

Syllabus Laboratorium Biomedic 1 Physiology Nervous System

A Sequences

- I. Introduction : 20 min
- II. Pre Test : 10 min
- III. Activity Lab (Discussion): 30 min

B Topic

1. Motoric pathway
2. Sensoric pathway
3. Reflex arch
4. ARAS

C Venue

Biomedical Laboratory, Faculty of Medicine, Universitas Islam Bandung

D Equipment

Poster
Hammer reflex

E Pre-requisite

Before following the activity in physiologylaboratorium, the students mustprepare to:

1. **Explain the functions of corticospinal and corticobulbar pathways**
2. **Explain about the functions of sensoric pathways**
3. **Explain about the functions of reflex arch**
4. **Explain about ARAS function**

Please write down the assignment in the separate papers.

The assignment will be collected on the lab day

- Content lab in manual book (pre and post test will be taken from the manual, if scoring pre test less than 50, can not allowed the activity lab)
- Bring your text book, reference book, e-book etc. (minimal 1 group 1 book).

F Activity Lab

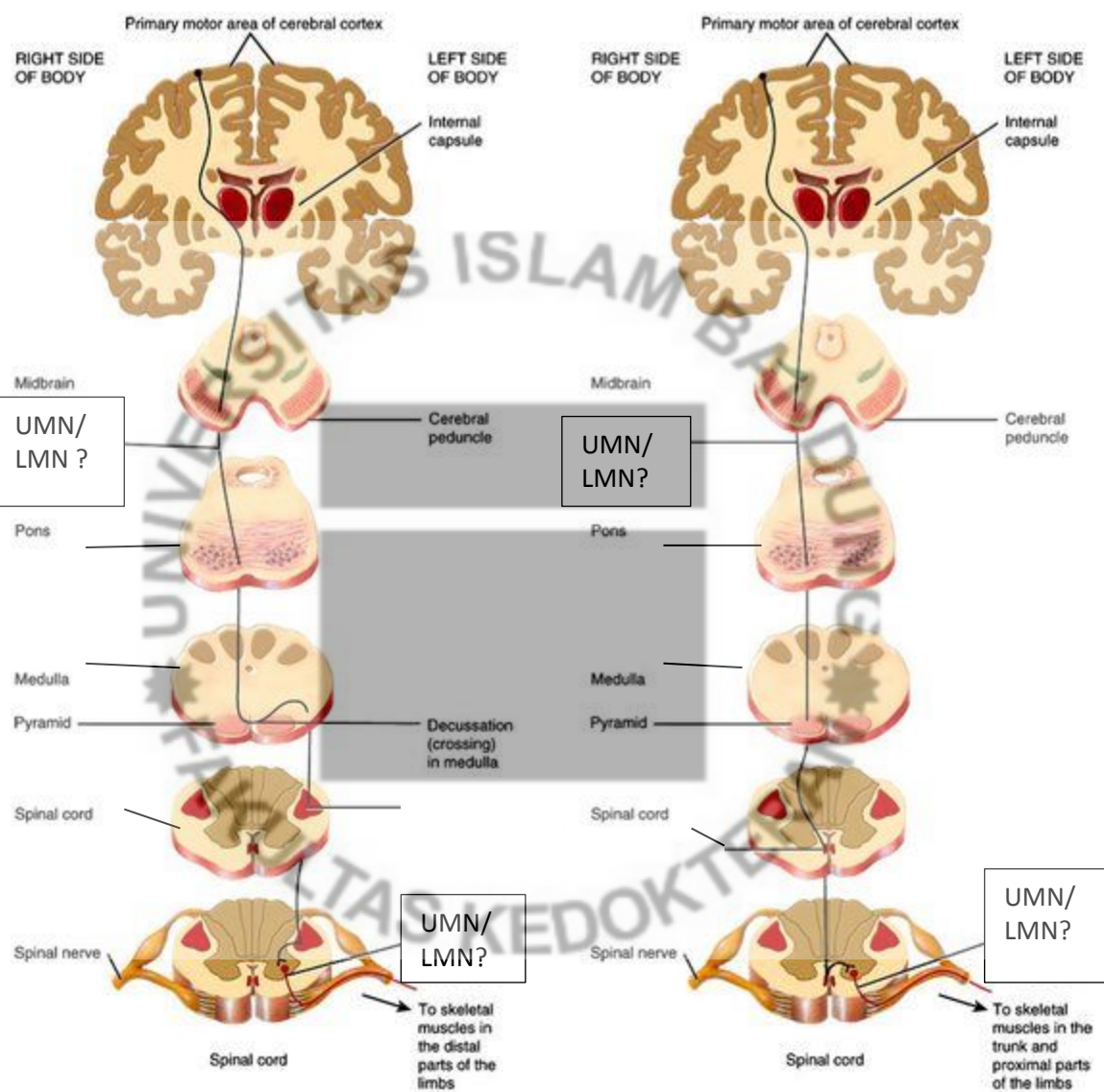
1. Students will be divided into 18 small groups
2. Introduction will be given in the large group (20 min)
3. Discussion in the small group (30 min)

