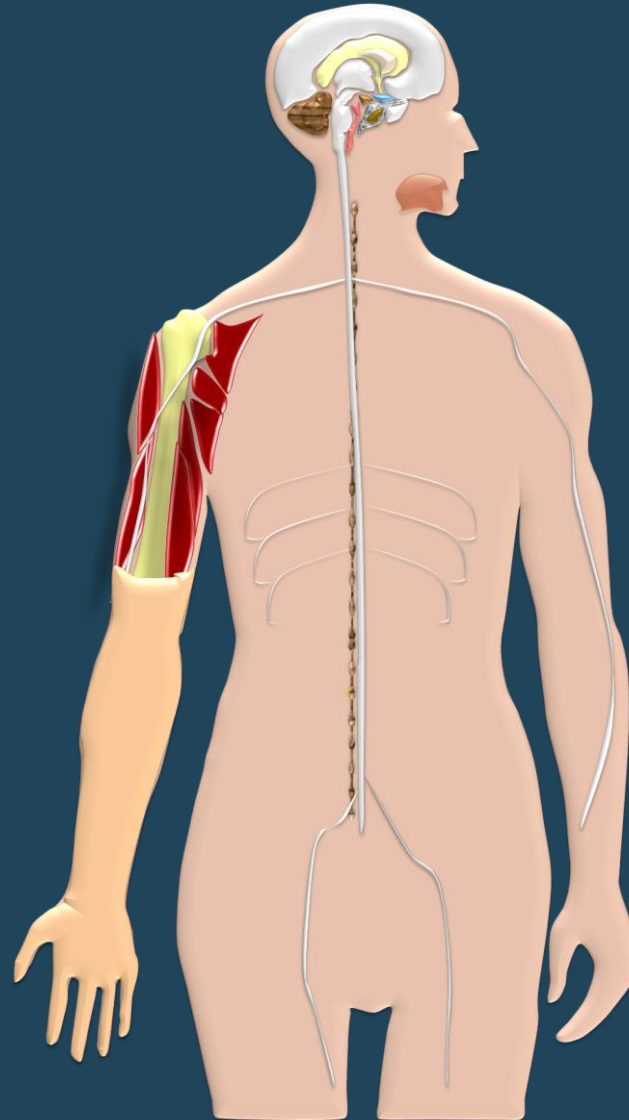
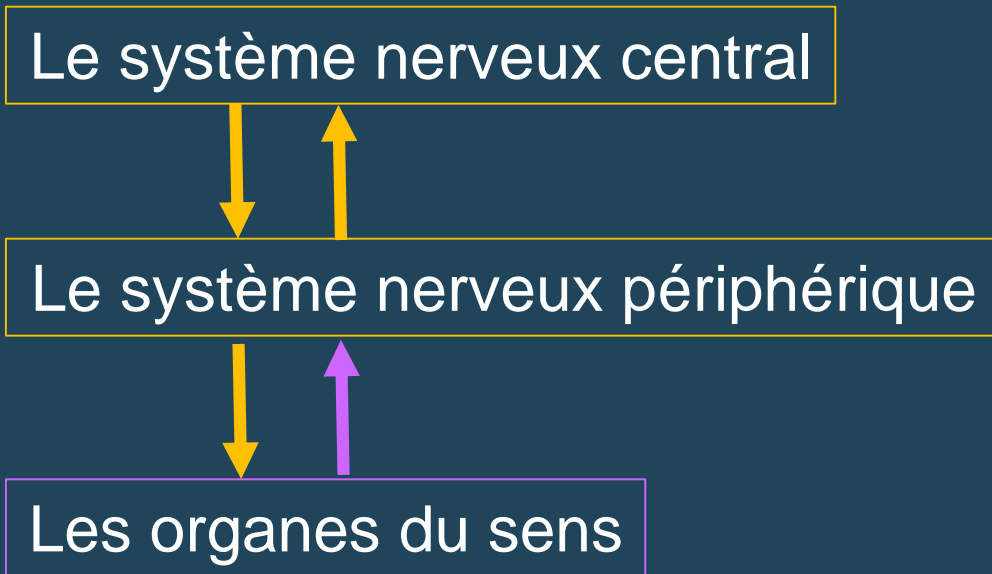


# LE SYSTEME NERVEUX

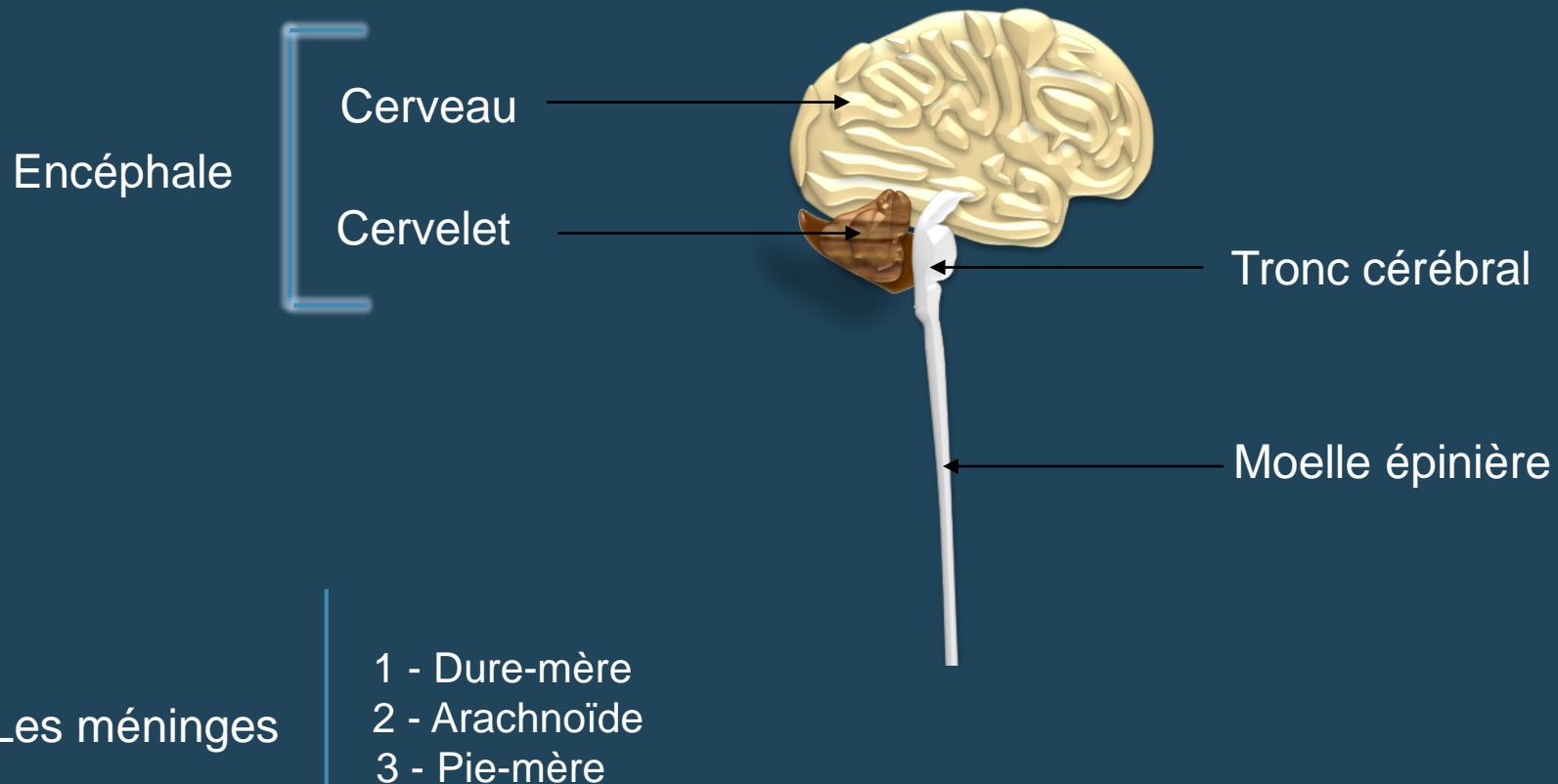




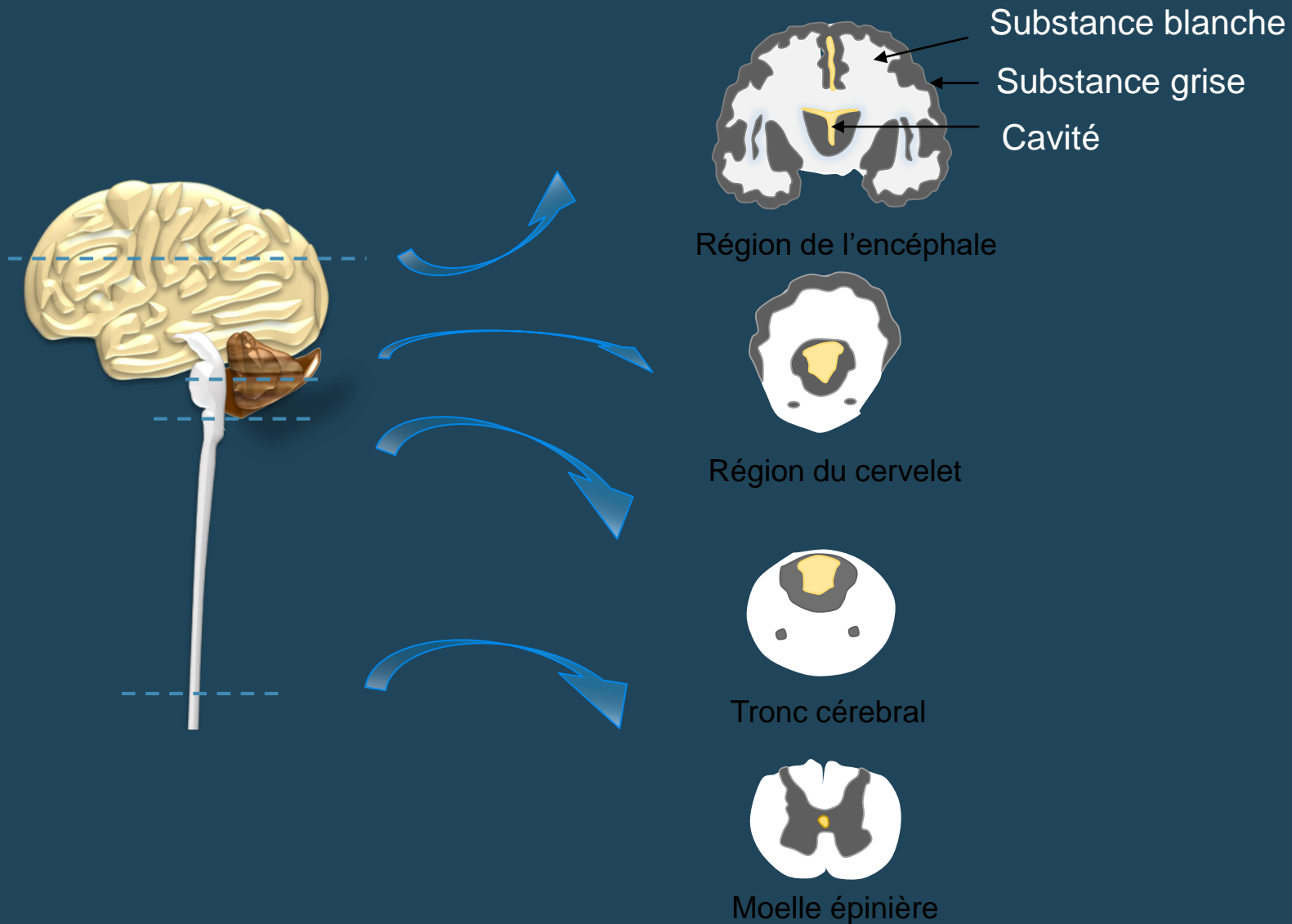
# LE SYSTEME NERVEUX CENTRAL

NERVEUX CENTRAL  
LE SYSTEME

# Le Système nerveux central



# Le Système nerveux central



# Le Système nerveux central

## Substance Grise

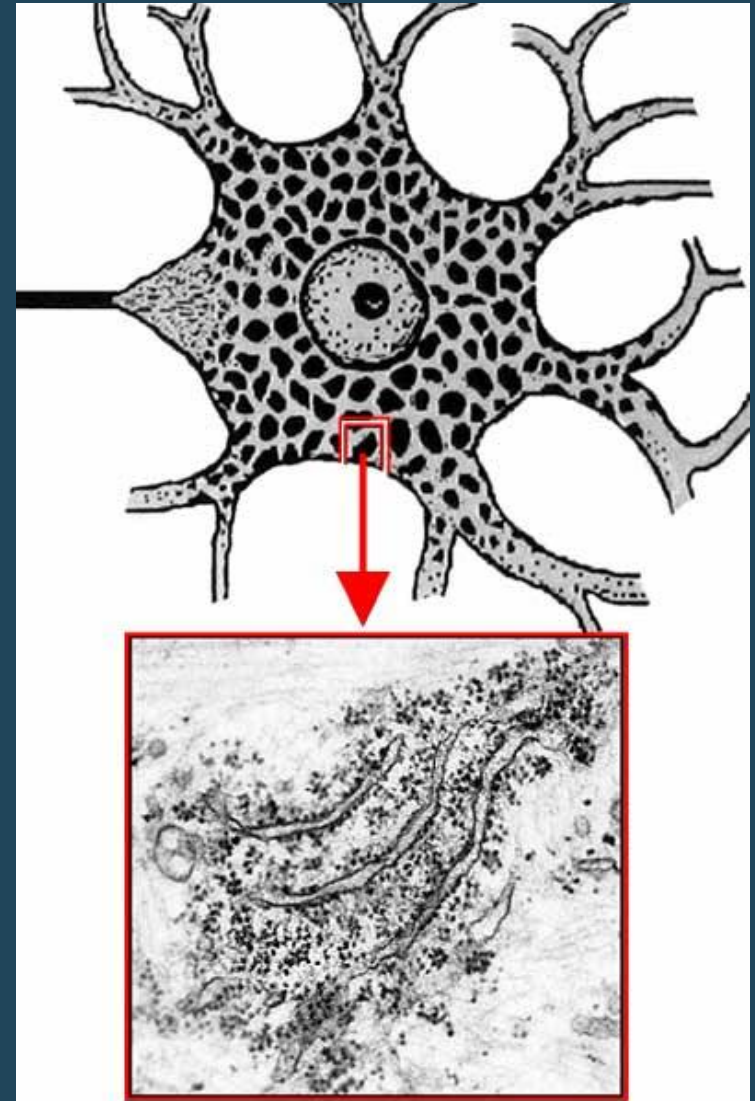
- Corps cellulaires des neurones
- Dendrites
- Fibres nerveuses (formées par les axones) amyélinisés
- Cellules gliales (astrocytes, oligodendrocytes et microglie)

