

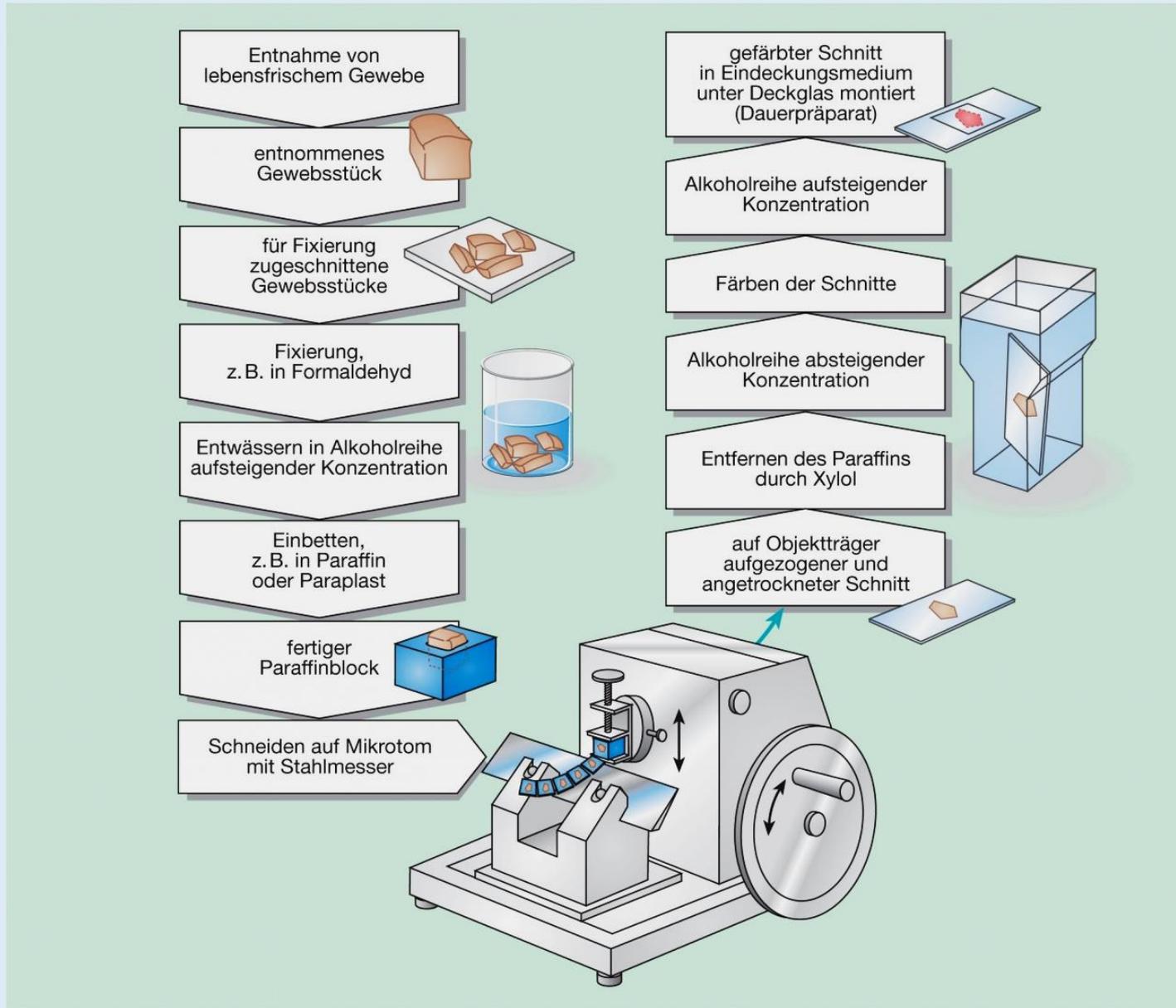
# **Einführung in die Histologie, Grundgeweben, die Haut**