4. **LIST PHYSIOLOGICAL REVIEW** (give the checklist ✓ if you have already known)

I. Direct motor pathway

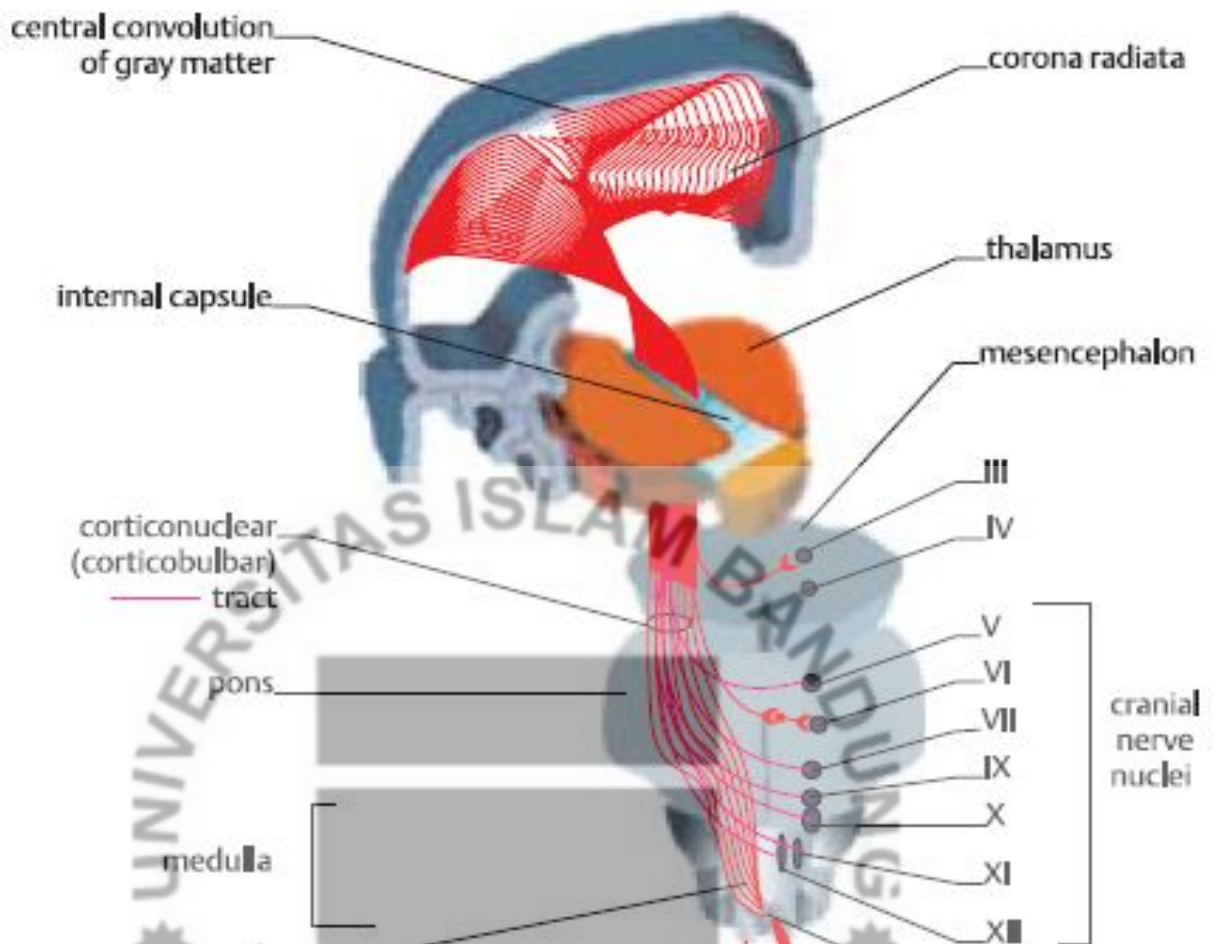
Identify schematic picture below