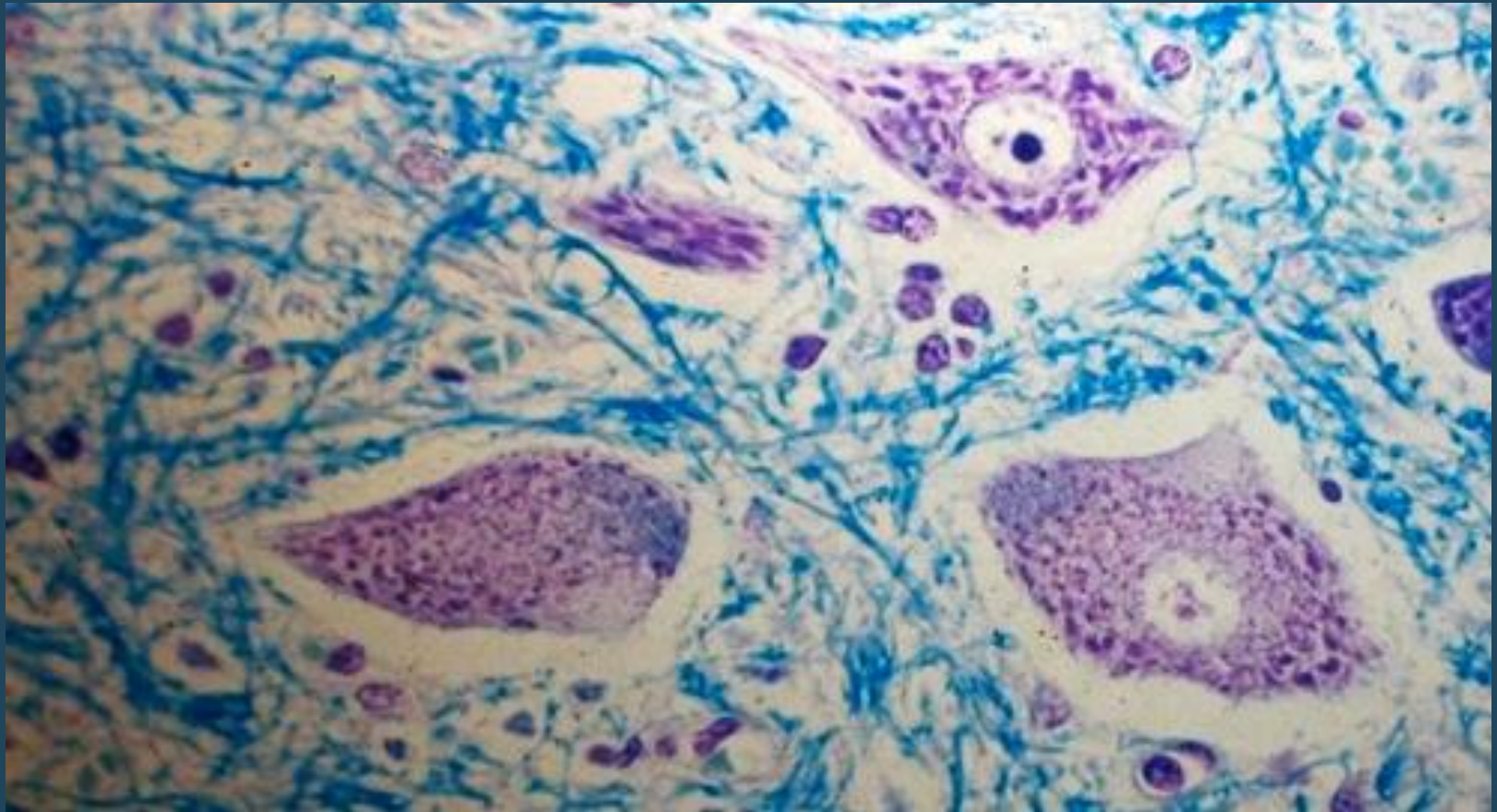
## Substance blanche

- Fibres nerveuses myélinisés regroupés en faisceaux
- Cellules gliales (astrocytes, oligodendrocytes et microglie)

# LE NEURONE

- Corps cellulaire= péricaryon
- Taille: de 4 à 150  $\mu$
- Volumineux noyau nucléolé
- Granules (MO) de 1-2  $\mu$  = corps de Nissl (polyribosomes + RER)
- cyto =sona
- dendrites 1 à pls
- 1 seul axone







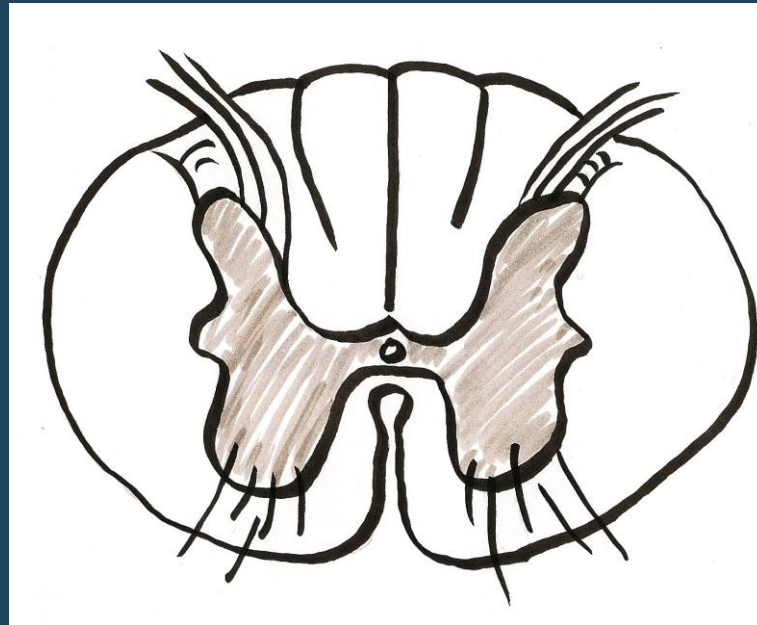
# LA MOELLE EPINIERE

LA MOELLE EPINIERE

# MOELLE ÉPINIÈRE

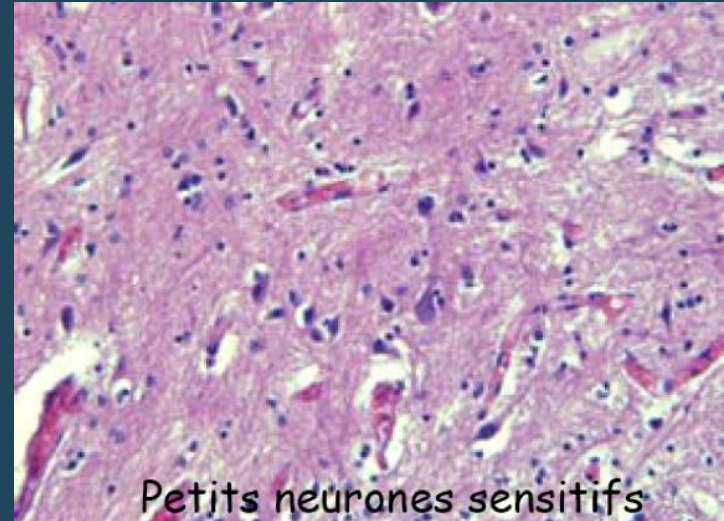
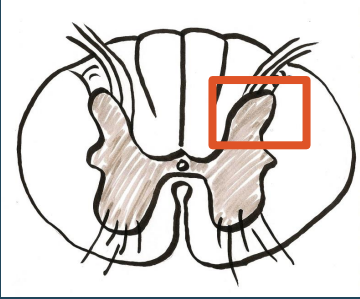
- substance grise au centre
- substance blanche en périphérie

Dorsal

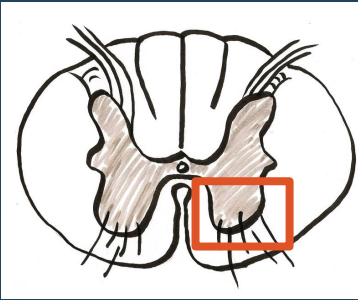


Ventral

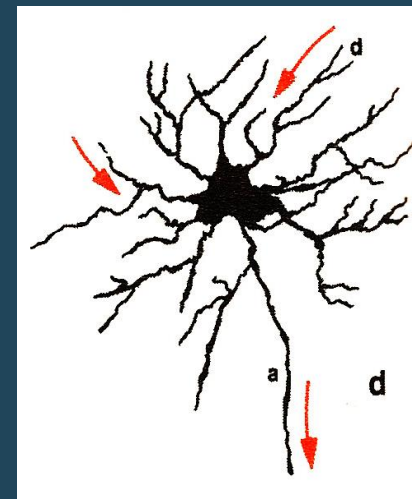
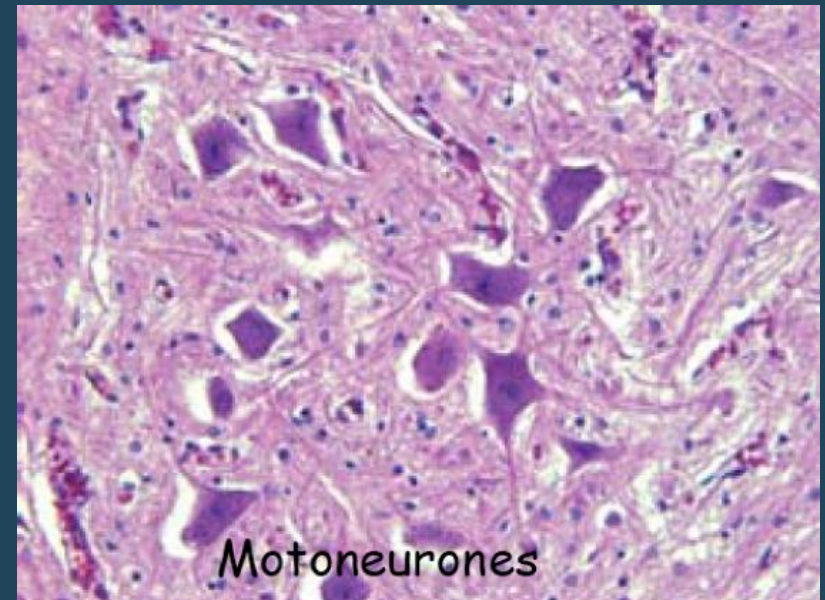
# SUBSTANCE GRISE : CORNE DORSALE



# SUBSTANCE GRISE : CORNE ANTÉRIEURE

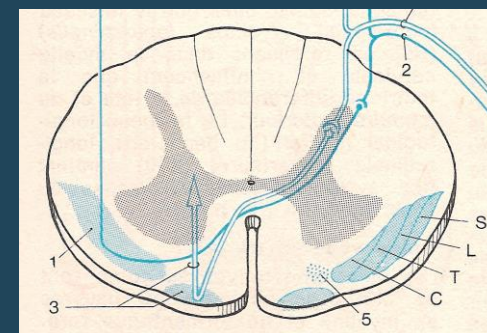
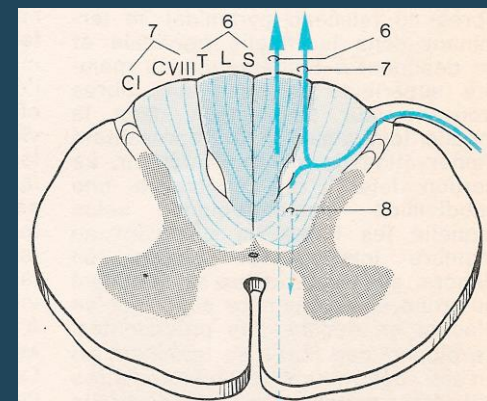
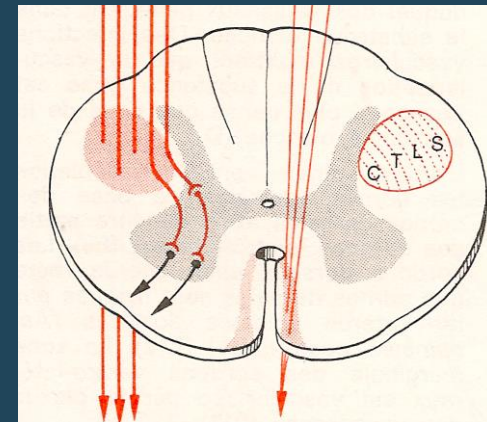


- **MOTONEURONES:**
  - **ALPHA** : grands neurones → muscle strié
  - **GAMMA**: petits neurones, innervation des fuseaux neuromusculaires
- **INTERNEURONES**