Fakultät für Pharmazie

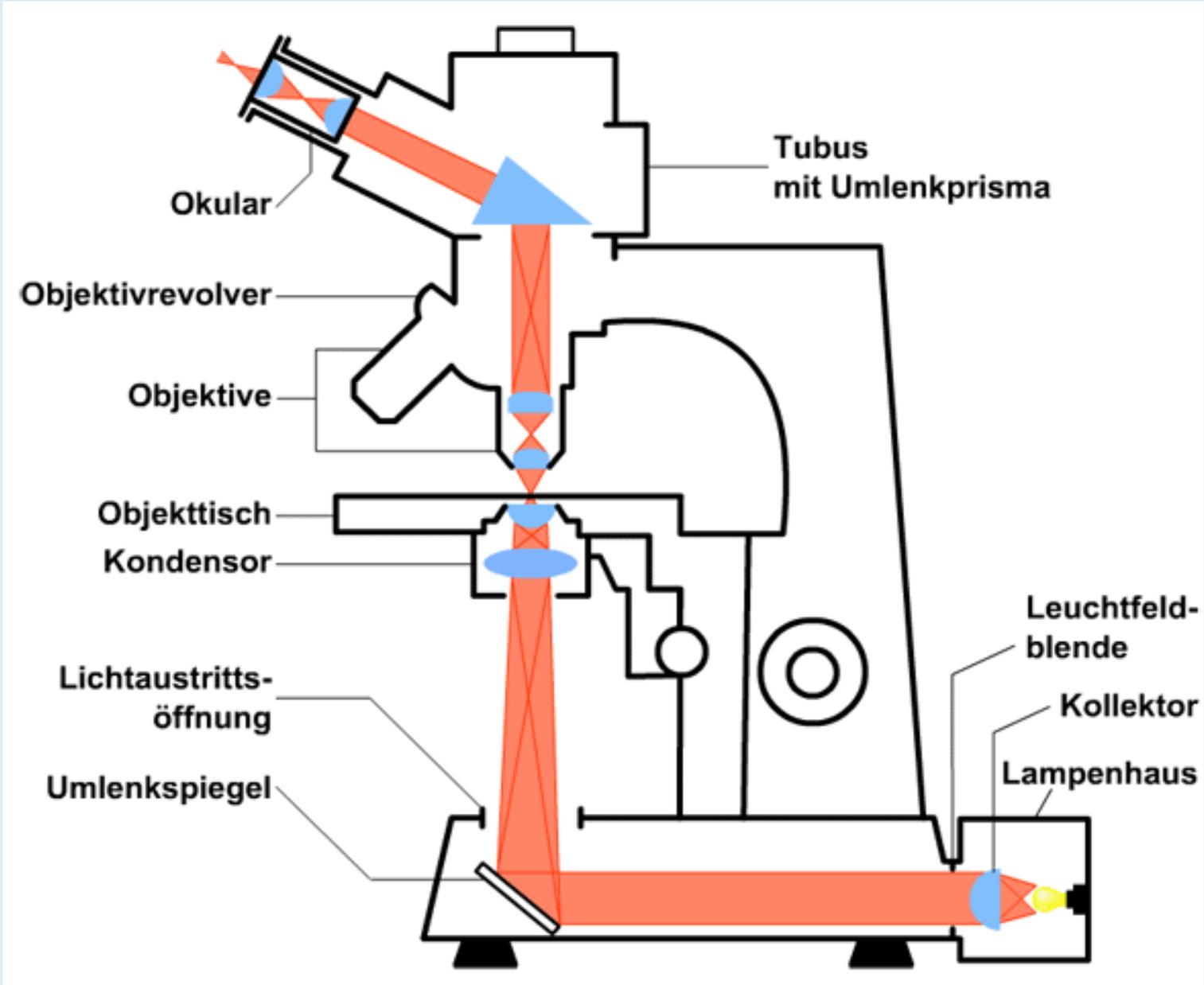
***Histologie-Praktikum I.***

**Anatomisches, Histologisches und Embryologisches Institut  
2018.**

# Vorbereitung der histologischen Präparate



# Lichtmikroskopie



# Grundgeweben:

Epithelgewebe

Binde- und Stützgewebe

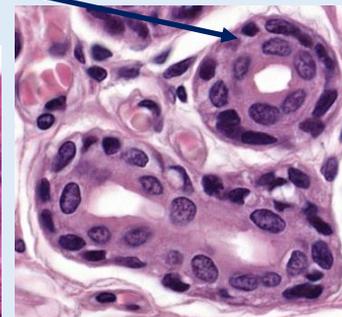
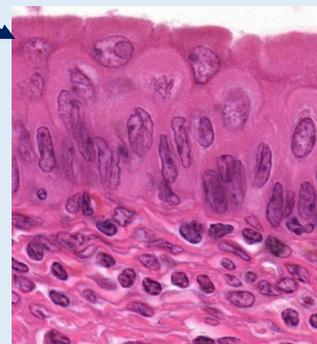
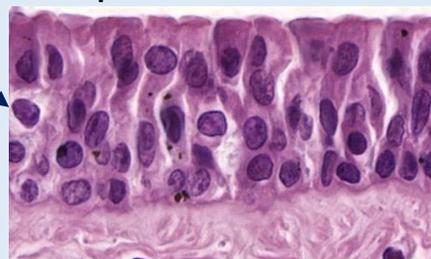
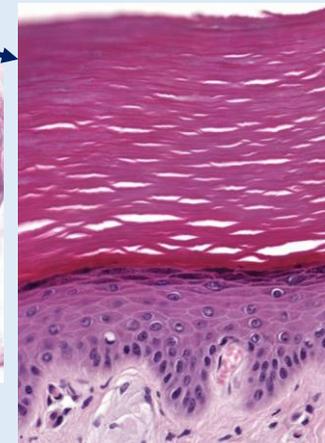
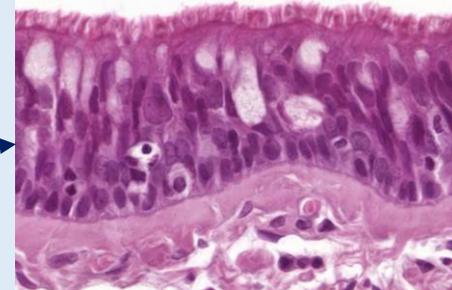
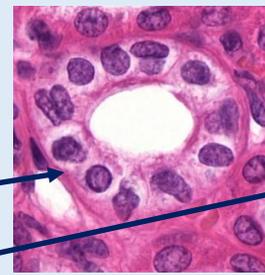
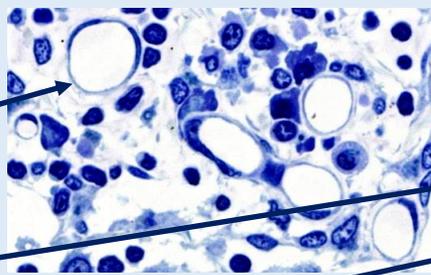
Muskelgewebe

Nervengewebe

# Epithelgewebe:

## **- Oberflächenepithelien**

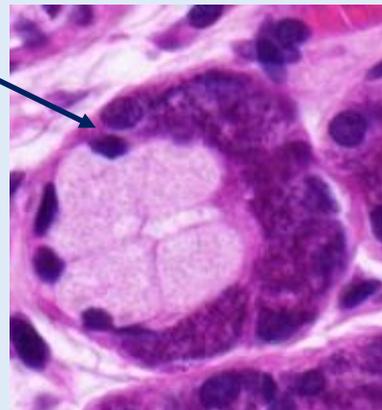
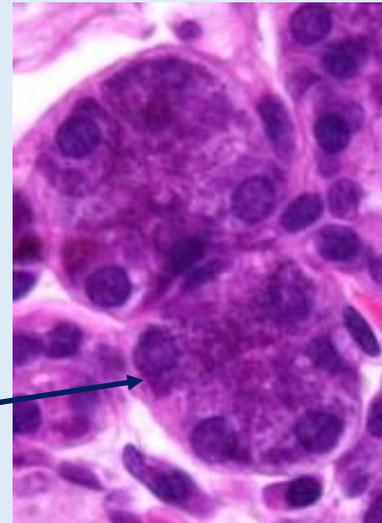
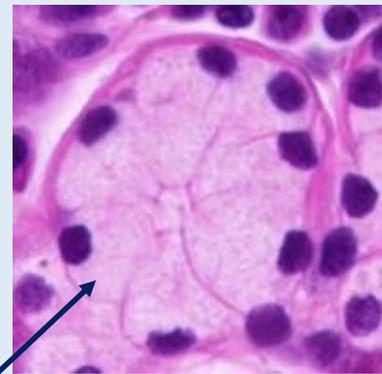
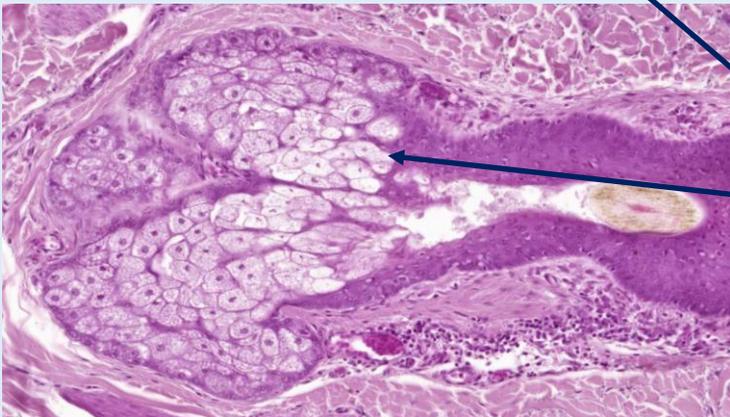
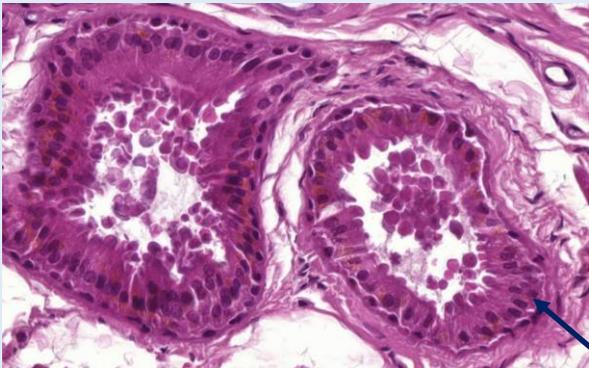
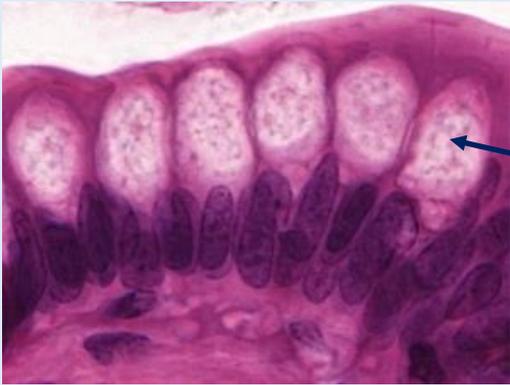
- einschichtiges Plattenepithel
- einschichtiges isoprismatisches Epithel
- einschichtiges hochprismatisches Epithel
- einschichtiges mehrreihiges Flimmerepithel
- mehrschichtiges unverhorntes Plattenepithel
- mehrschichtiges verhorntes Plattenepithel
- mehrschichtiges (zweischichtiges) kubisches Epithel
- Übergangsepithel (Urothelium)
- mehrschichtiges hochprismatisches Epithel