Don't forget to give the name for every each structure !



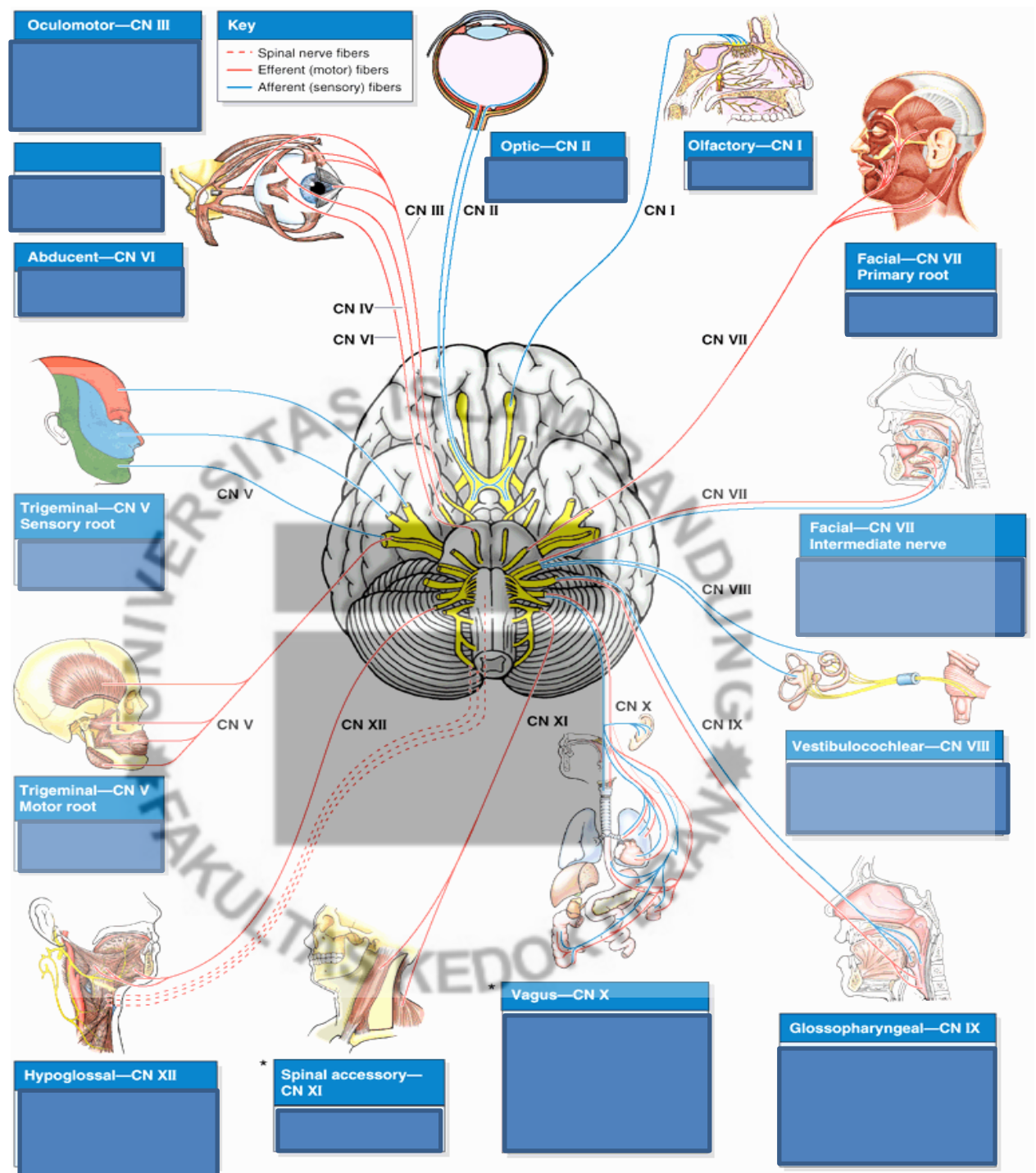
Which one anterior corticospinal and lateral corticospinal pathway ?
Explain about pathways above!