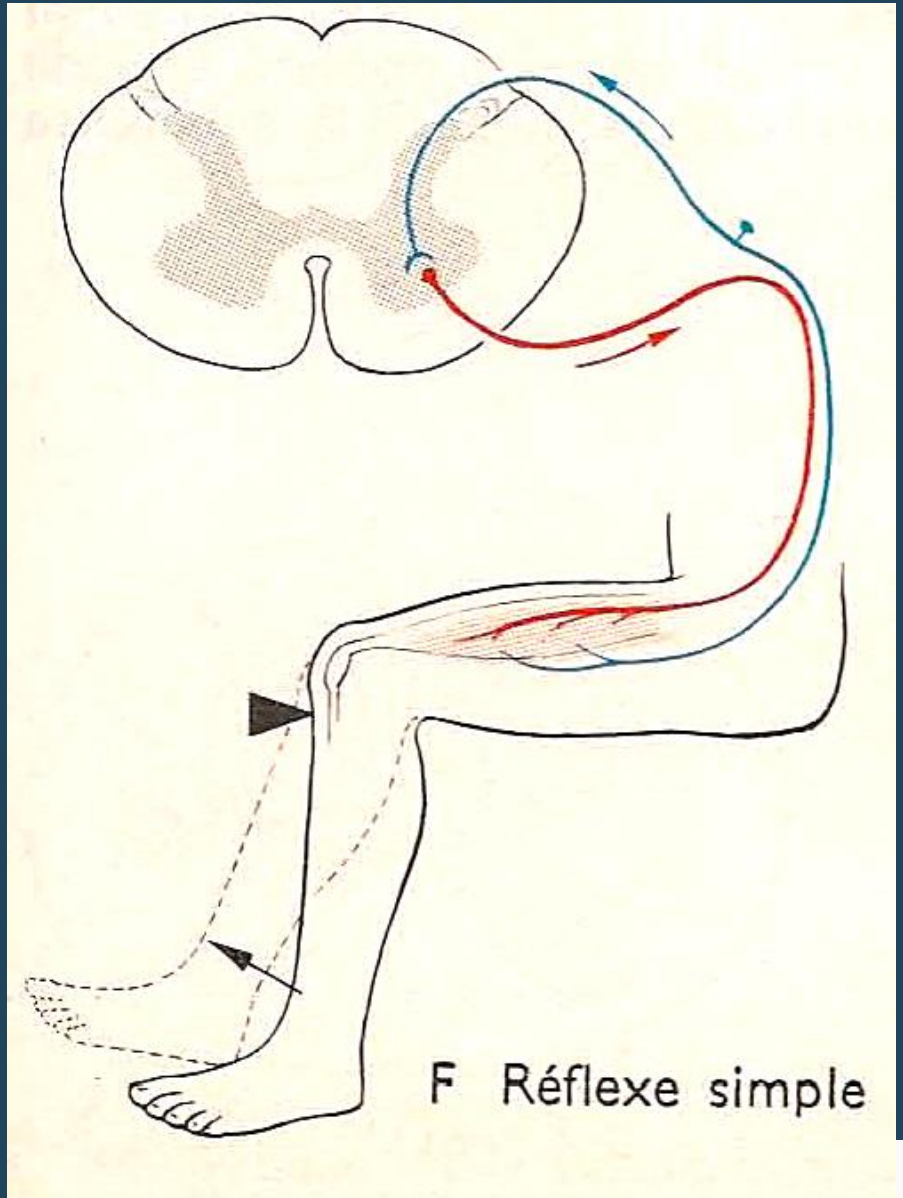
# SUBSTANCE BLANCHE

- Voies descendantes motrices :
  - voie pyramidale
  - NB : relai dans la corne antérieure
- Voies ascendantes:
  - sensibilité épicrotique (vibration, proprioception et toucher discriminatif) (cordon postérieur)
  - sensibilité thermique et douloureuse (cordon ventro-latéral)



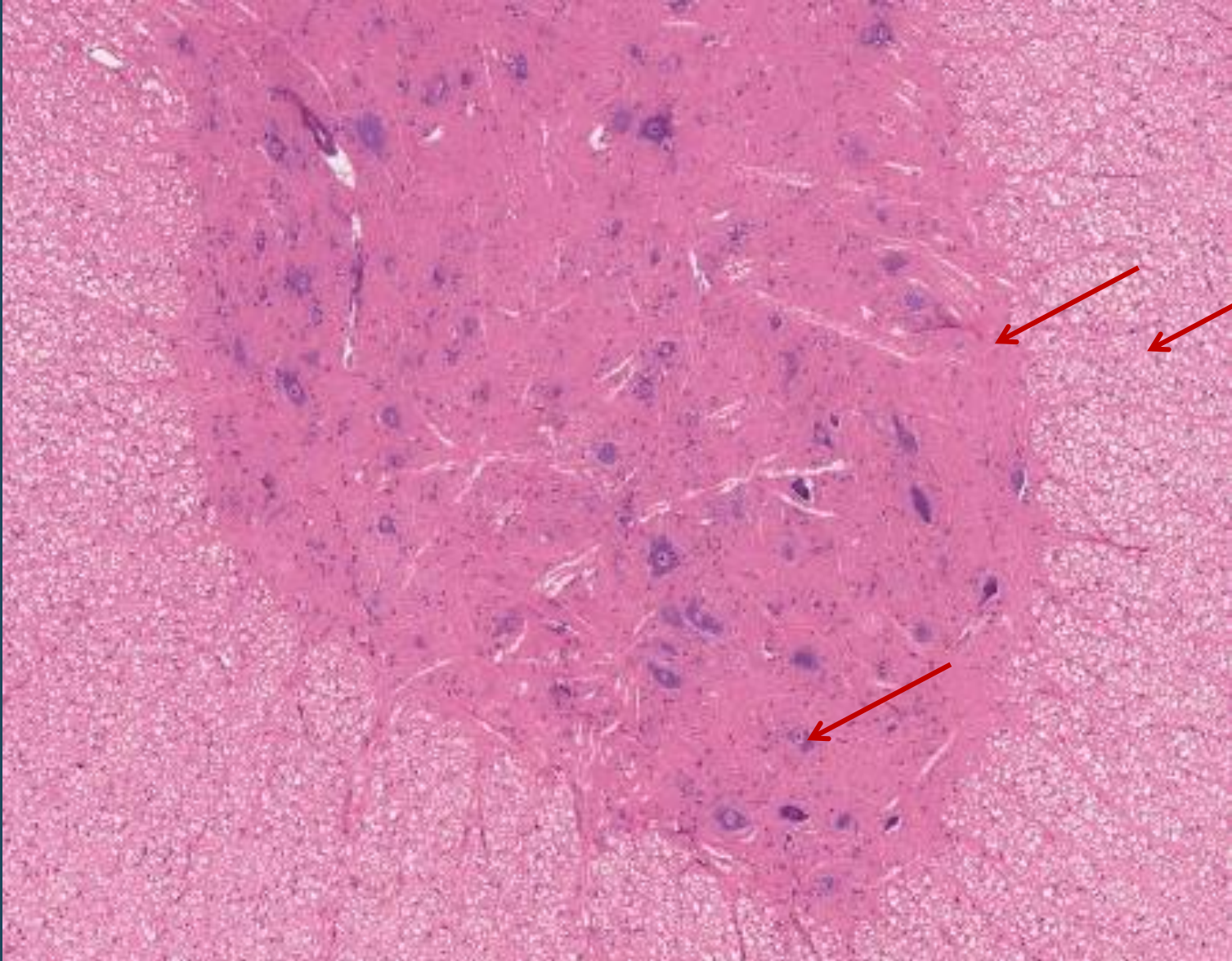
# HISTOPHYSIOLOGIE

- La moelle épinière est :
  - un lieu de transit pour l'influx nerveux
  - un centre nerveux : coordination de certains réflexes