## Epithelgewebe:

### - Aufteilung des Drüsenepithels

- nach Abgabe des Sekrets:
  - endokrine Drüsen
  - exokrine Drüsen
- nach Anzahl der Drüsenepithelzellen:
  - einzellige (Becherzelle)
  - mehrzellige
- nach Gestalt des Drüsenendstückes:
  - azinär
  - tubulär
  - gemischt (tubuloazinär)
- nach chemischer Beschaffenheit des Sekrets:
  - mukös
  - serös
  - gemischt (seromukös)
- nach Sekretionsmodus:
  - merokrin
  - apokrin
  - holokrin



## Bindegewebszellen:

- ortständige Zellen:

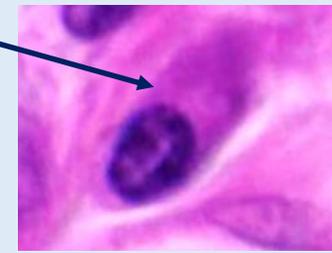
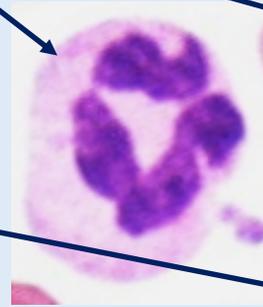
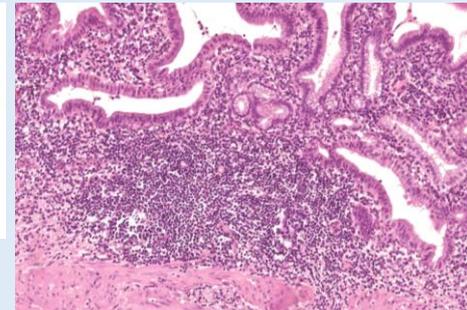
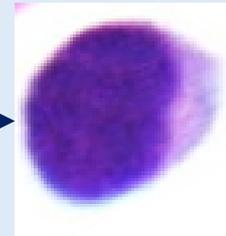
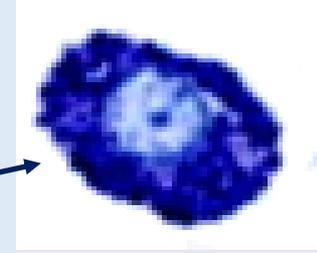
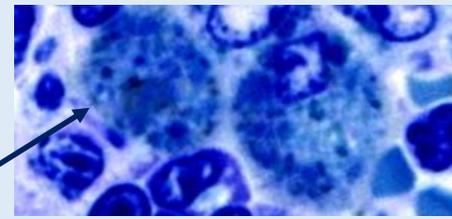
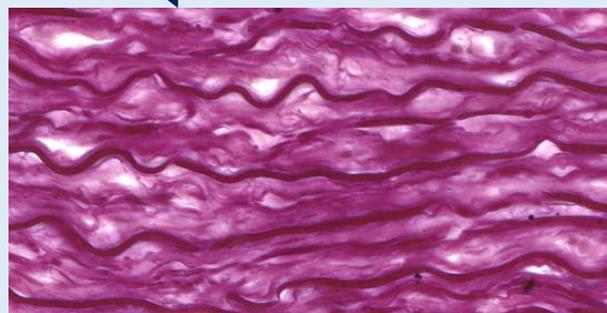
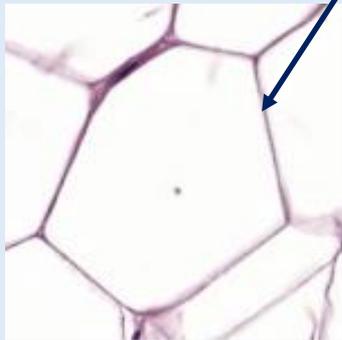
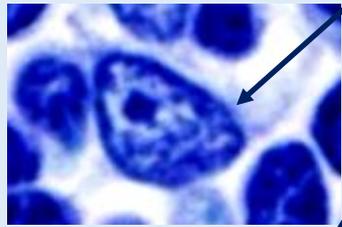
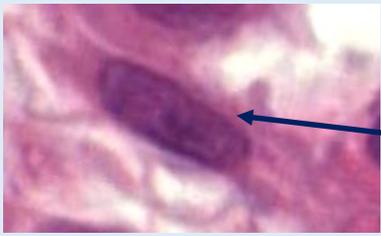
- Fibroblasten
- Fibrozyten
- Retikulumzellen
- Fettzellen (Adipozyten)

- mobile Zellen

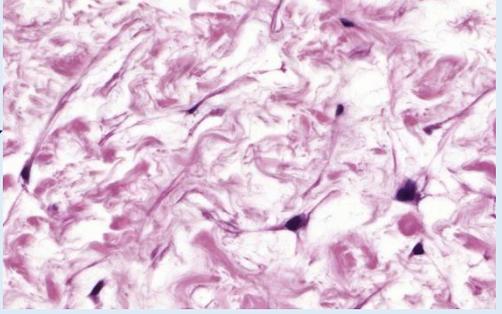
- Makrophage
- Mastzellen
- Lymphozyten
- Plasmazellen
- Granulozyten

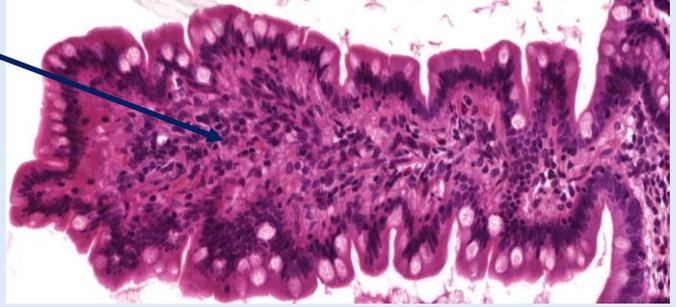
## Bindegewebsfasern:

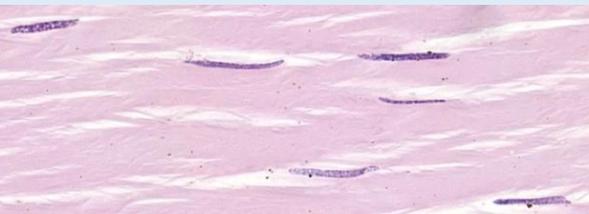
- Kollagenfasern
- Gitterfasern
- elastische Fasern