Identify schematic picture below



Explain about pathways above! (corticobulbar pathway)
What is the function of that pathways?

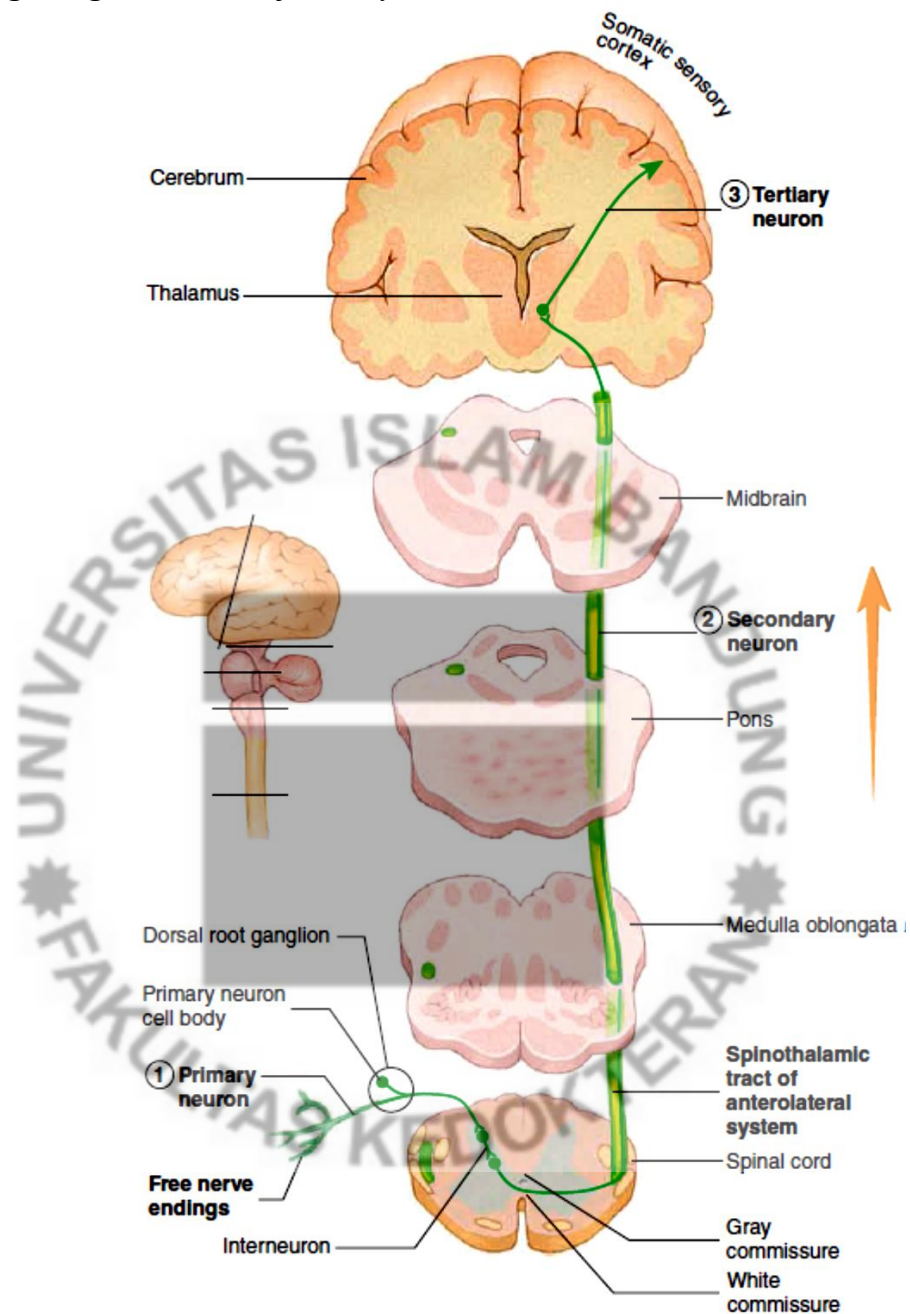
Explain about cranial nerve function!