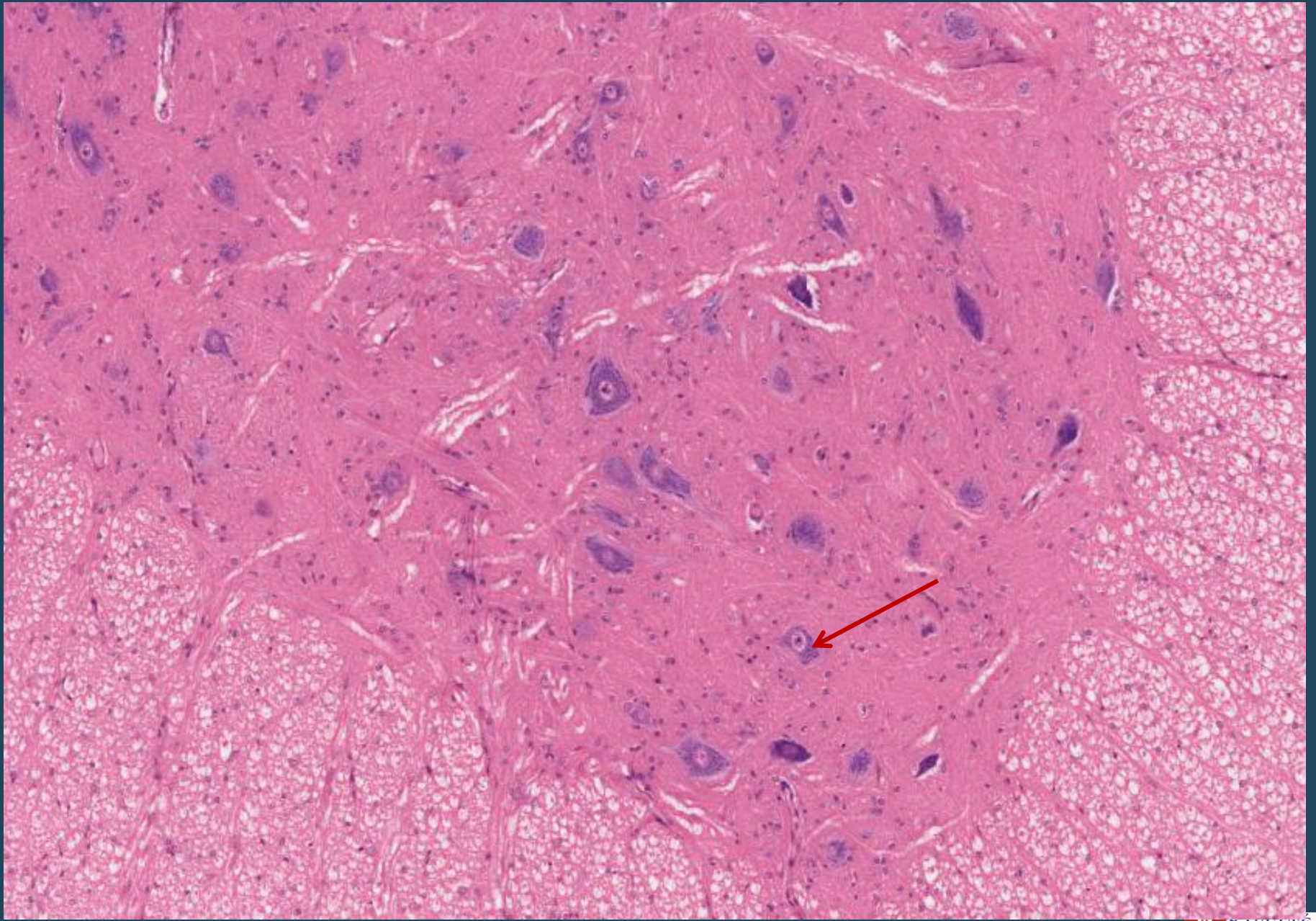


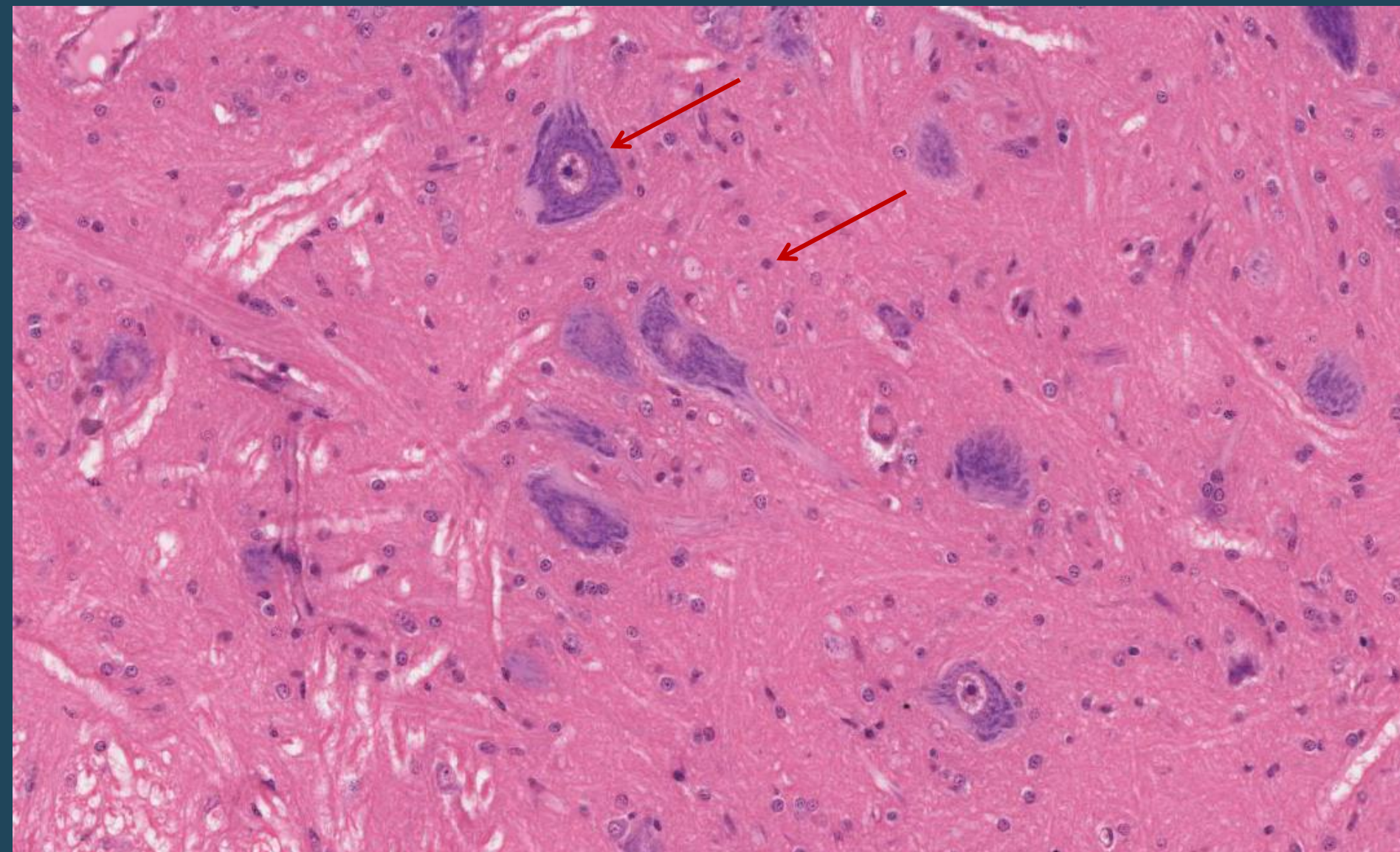


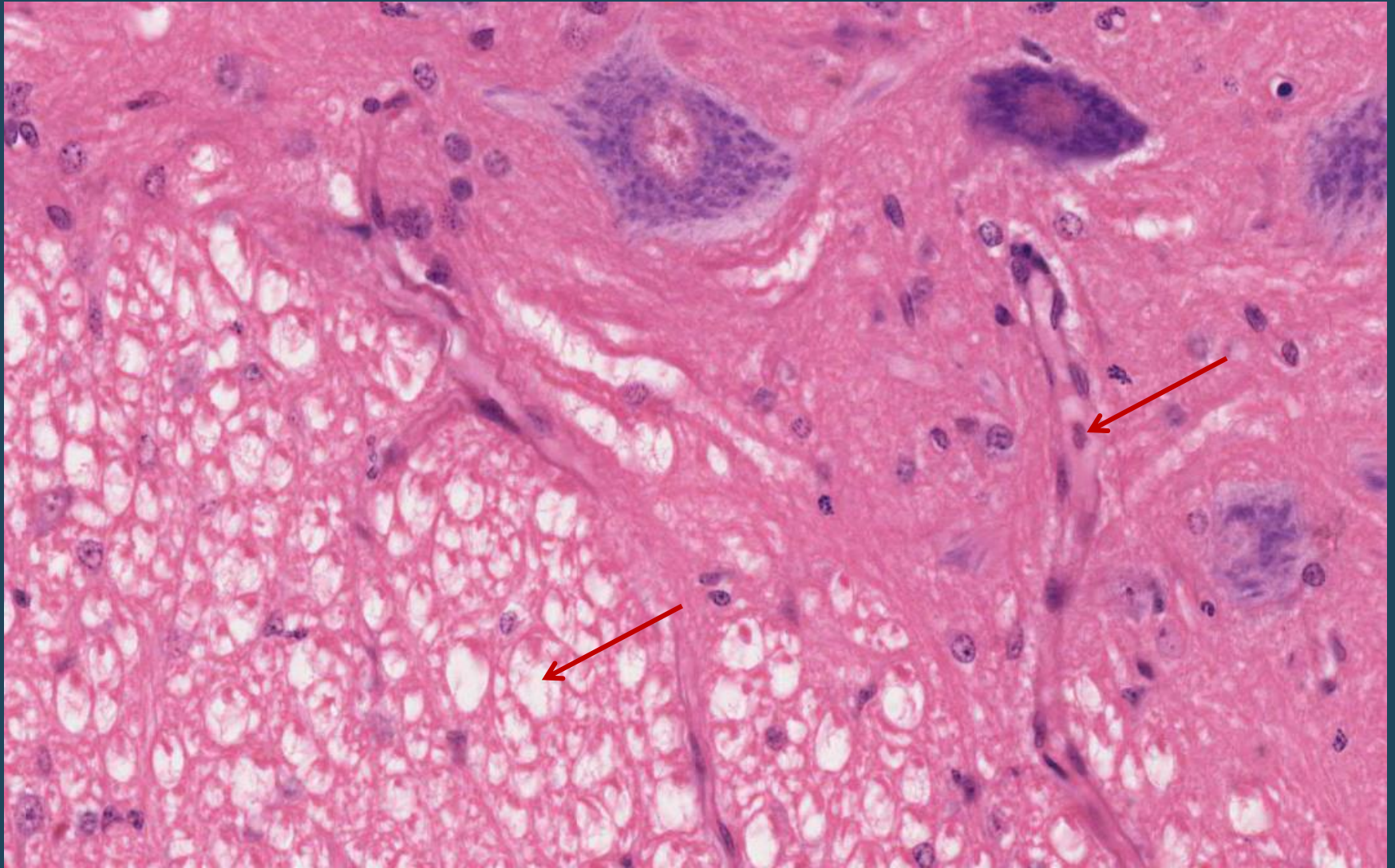
Coloration de Dominici



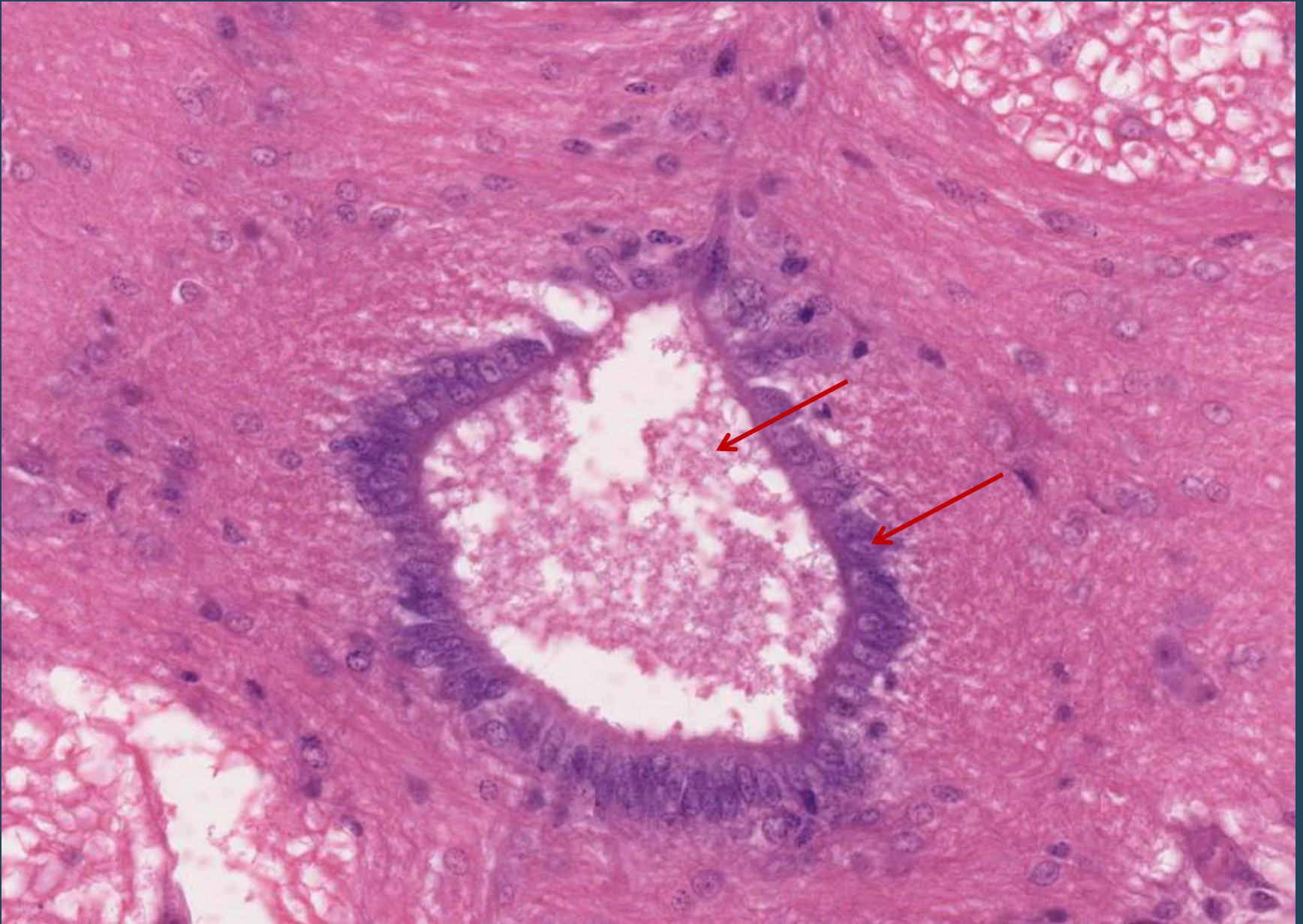












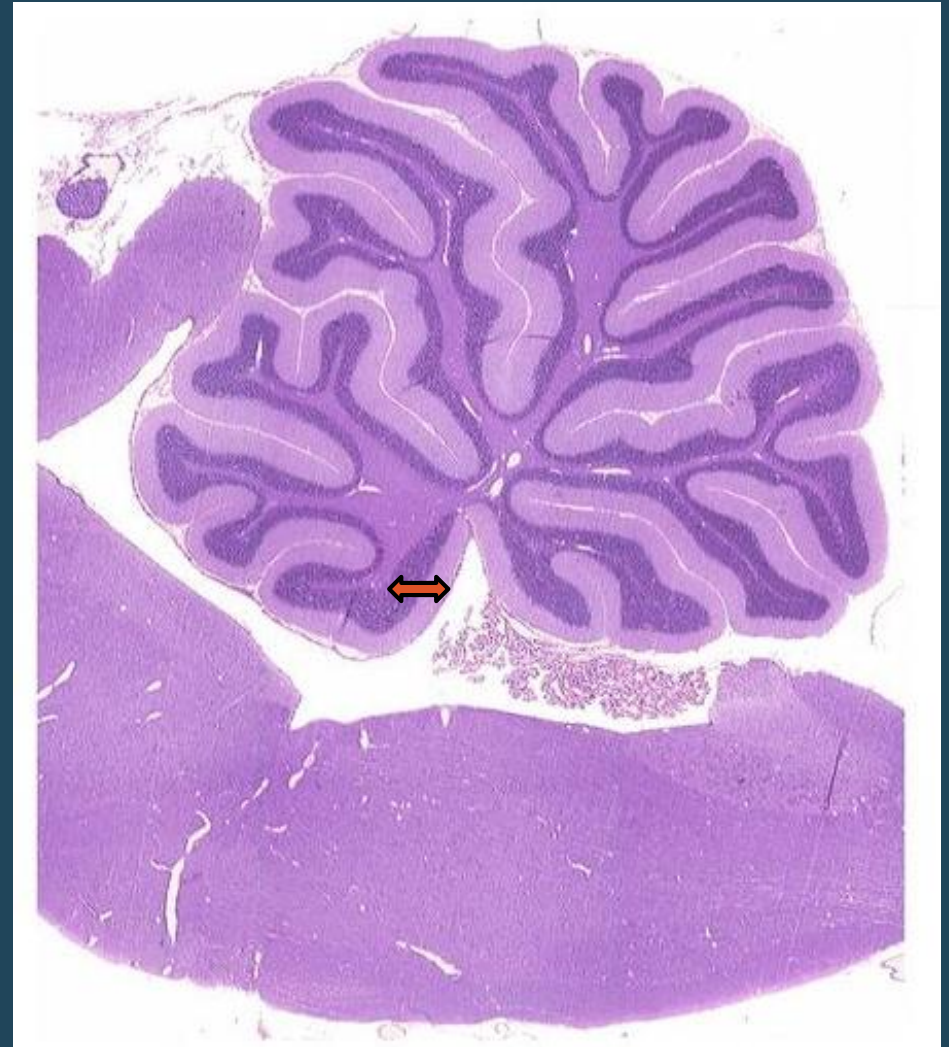
Canal épendymaire

# LE CORTEX CEREBELLEUX

СЕРЕВЕГГЕНХ  
ГЕ СОКТЕХ

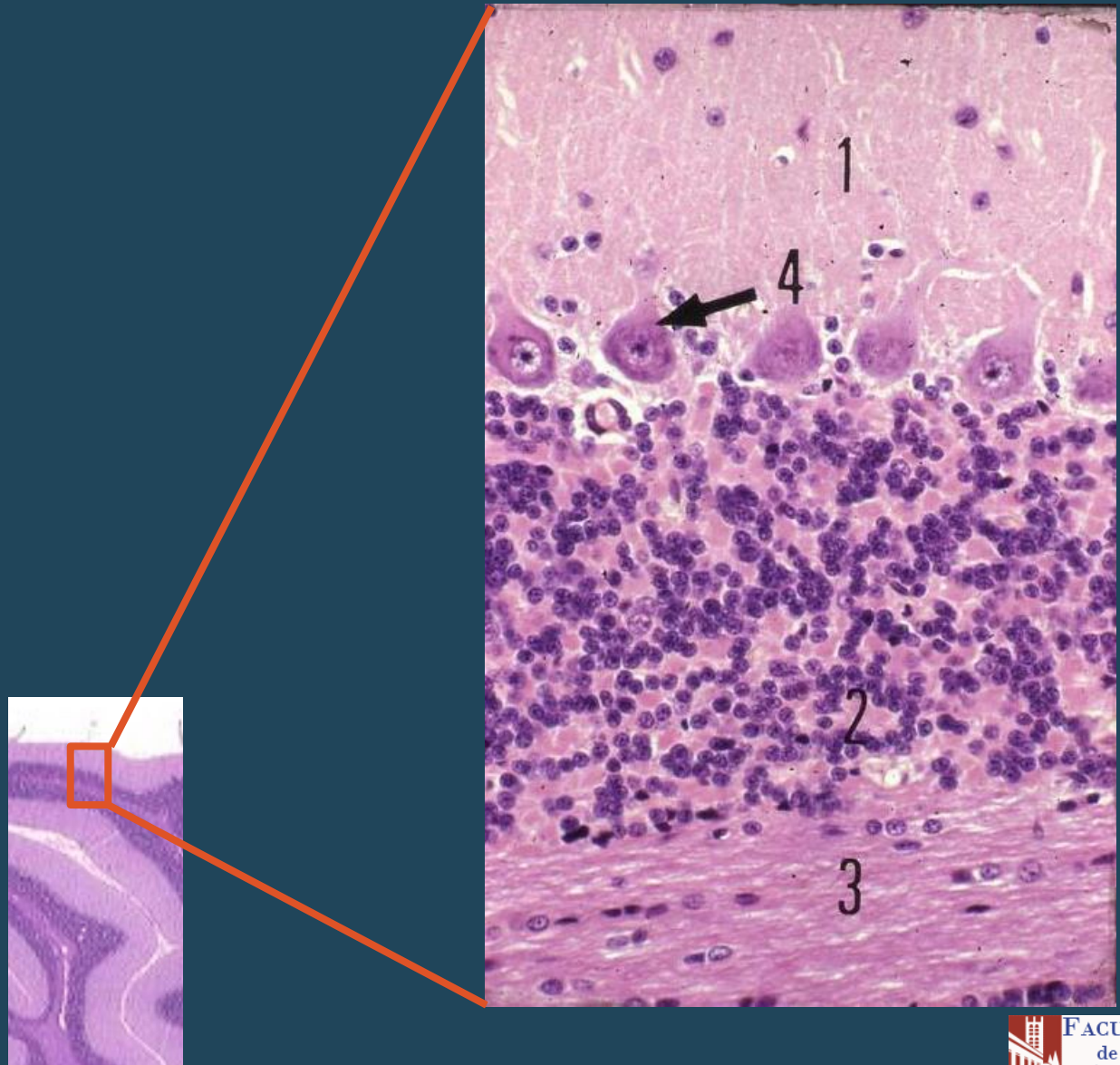
# MICROSCOPIE : SUBSTANCE GRISE

- Inversion de la localisation  
Substance grise/subst blanche
- circonvolutions ramifiées, « arbre de vie »  
=>augmente la surface de cortex
- Rôle ds la coord des mvts et  
permet le maintien de la posture et  
de l'équilibre