## Klassifizierung des Bindegewebes:

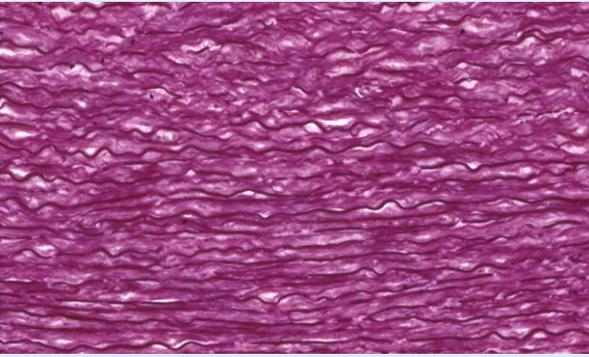
- unreifes, embryonales Bgw. → 

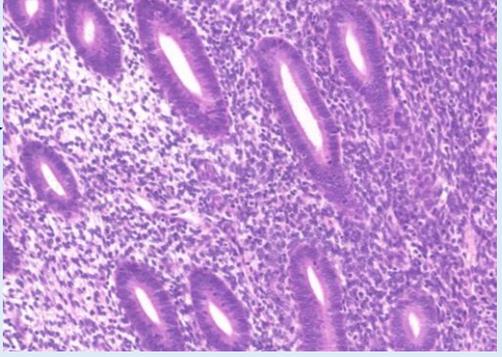
- lockeres Bgw. → 

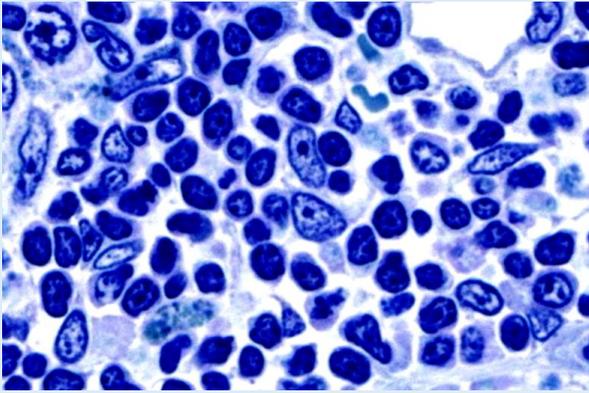
- straffes Bgw. → 

- geflechtartiges

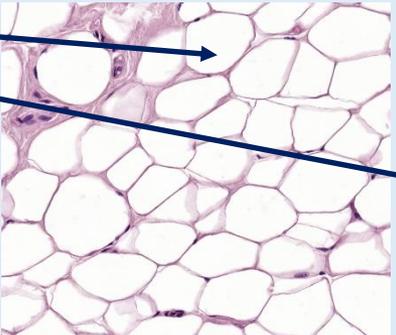
- parallelfaseriges

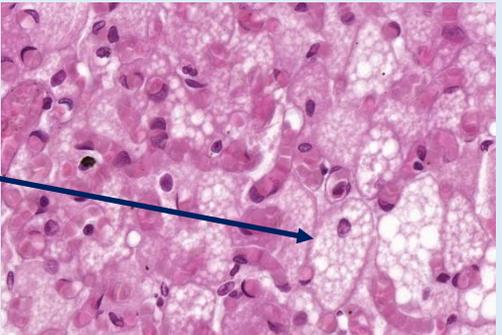
- elastisches Bgw. → 

- retikuläres Bgw. → 

- zellreiches / spinozelluläres Bgw. → 

- Fettgewebe

- weiss → 

- braun → 

## Stützgewebe

- Knorpelgewebe:

- hyaliner Knorpel

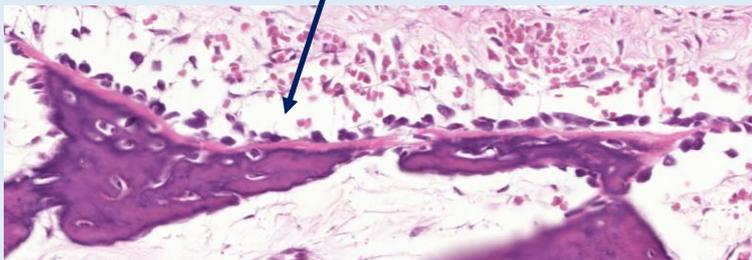
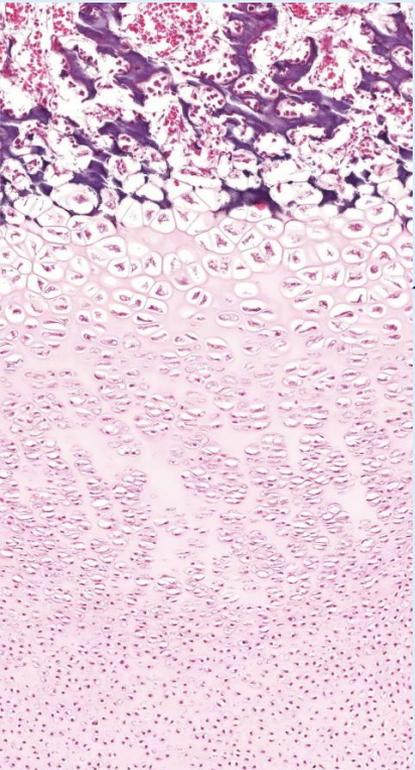
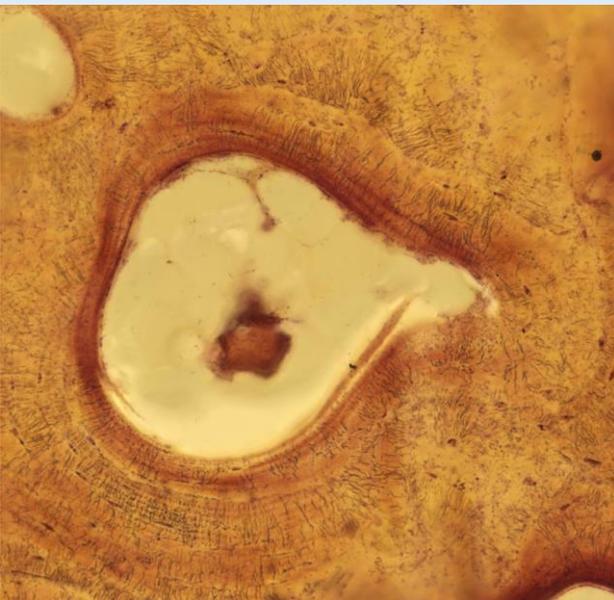
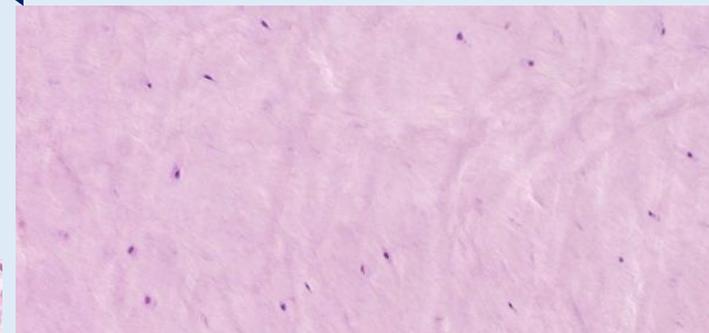
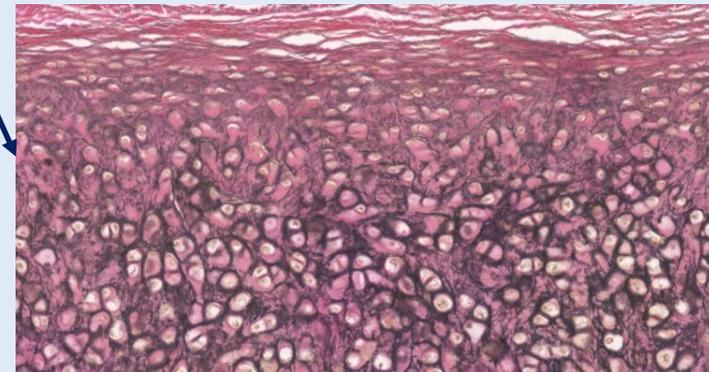
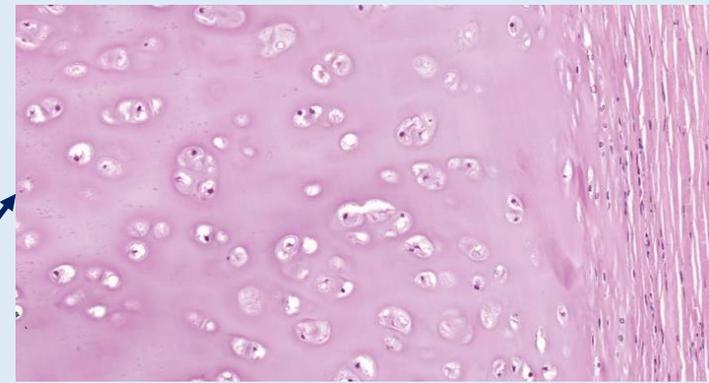
- elastischer Knorpel

