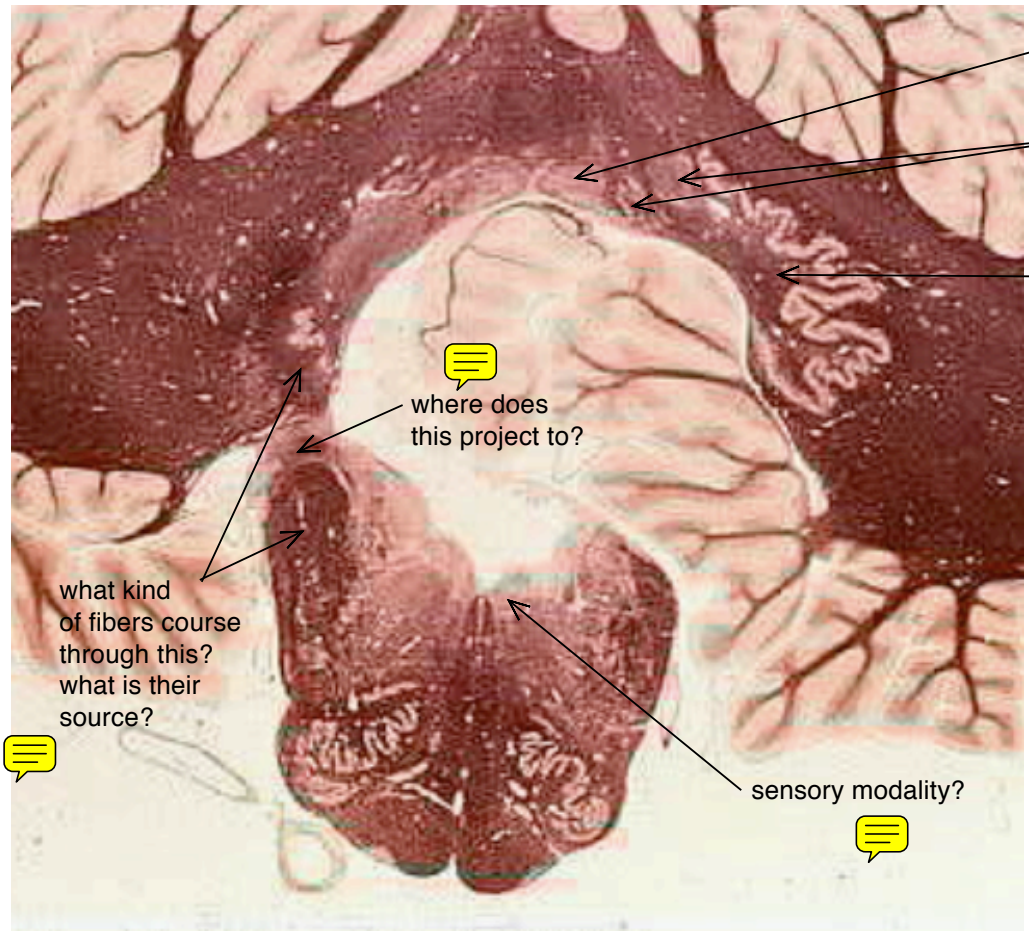
**Note: Weber Syndrome - "Medial Midbrain Syndrome" -- occlusion of posterior cerebral artery... ipsilateral CN3 lesion and contralateral hemiplegia (loss of ipsilateral cerebral peduncle)