Dr Serge Nataf, Université de Lyon/Hospices Civils de Lyon

# CORTEX CÉRÉBELLEUX





# CORTEX CÉRÉBELLEUX

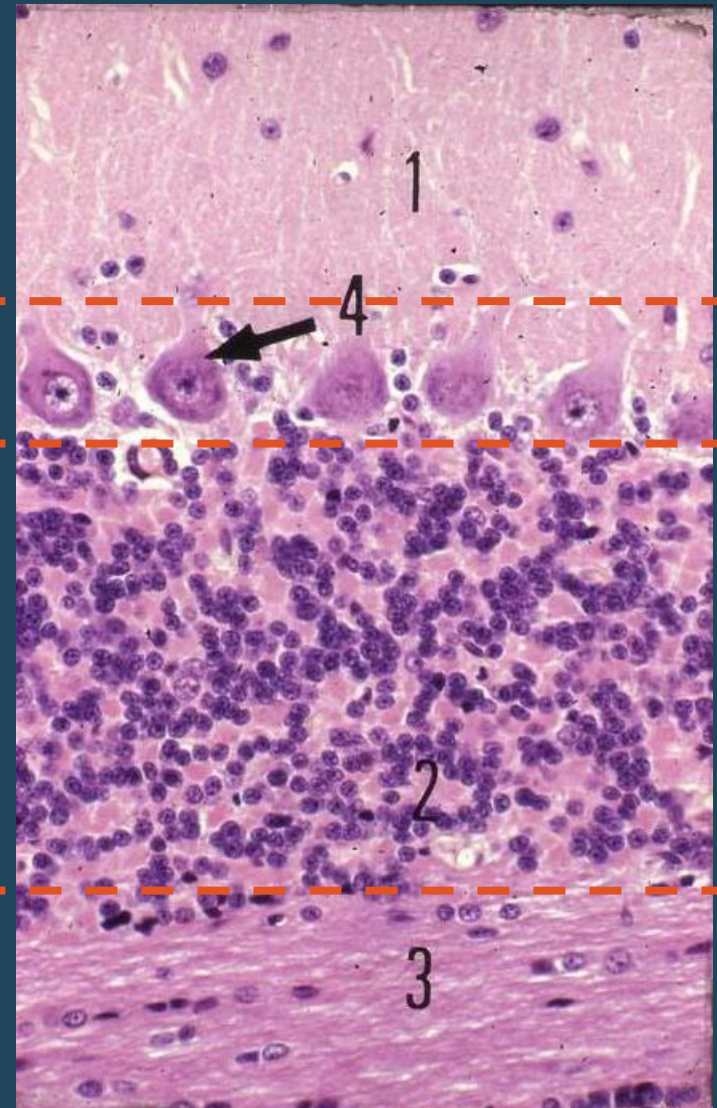
Couche moléculaire (ou externe)

Couche ganglionnaire (ç de Purkinje)

Couche granulaire (grains)

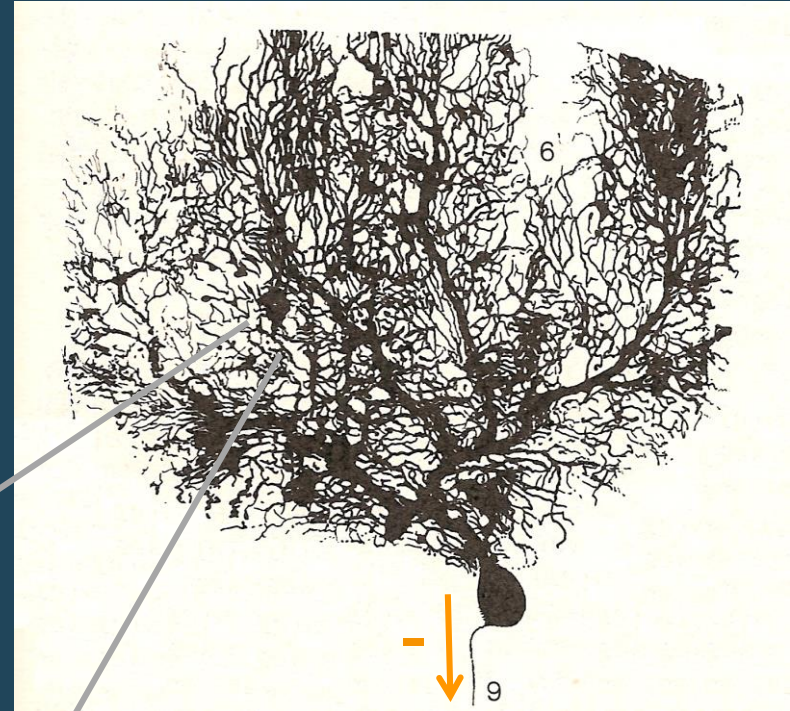
- Les + petites cellules : ç de grains
- Les + gdes ç de golgi de type II

Substance blanche



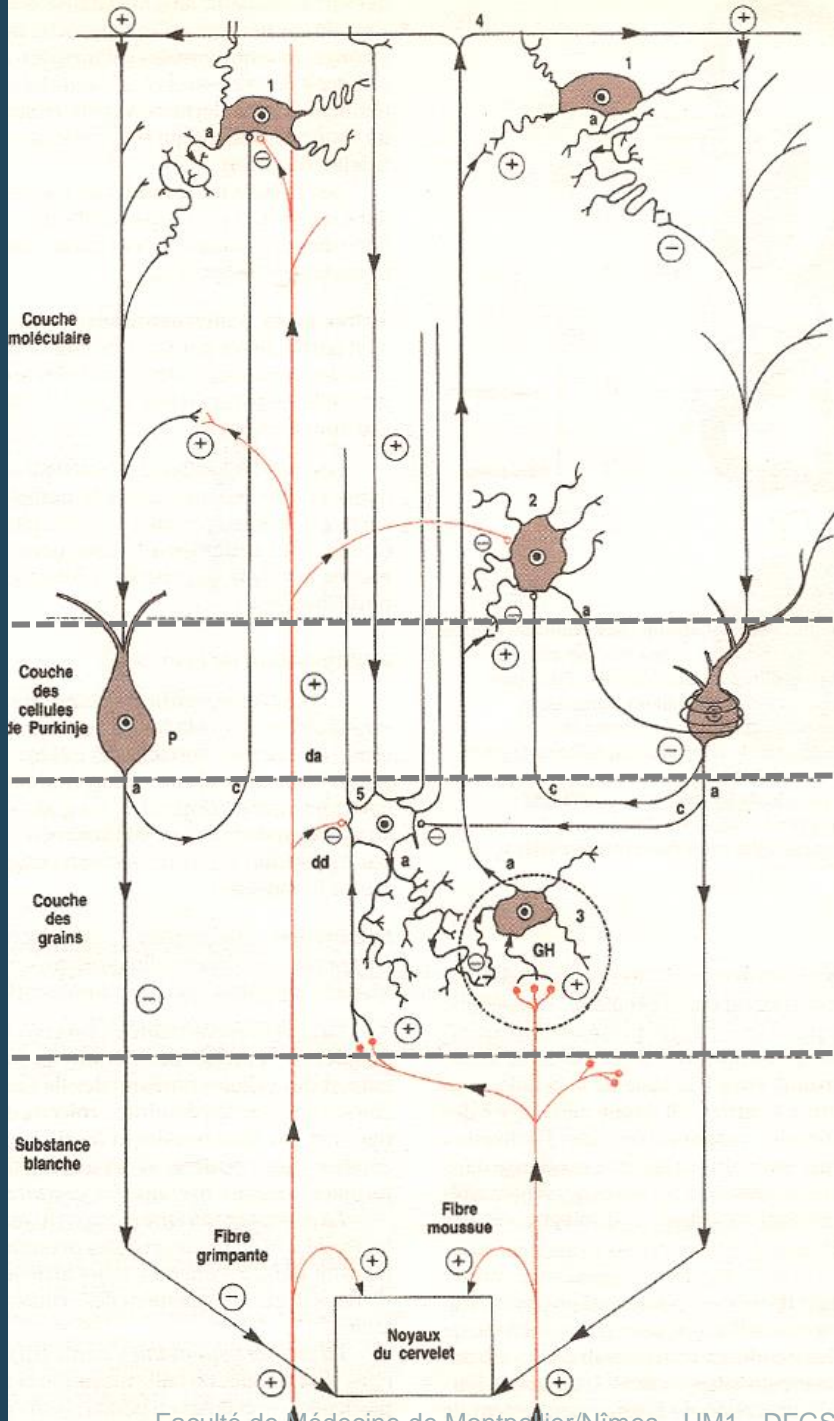
# LA CELLULE DE PURKINJE

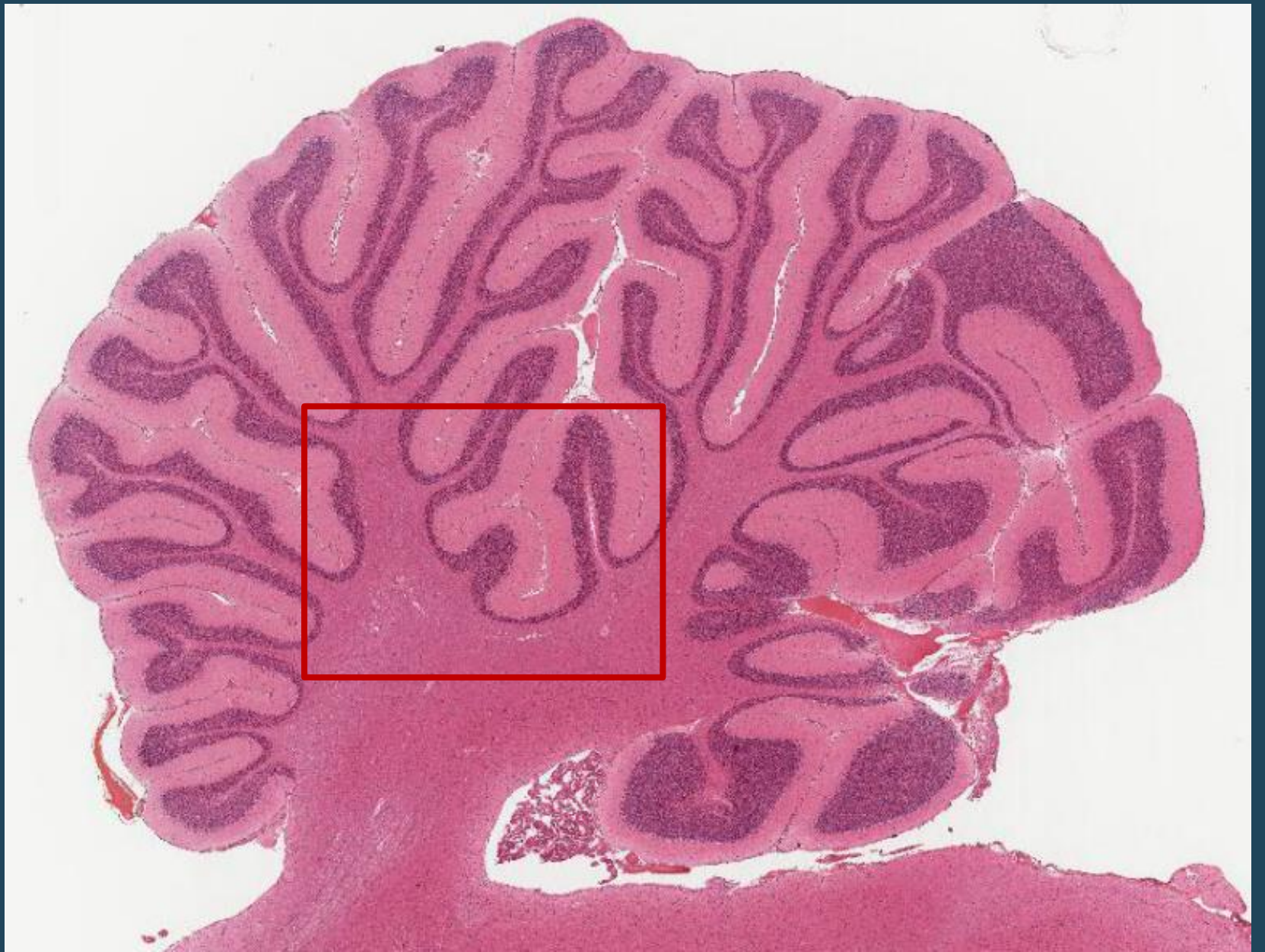
- Péricaryon piriforme, 30-40  $\mu$
- Dendrites très ramifiés, très nombreuses synapses
- Contact avec plus de 200 000 autres neurones