- Faserknorpel

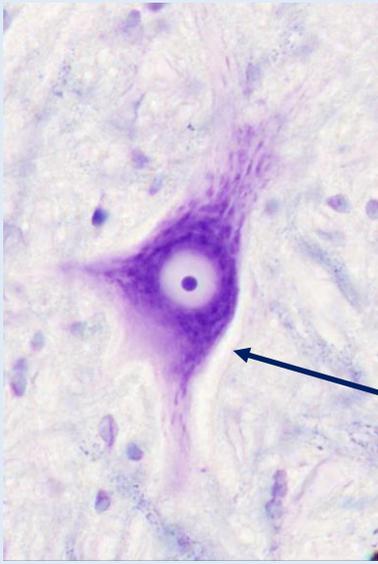
- Knochengewebe:

- chondrale  
Ossifikation

- desmale  
Ossifikation

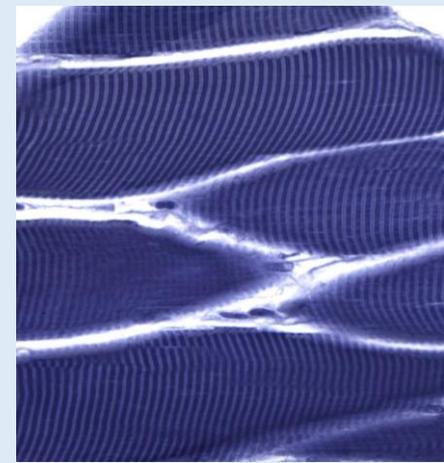
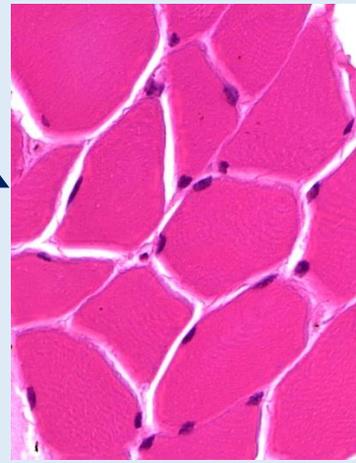


Rückenmark



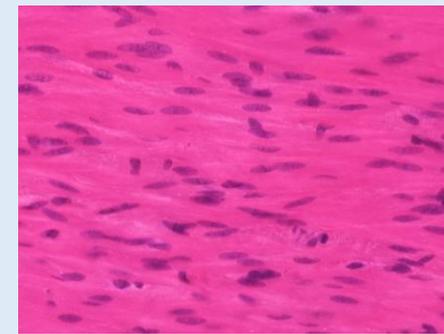
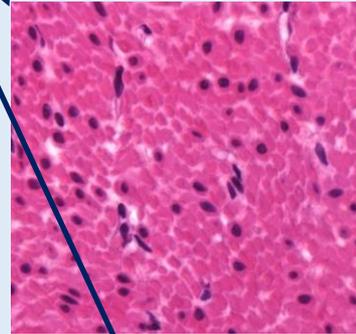
**Muskelgewebe:**

- quergestreifte Muskulatur
- glatte Muskulatur
- Herzmuskulatur

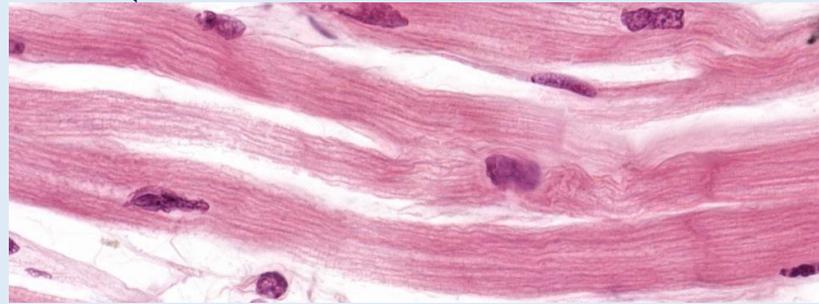
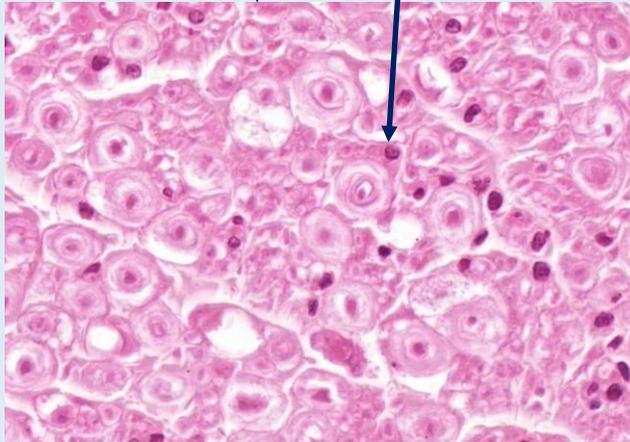