II. Sensoric pathway

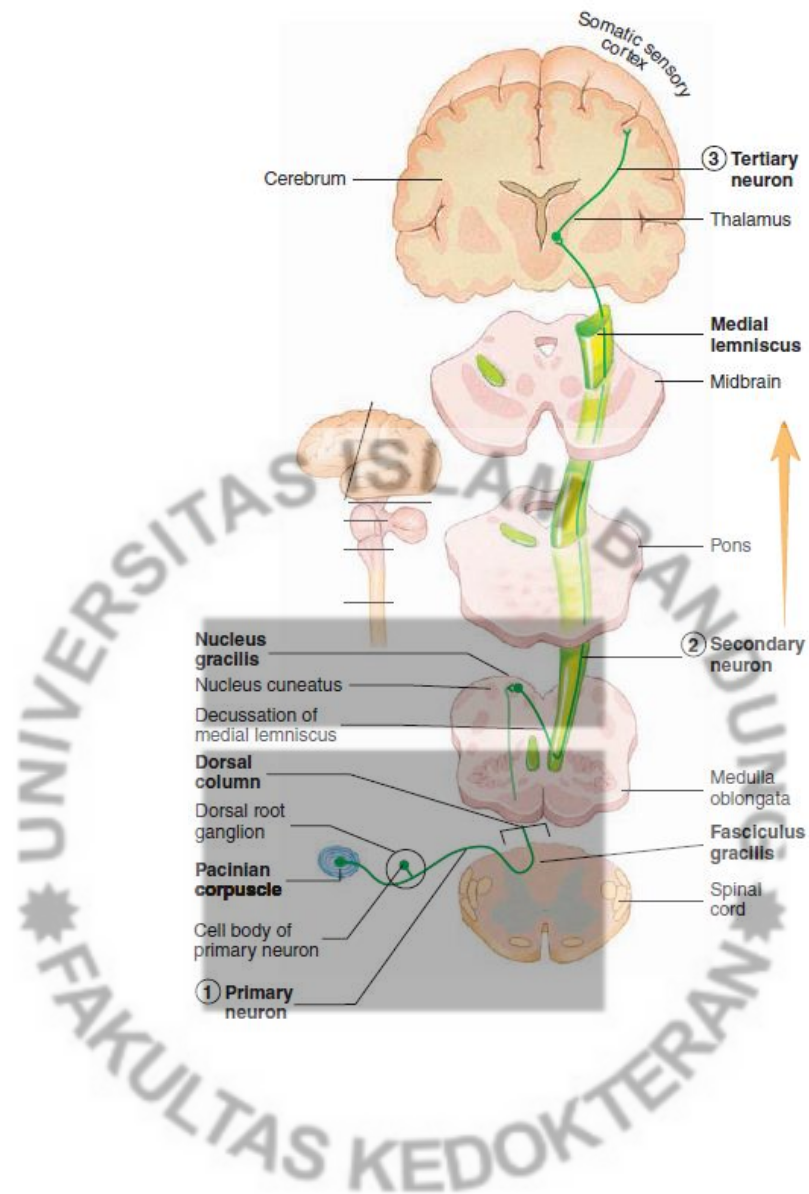
Identify schematic picture below

Don't forget to give the name for every each structure !