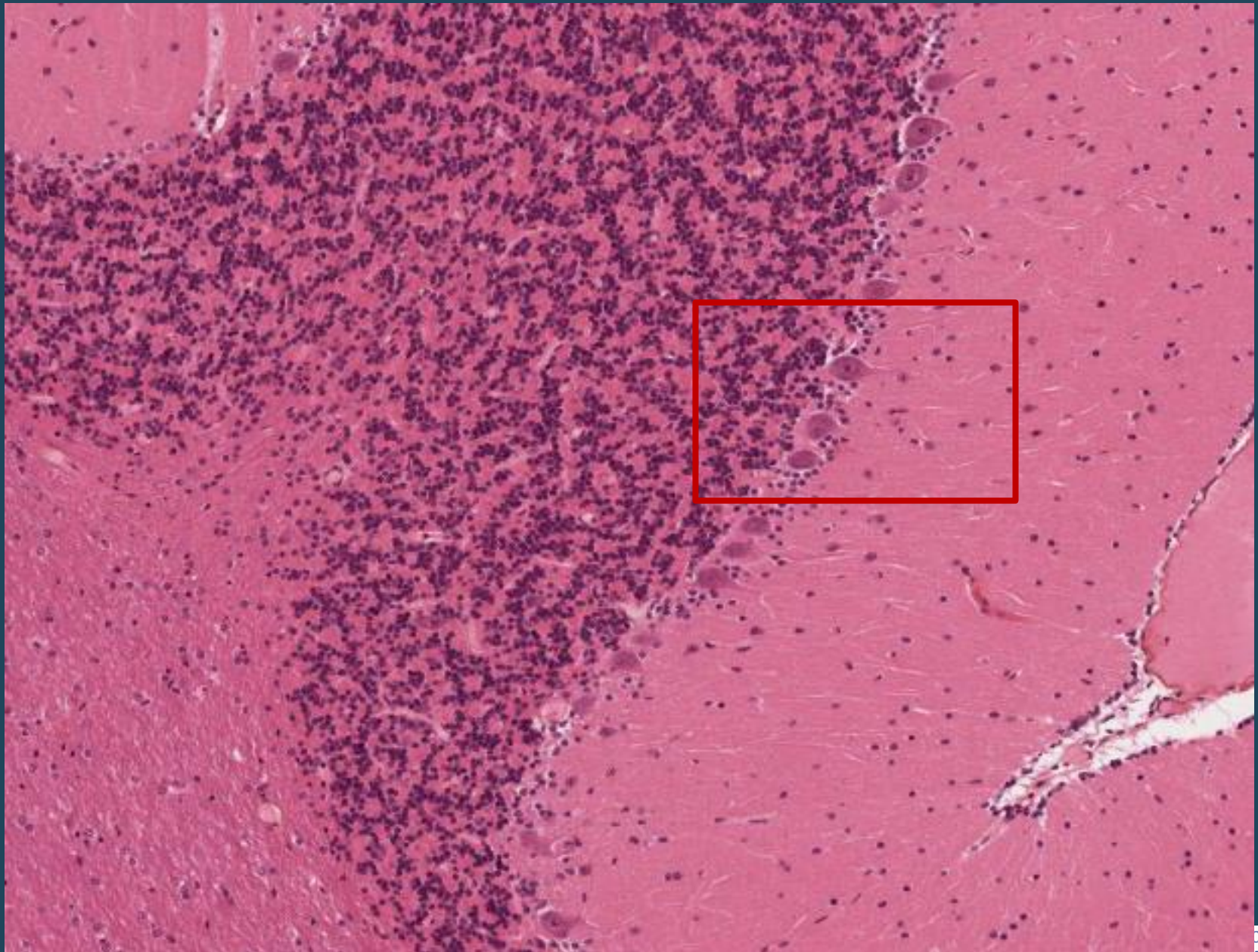
- Schéma représentant les interactions des neurones cérébelleux

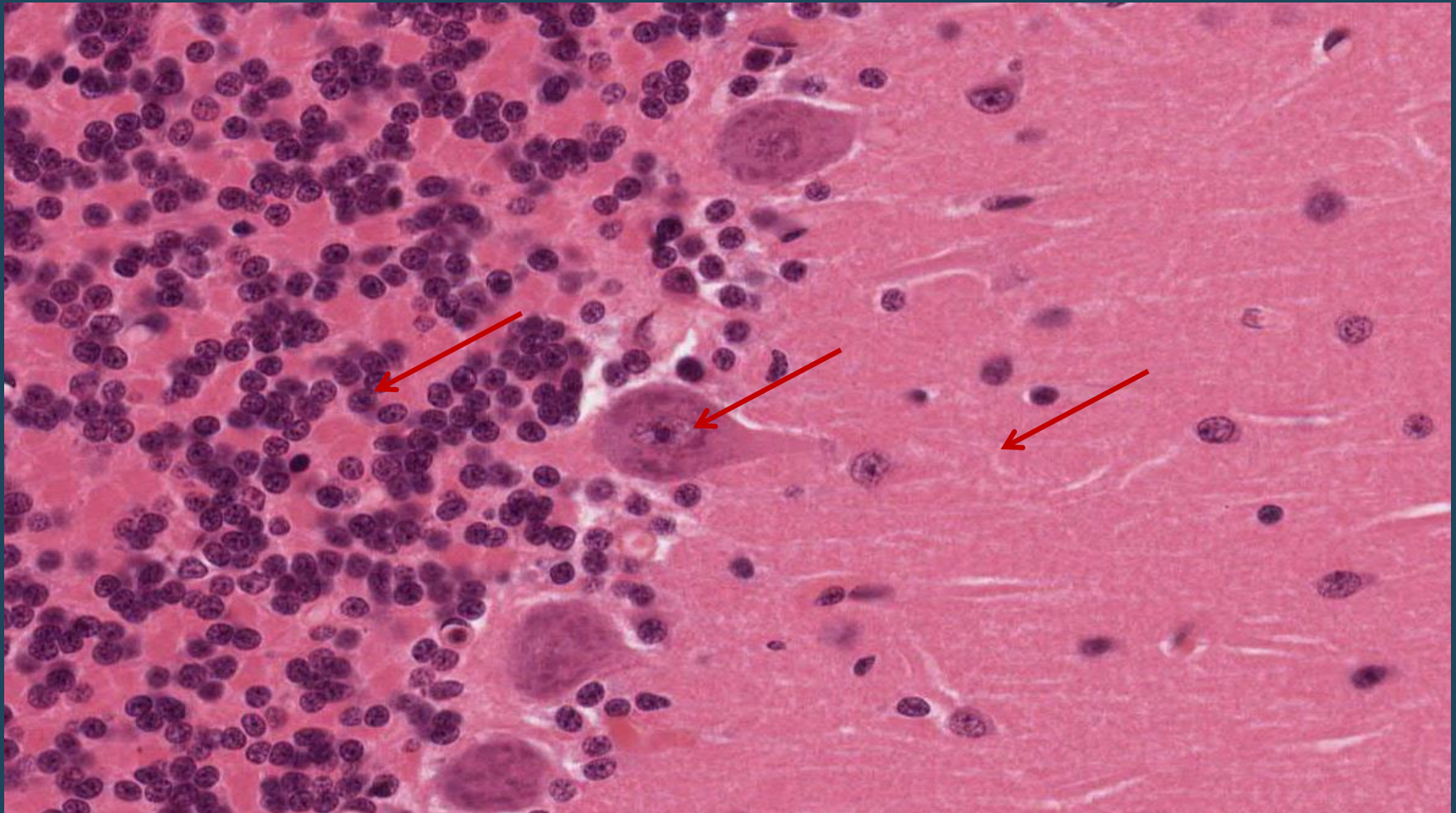
- (1)  $\phi$  étoilées superficielles
- (2)  $\phi$  en panier
- (3)  $\phi$  des grains
- (4)  $\phi$  de golgi de type II