**Nervengewebe:**

- multipolare Neuronen
- peripherer Nerv
- Schwann-Zellen

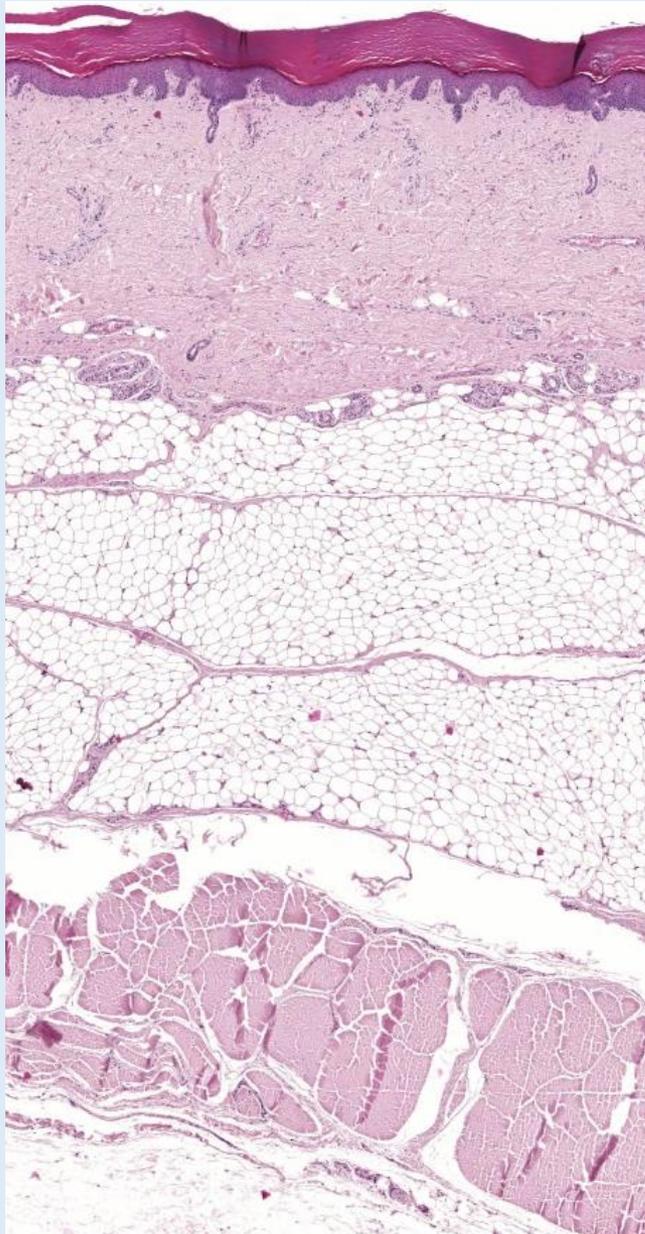


Kleinhirn



# **Histologische Präparate und Strukturen zu erkennen**

## 6. Haut (HE)

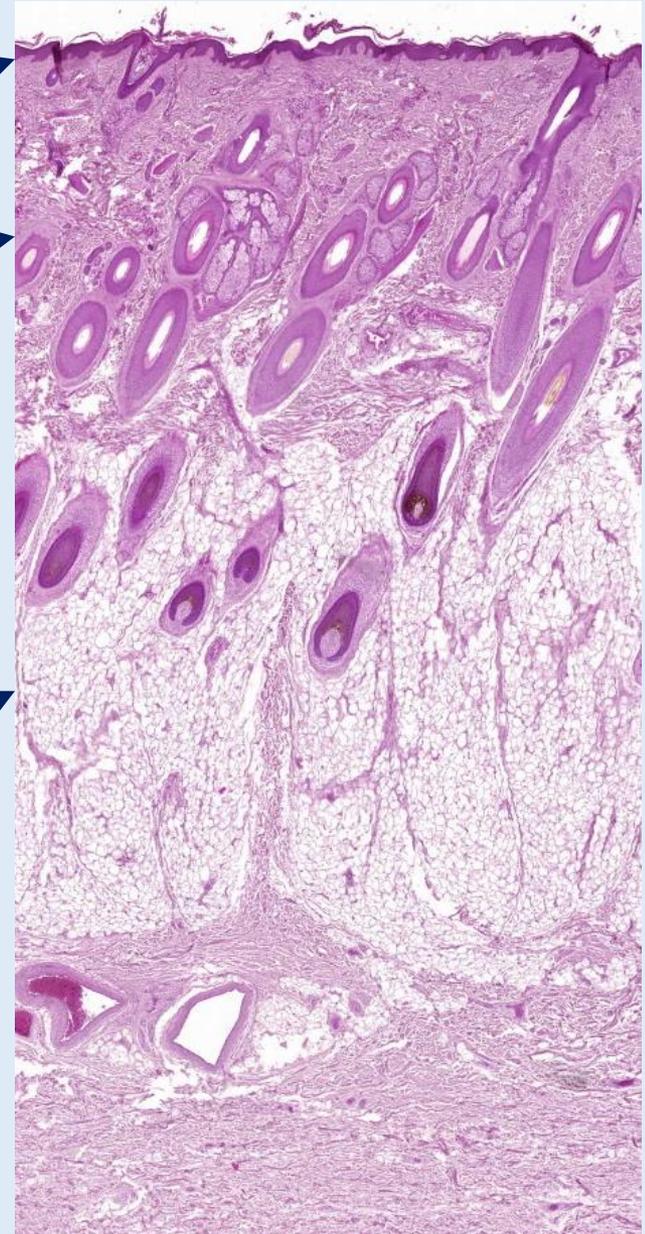


Hohlhand

← Epidermis →

← Dermis →

← Hypodermis →



Kopfhaut

## 6. Haut (HE)

Schichten des Epidermis:

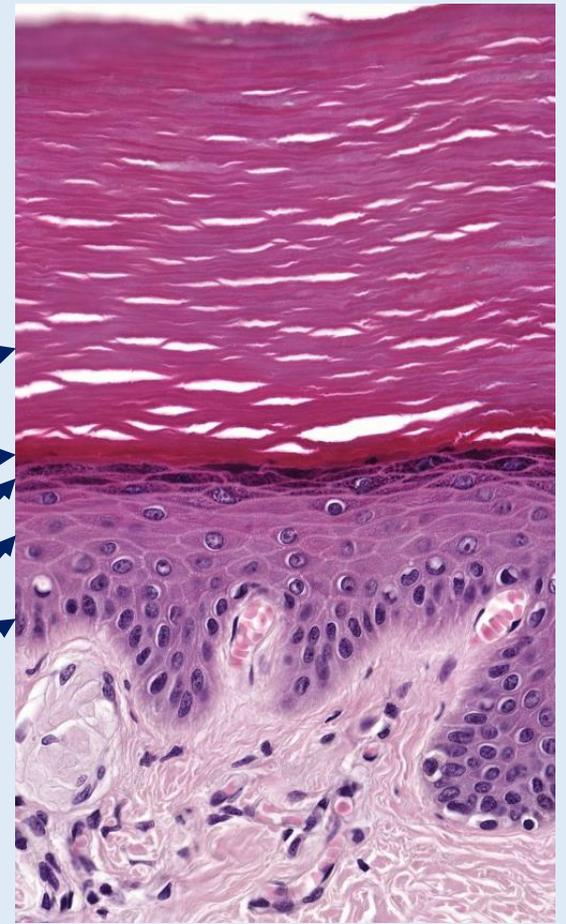
Stratum corneum

Stratum lucidum

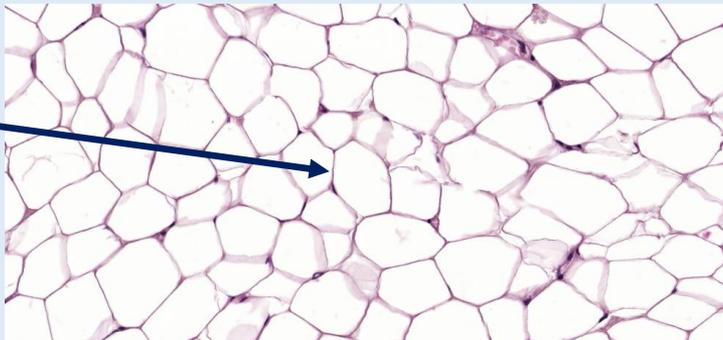
Stratum granulosum

Stratum polygonale

Stratum basale

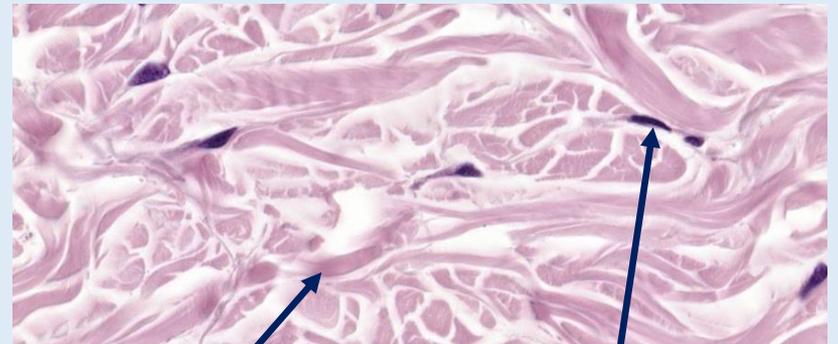


weisses  
Fettgewebe  
(Adipozyten)