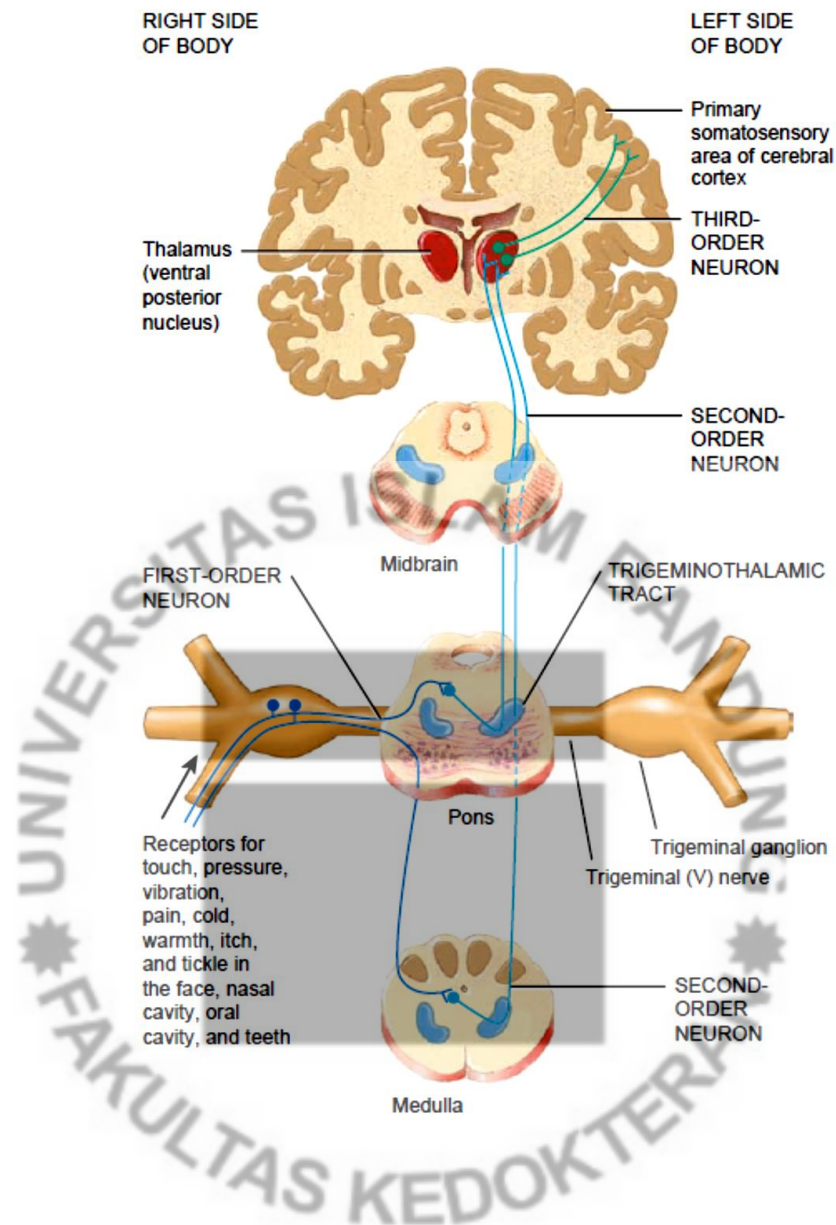


Explain about anterolateral system (spinothalamic system) pathway!
What is the function of that pathways?

Explain about Dorsal Column–Medial Lemniscal System pathway!
What is the function of that pathways?