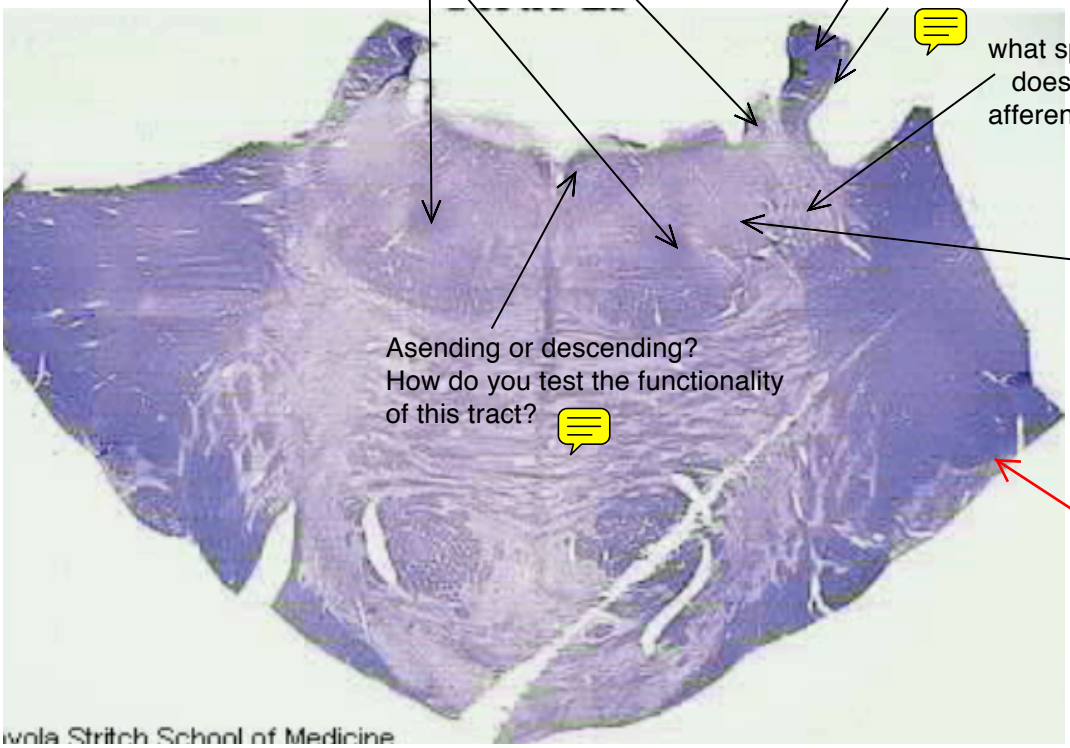
**Note the absence of the medial and lateral vestibulospinal tracts at this level (medulla/glossopharyngeal)... this is because we have reached the apex of the medial and lateral vestibular nuclei (the source of these descending tracts).

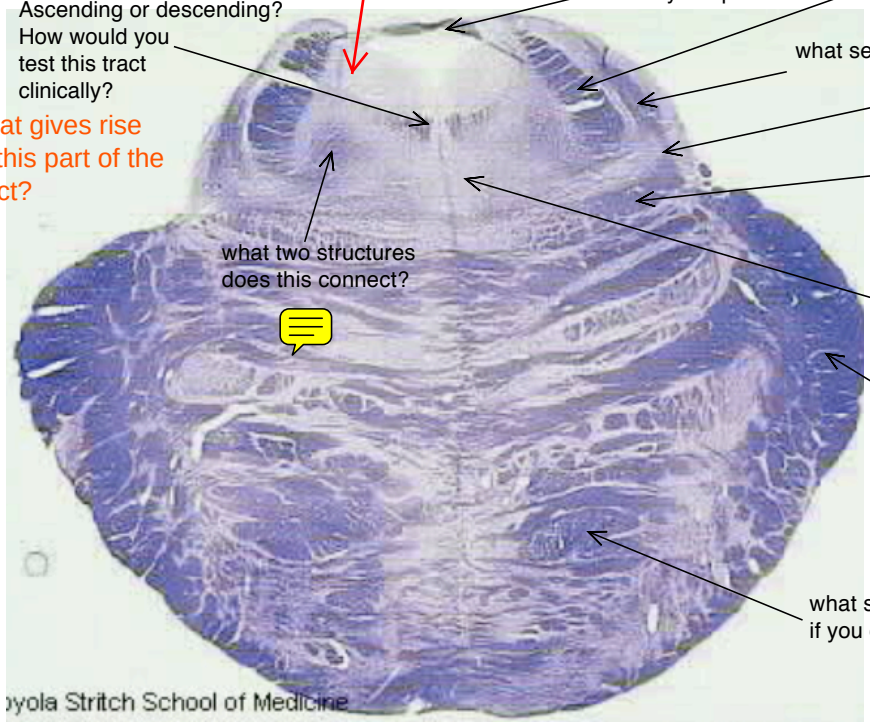
Basilar artery from this cross section was on the quiz.