Kollagenfasern

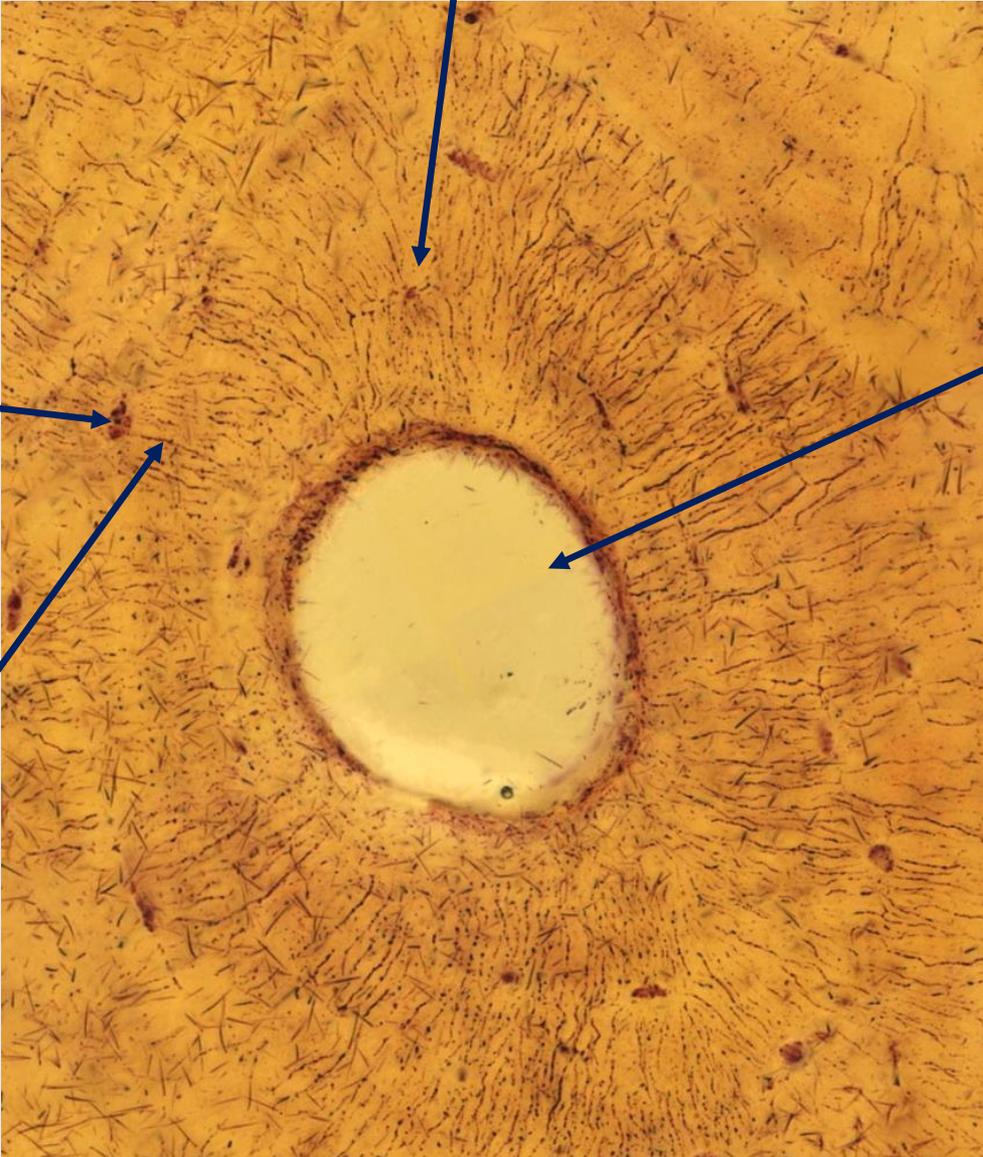
Fibrozyten



# 25. Knochengewebe (Schmorl-Färbung)

Anteile eines Osteons:

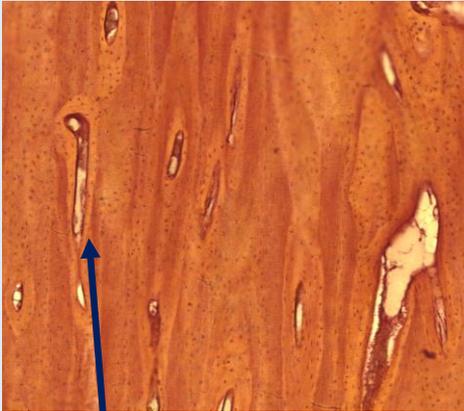
Lamina specialis



Lacuna ossea  
+  
Osteozyt

Canaliculus  
osseus

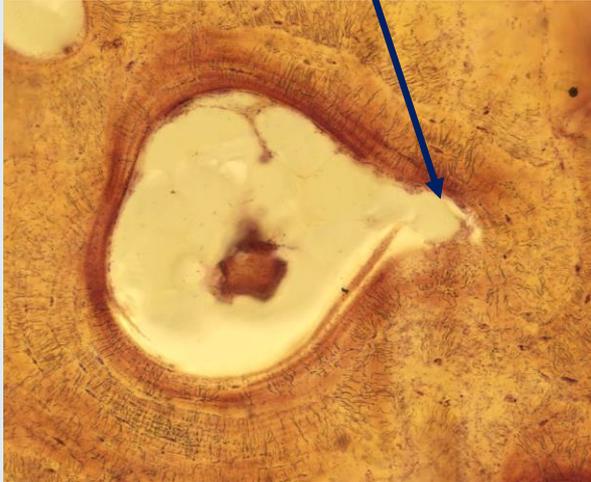
Querschnitt



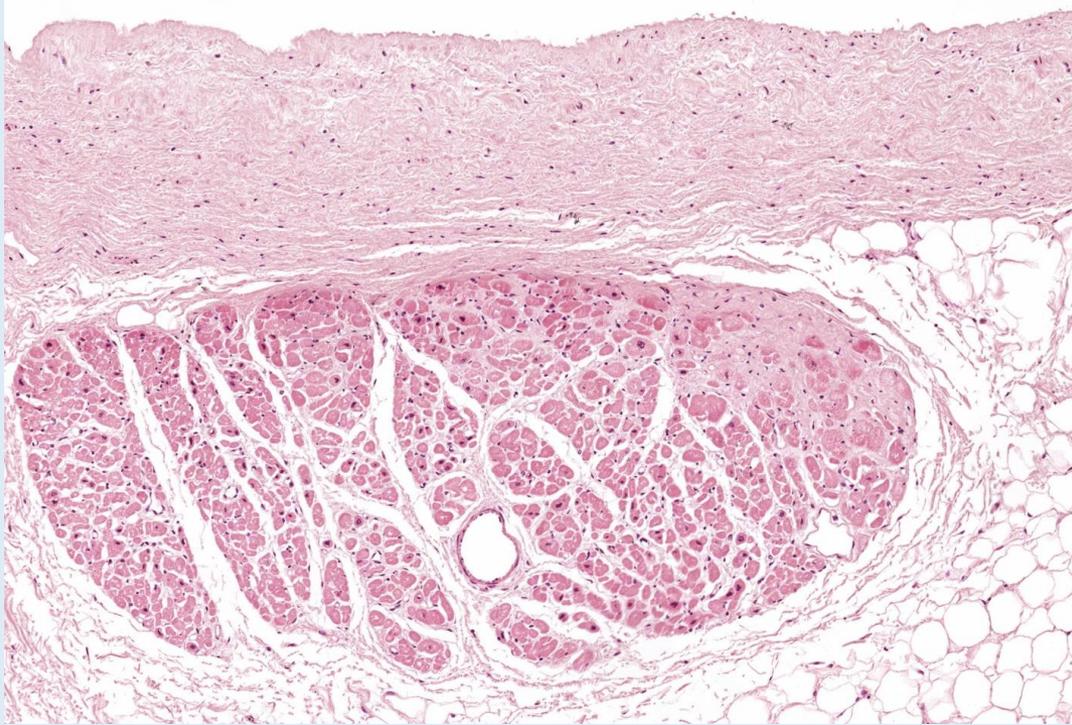
Längsschnitt

Havers-Kanal

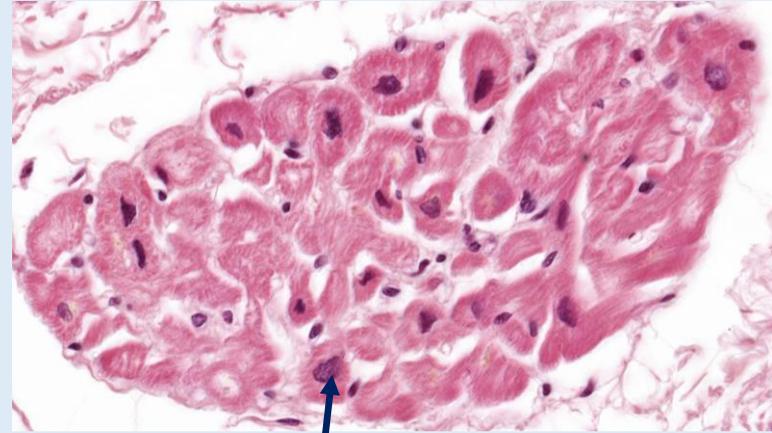
Volkman-Kanal



# 41. Herz (HE)



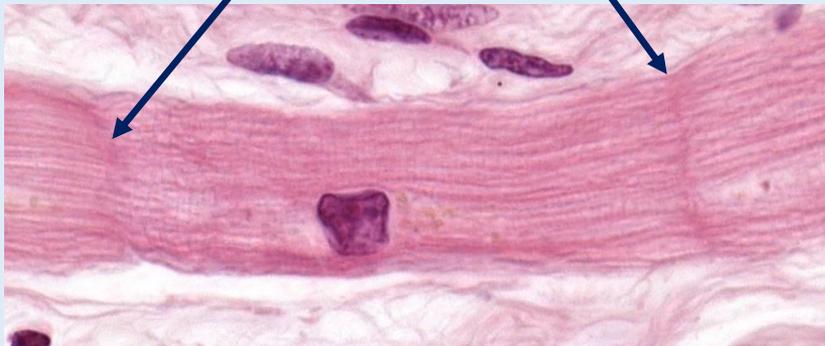
Querschnitt



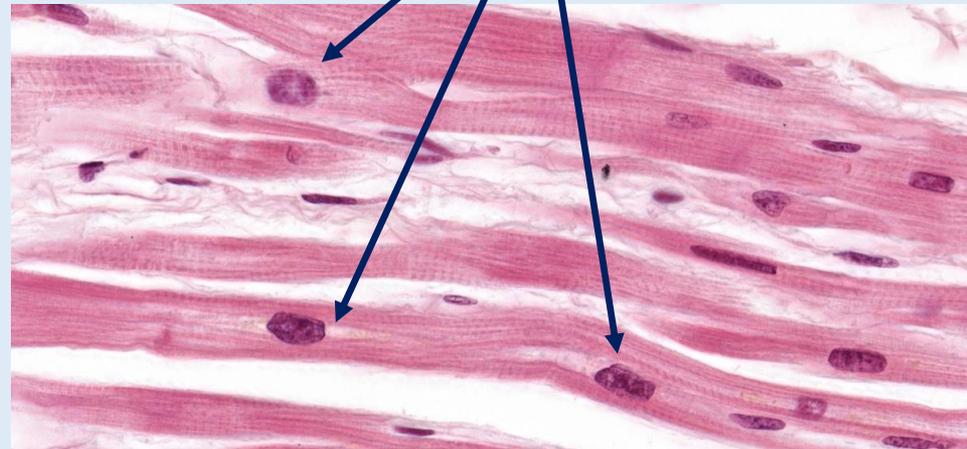
Querschnitt

Herzmuskelzelle

Discus intercalaris



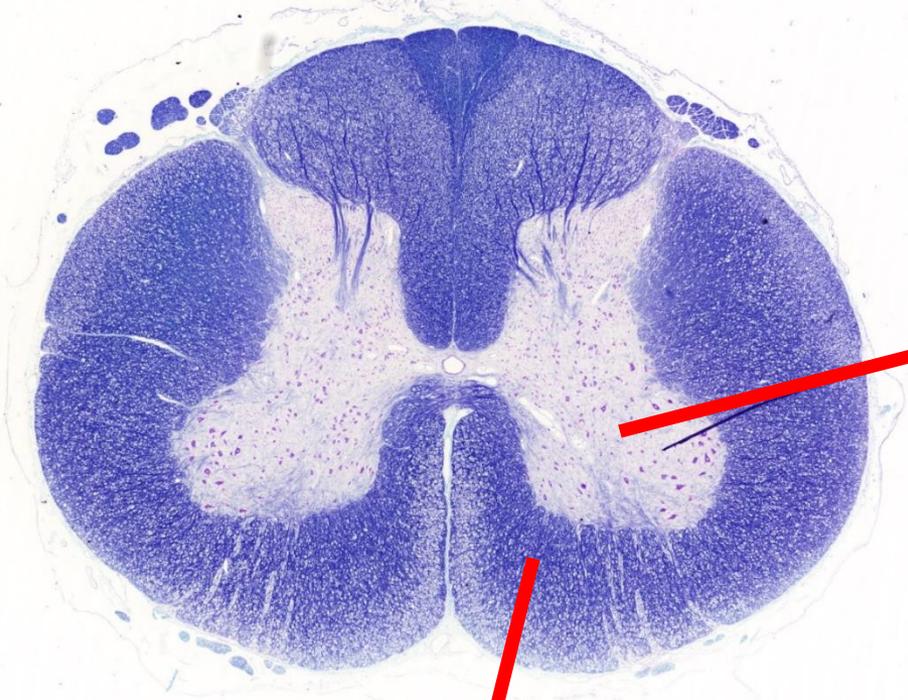
Längsschnitt



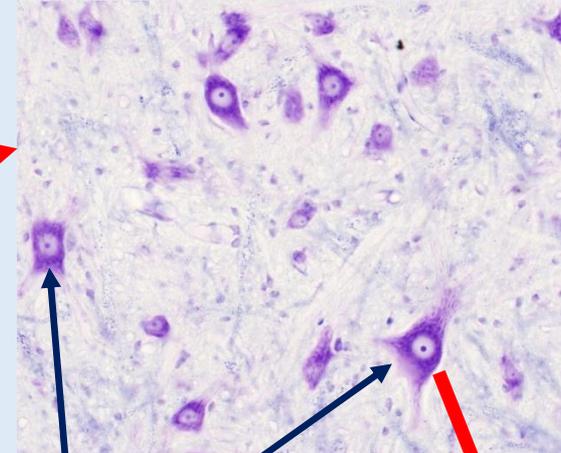
# 101. Rückenmark (Luxol-fastblue + Kresylviolett)

graue Substanz

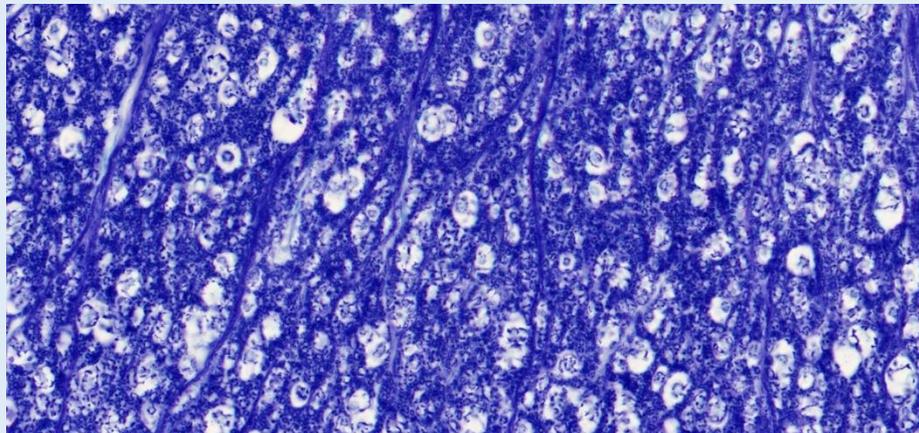
Kresylviolett



weisse Substanz



multipolare Neuronen  
(Alfa-Motoneuron)



Myelinscheide

Nissl-Schollen

Perykarion

Zellkern  
(Nukleolus)

Axon  
(Axonhügel)

Dendrit