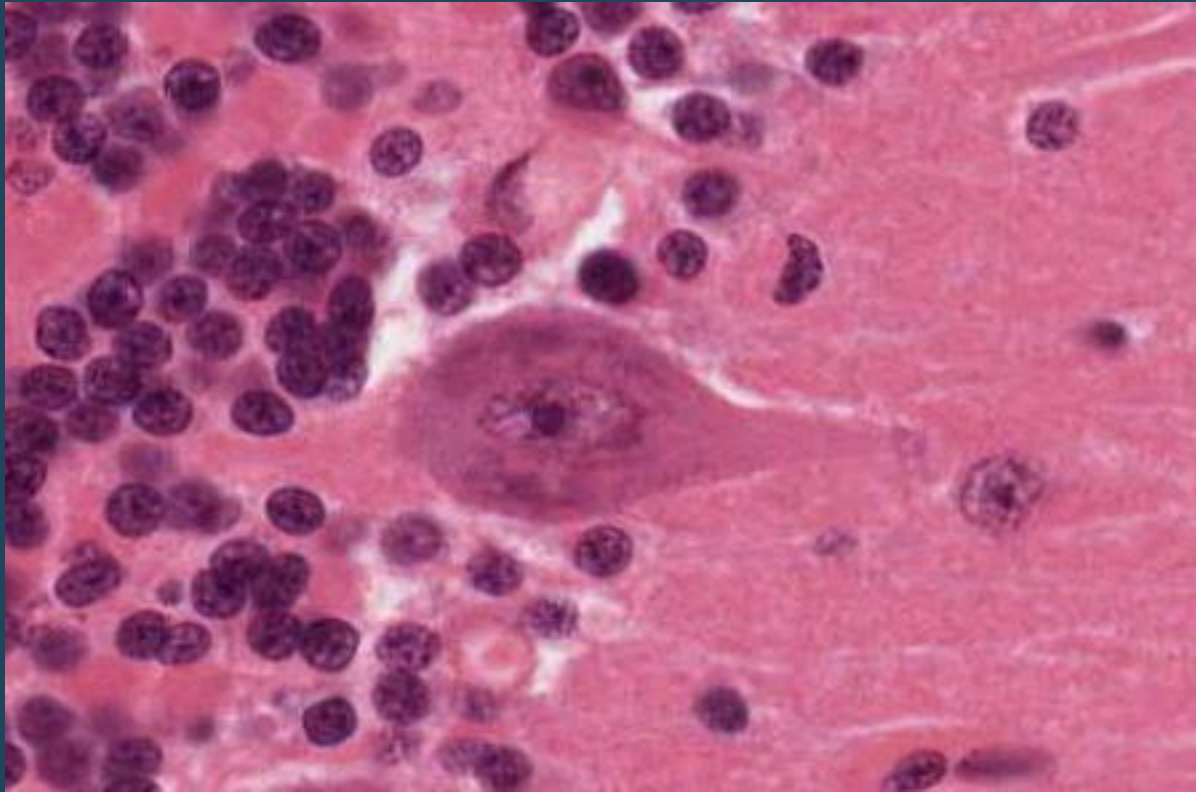








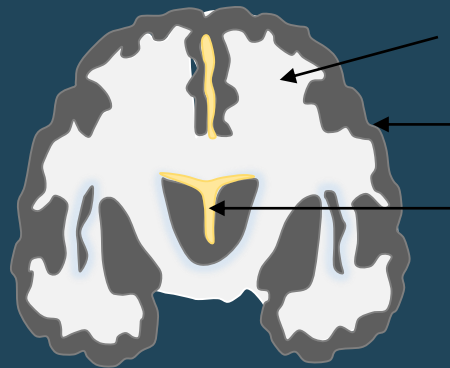






# LE COTEX CEREBRAL

LE COTEX CEREBRAL



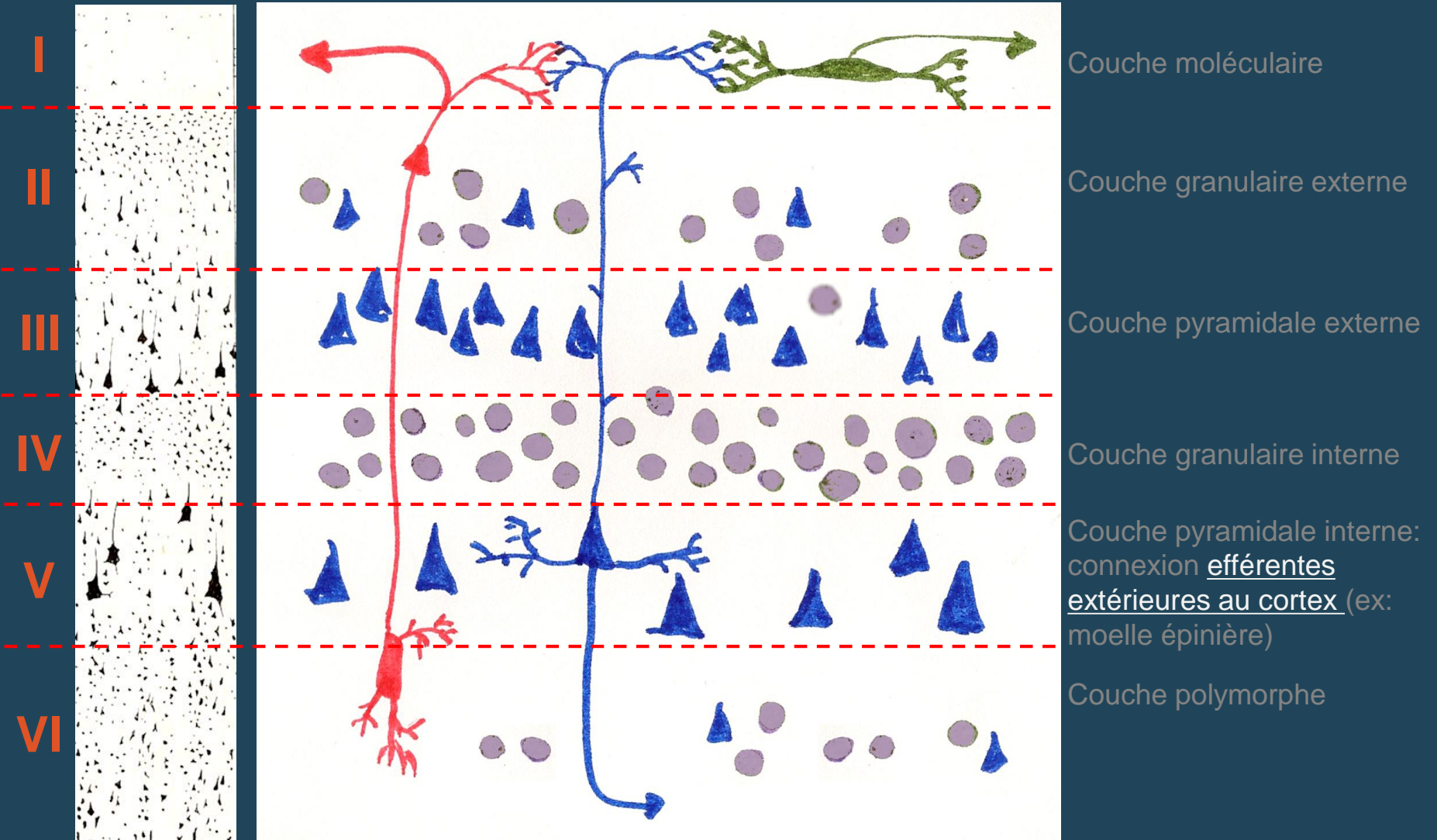
Substance blanche

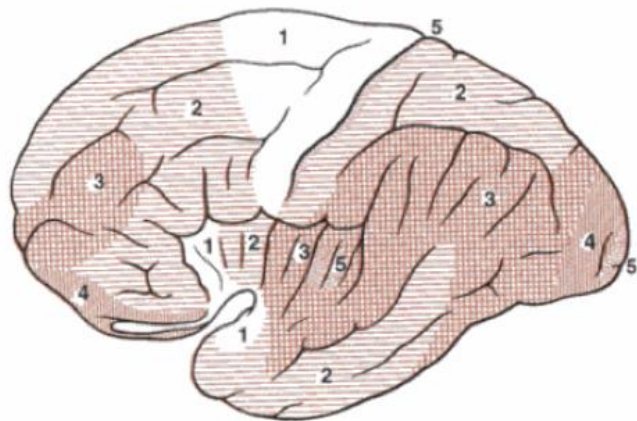
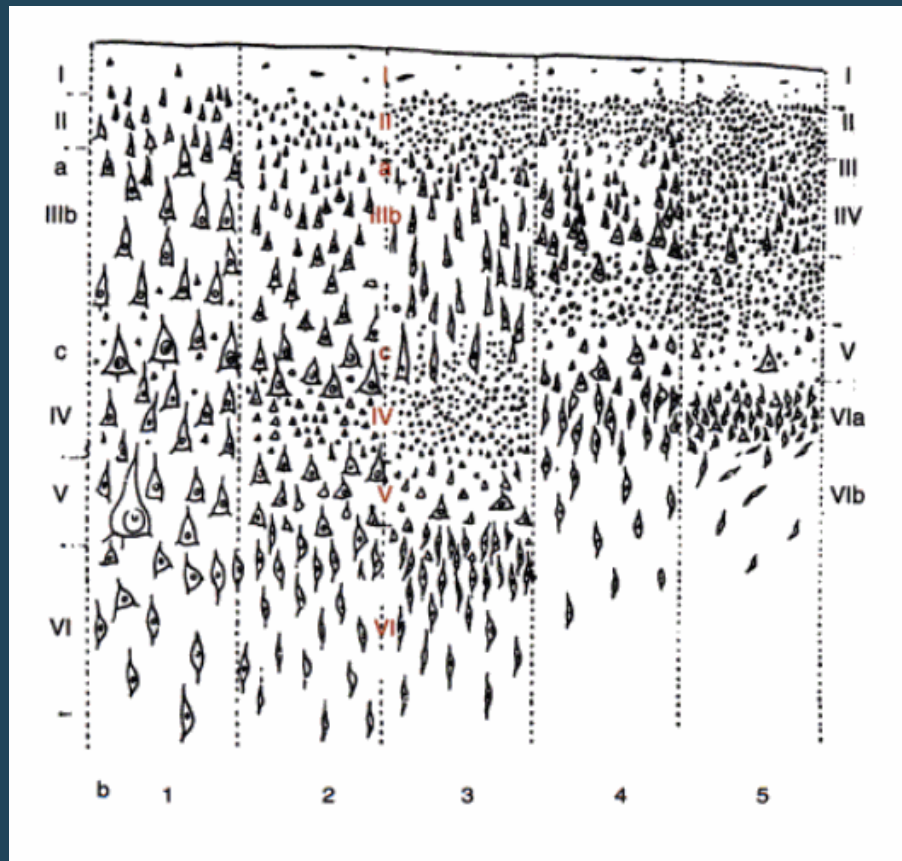
Substance grise

Cavité

Région de l'encéphale

# LES 6 COUCHES





**Figure 8.13 a et b**  
**Les 5 différents types fondamentaux**  
**du cortex cérébral selon V. Economo.**

- 1) Agranulaire
- 2) Type frontal
- 3) Type pariétal
- 4) Type polaire
- 5) Granulaire (koniocortex), de C.V. Economo,  
 Zellaufbau des Großhirnrinde des Menschen,  
 Springer, Berlin, 1927

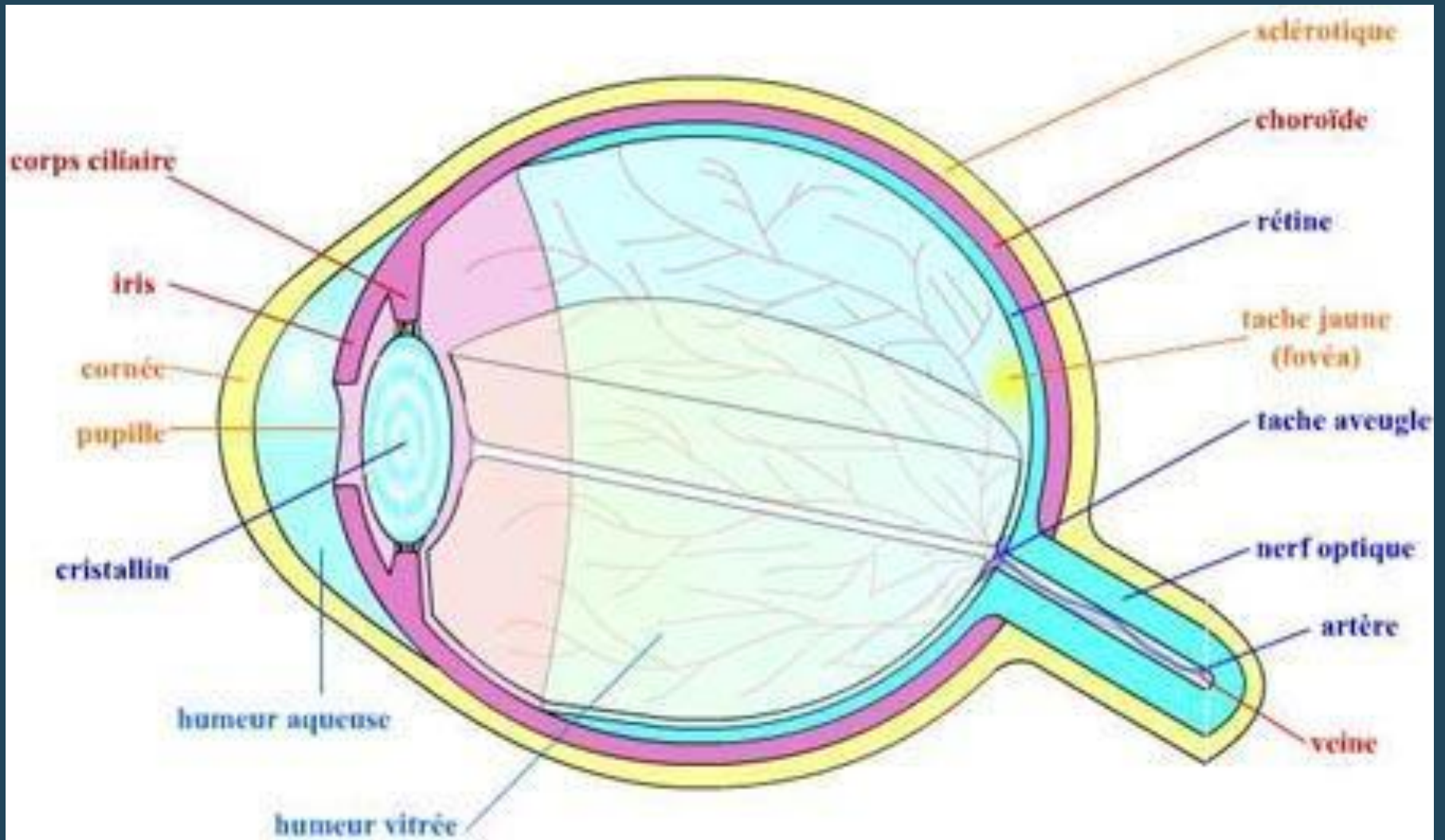
# LES ORGANES DES SENS

SENS  
LES ORGANES DES

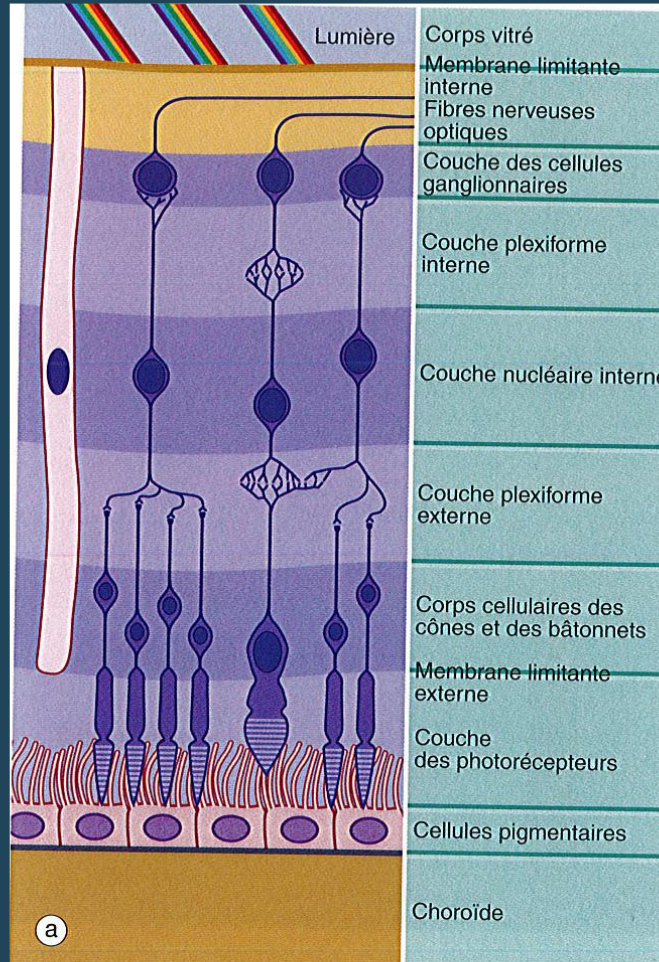
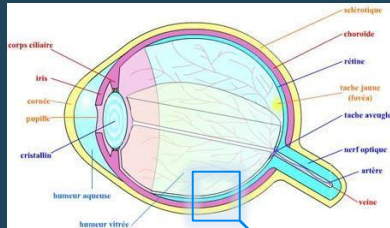
L'OEIL