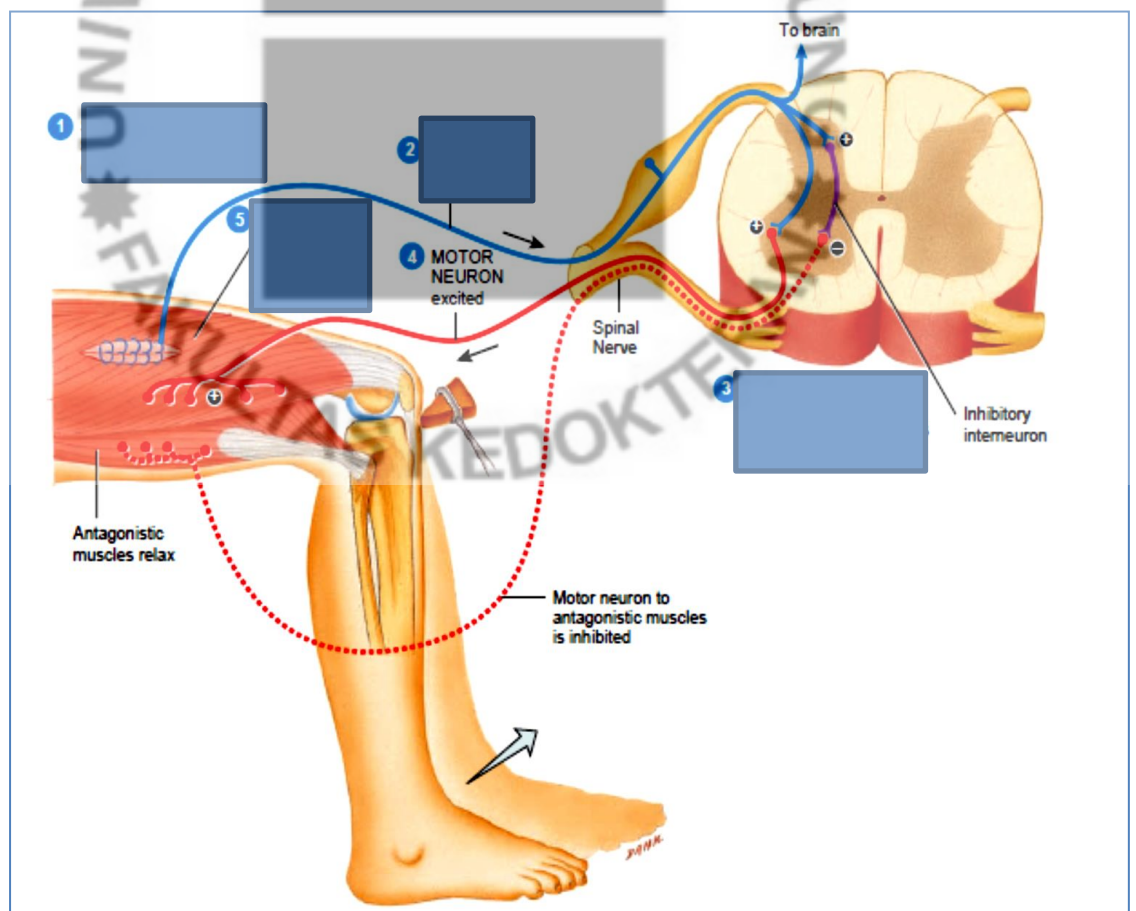
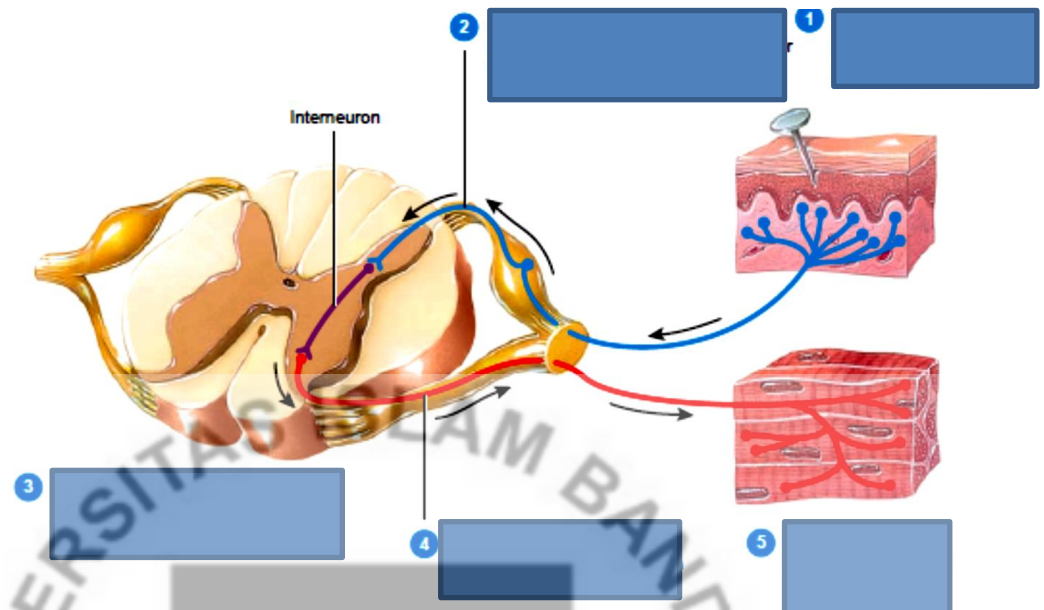
What is trigeminothalamic tract function?
Explain about trigeminothalamic pathway!