They flipped this image over on the quiz and asked about the Fastigial nucleus.

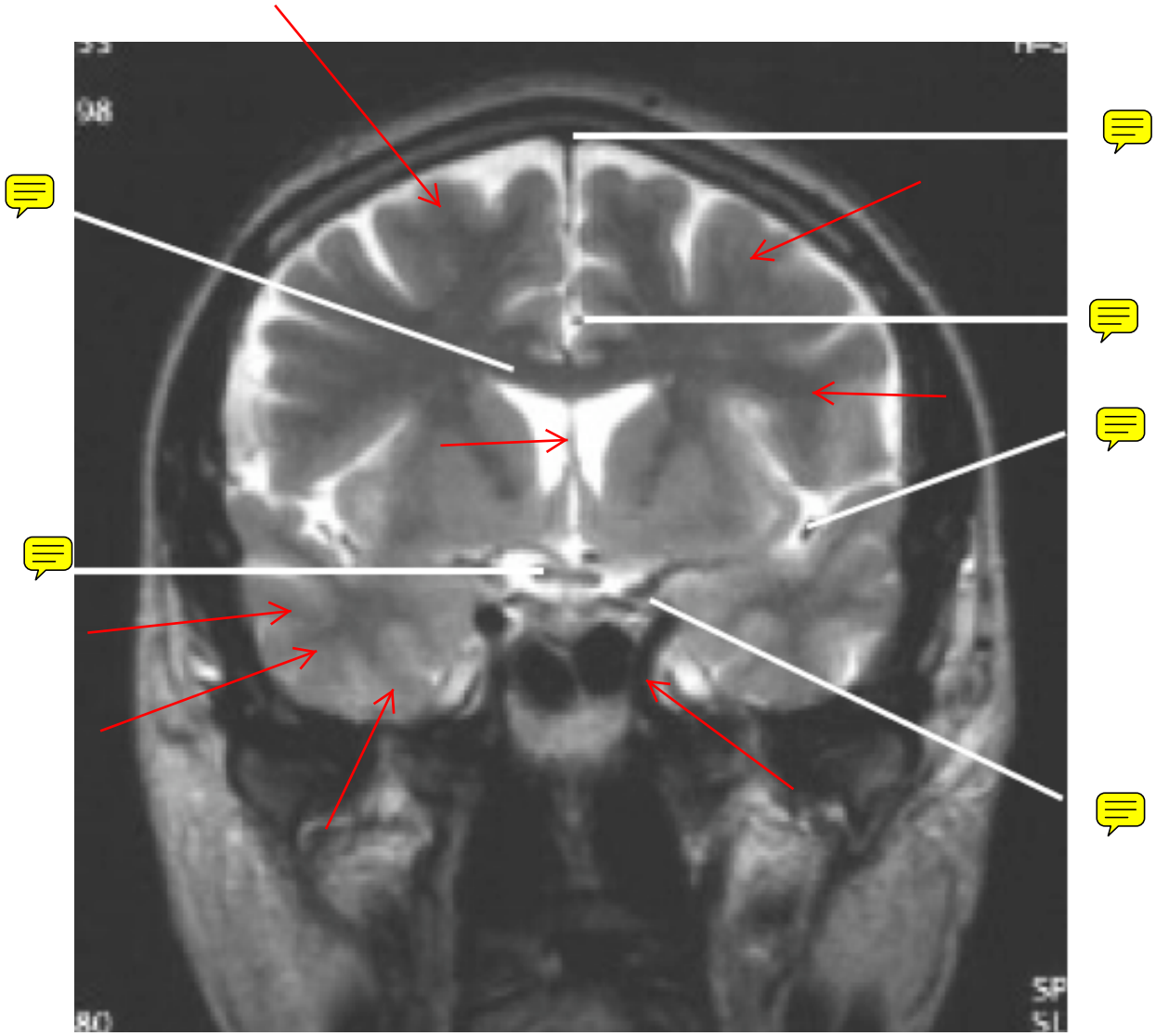


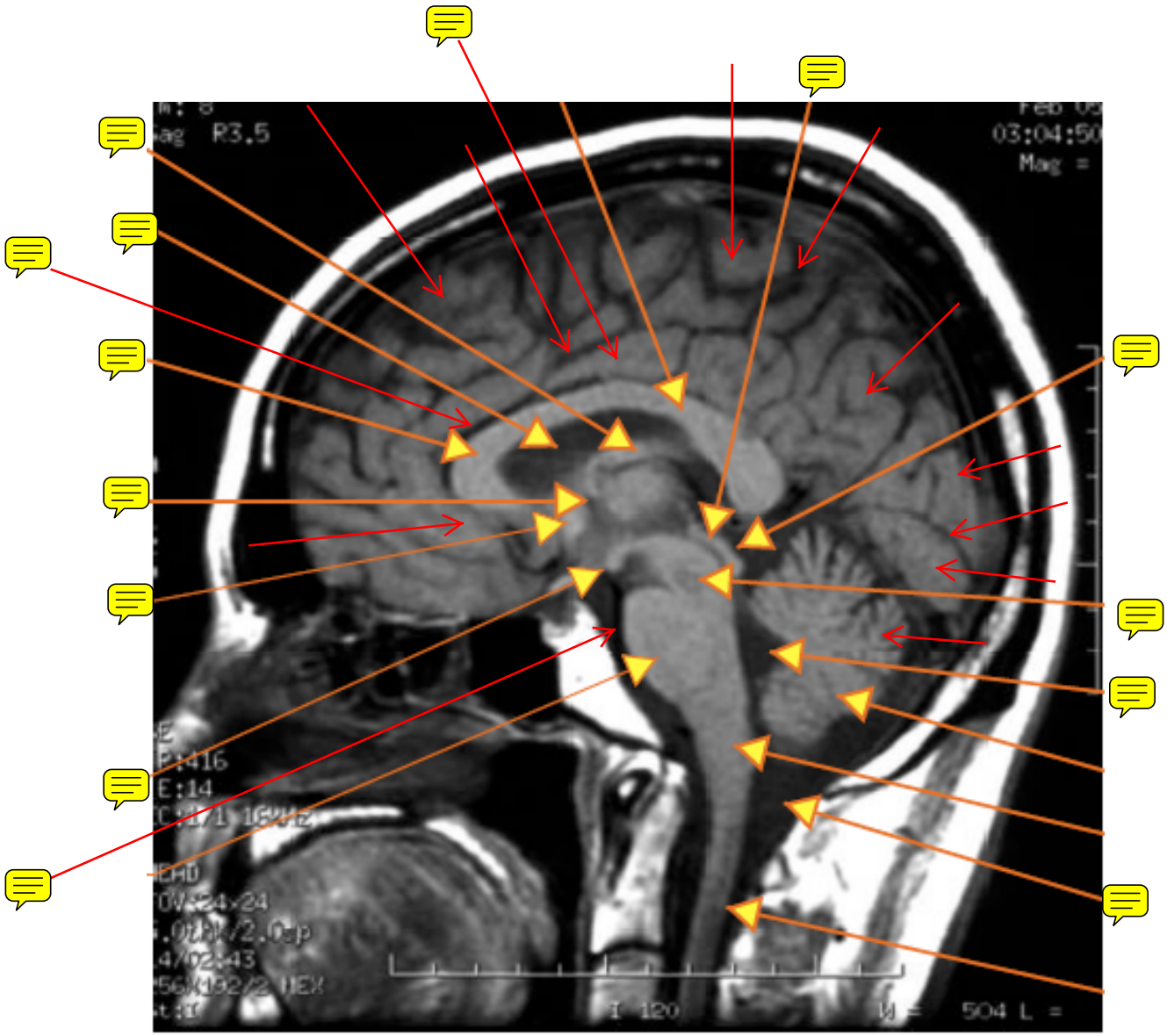
Which cerebellar cortical fibers project to the deep cerebellar nuclei?


where did this originate?
where is it going?
reflex?
what spinal column tract does this mimic? where are its afferent axon cell bodies located?
what foramen does this branch run through?
Asending or descending?
How do you test the functionality of this tract?
which cranial nerve exits the brainstem here, via the middle cerebellar peducnle?
Stritch School of Medicine



*Note the absence of the VSCT at this level - it has now terminated in the SCP.

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03:04:50
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