Γ.ΟΕΙΓ

# Histologie de l'Œil



# Histologie de l'Œil





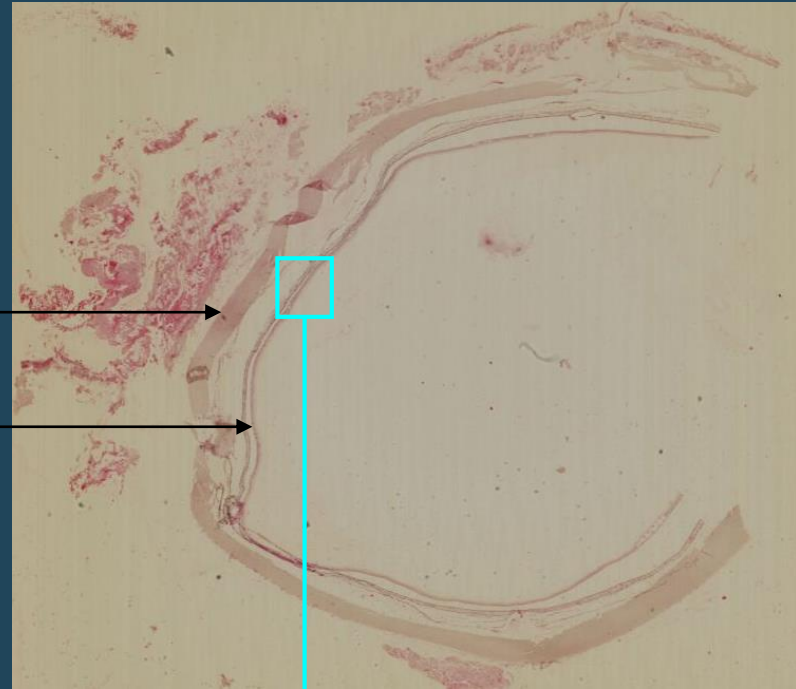
# Histologie de l'Œil



**Coupe sagittale**

**Sclère**

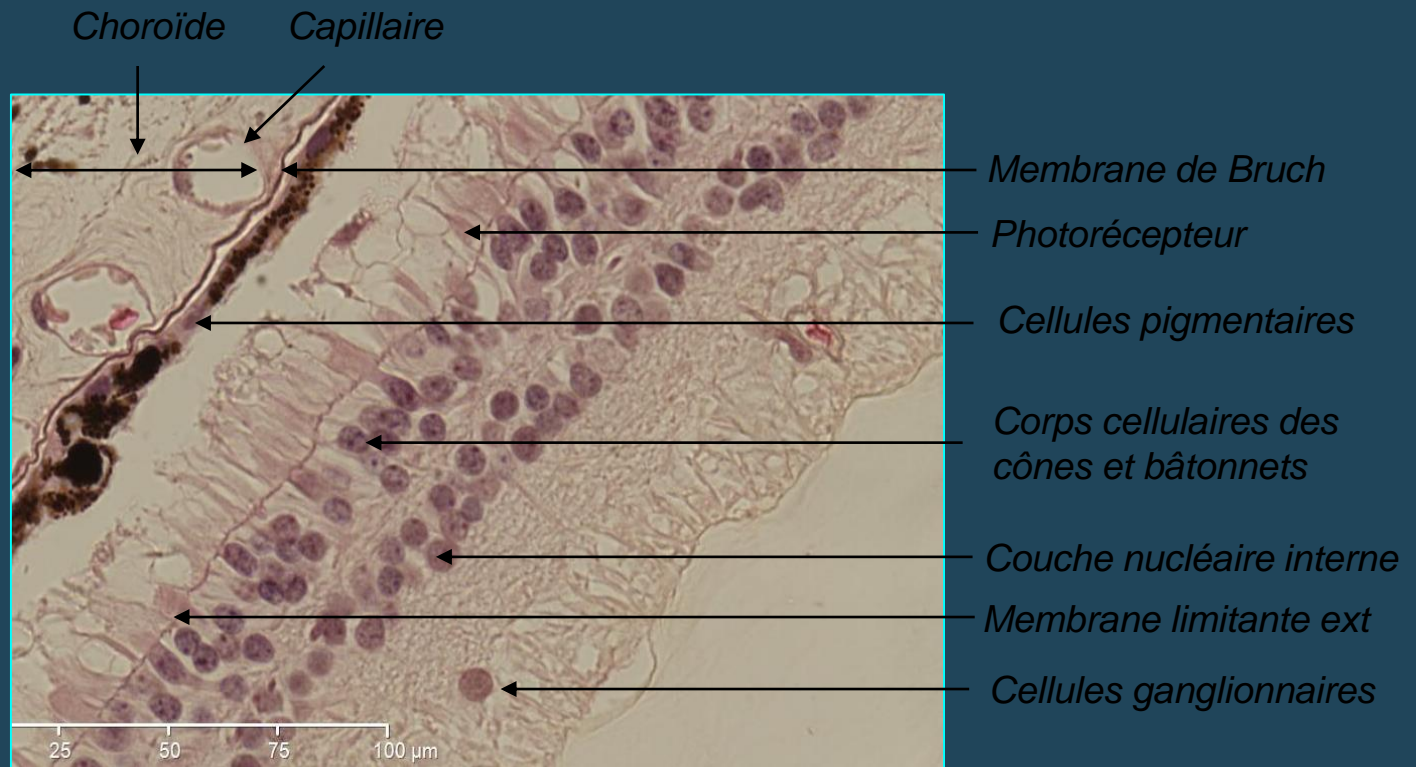
**Rétine**



**Œil, HE, 0.41 X**



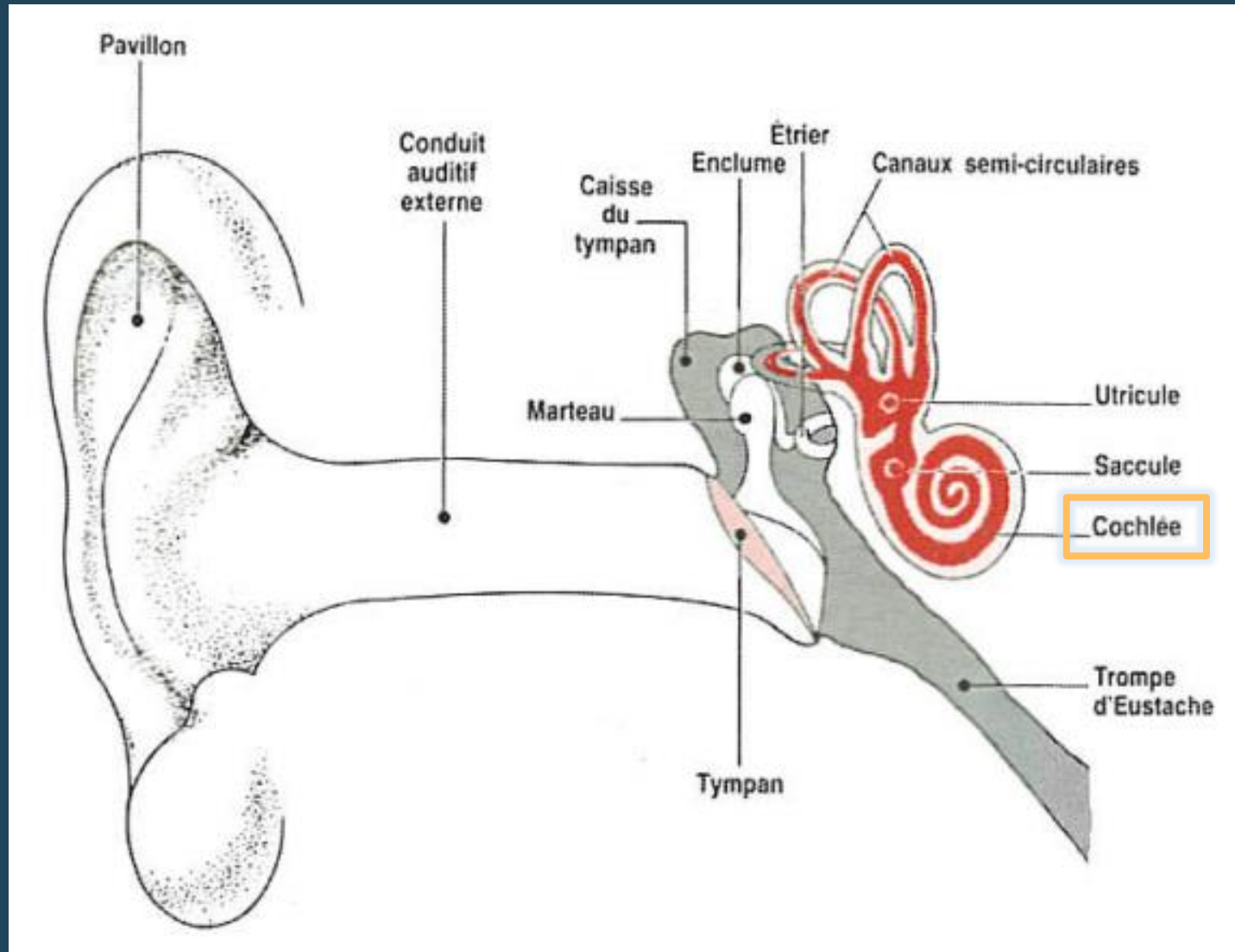
# Histologie de l'Œil



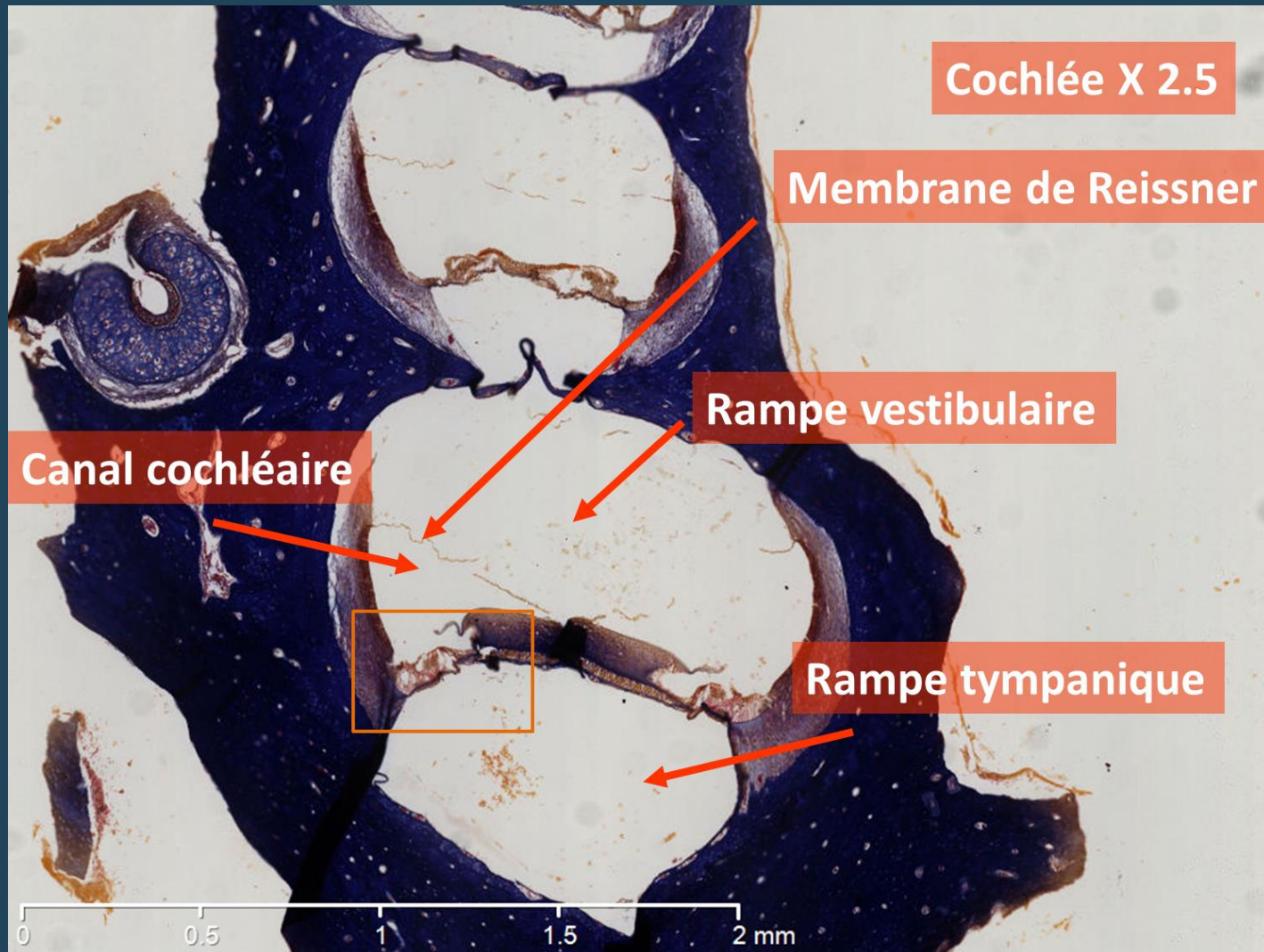
# L'OREILLE

# Г.ОБЕИГГЕ

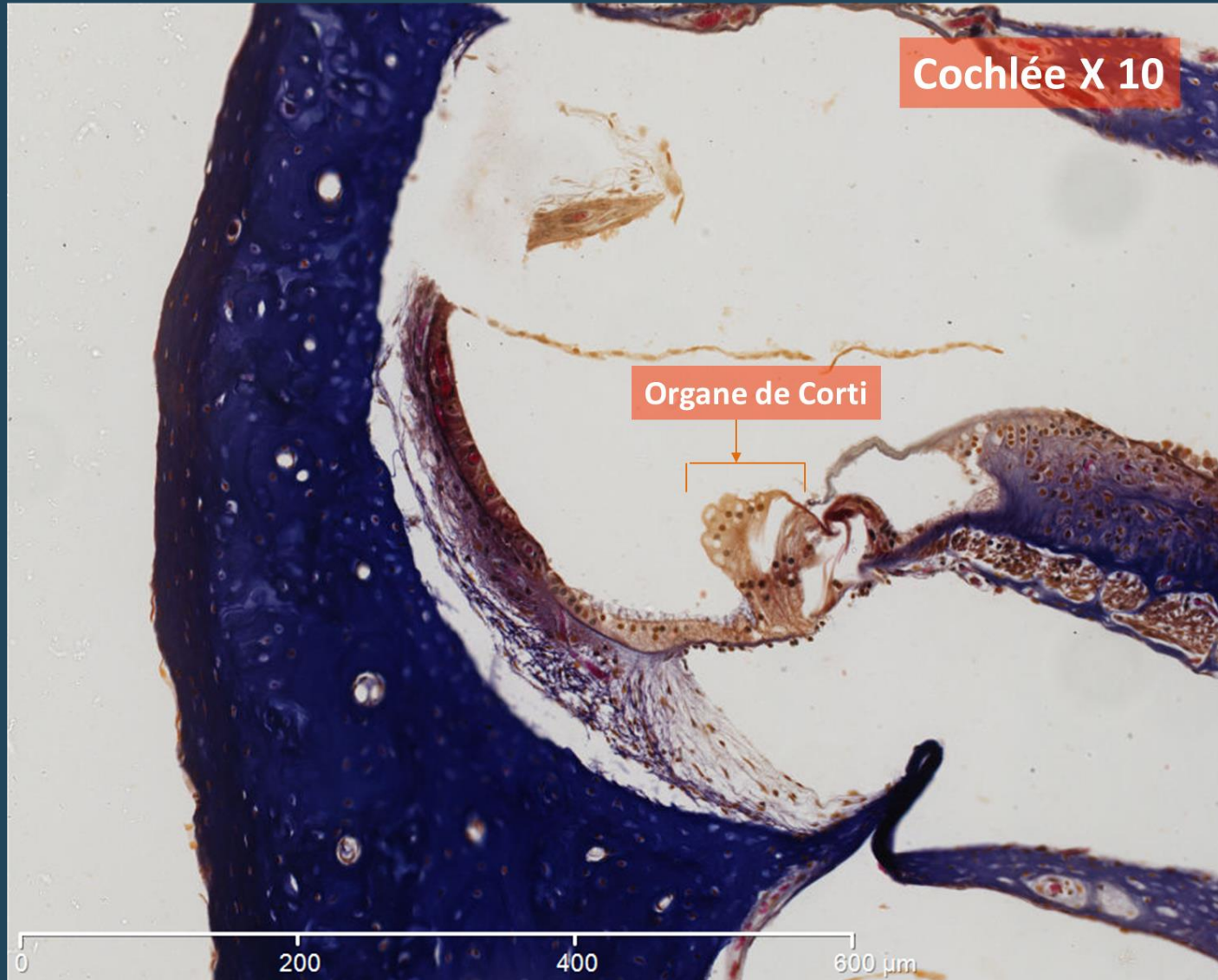
# Anatomie de l'oreille



# Histologie de la cochlée



# Histologie de la cochlée



# Histologie de la cochlée