III. Reflex arch

Identify schematic picture below

Don't forget to give the name for every each part of picture below !



Explain about pathway above!

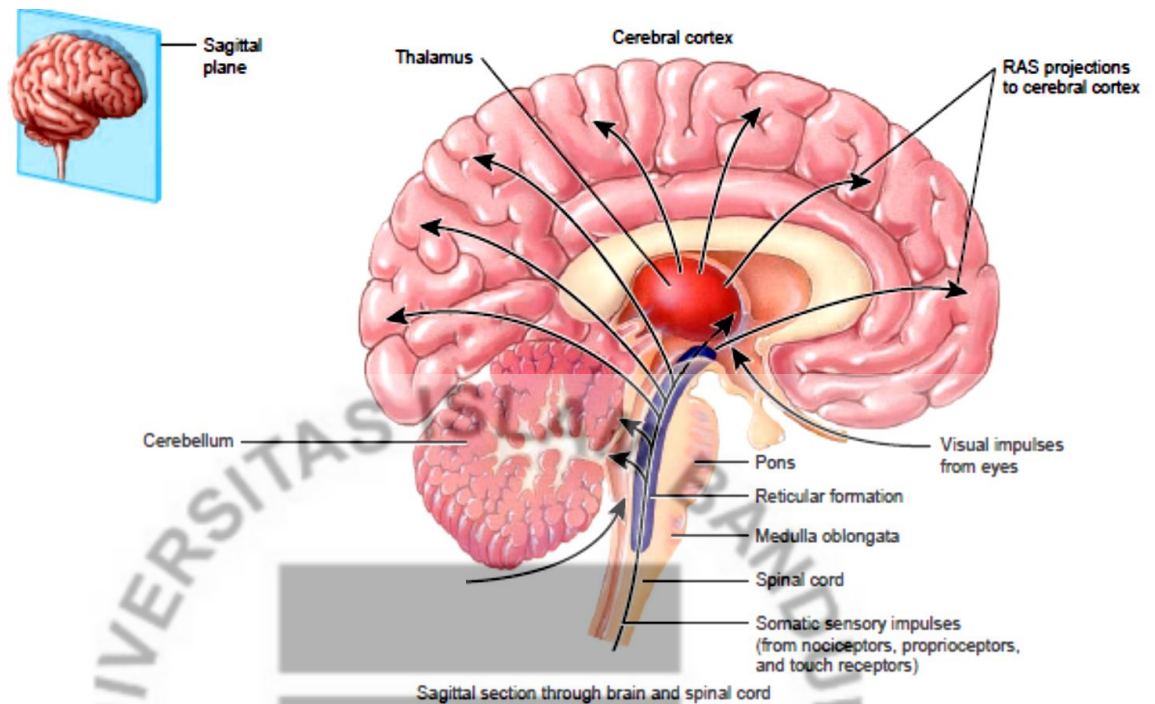
What is the function of that pathway? Perform activity related to that pathway!



IV. RAS (Reticular Activating System)

Identify schematic picture below

Explain about structures below! What is the function of that structures?



G Reference

1. Guyton AC, Hall JE. Textbook of Medical Physiology, 11th Edition. Elsevier
2. VanPutte C, Regan J, Russo A, Seeley R, Stephens T, Tate P. Seeley's Anatomy and Physiology. 11th Edition. McGrawHill.
3. Tortora GJ, Derrickson B. Principle of Anatomy and Physiology. 12th Edition. John Wiley & Son Inc.