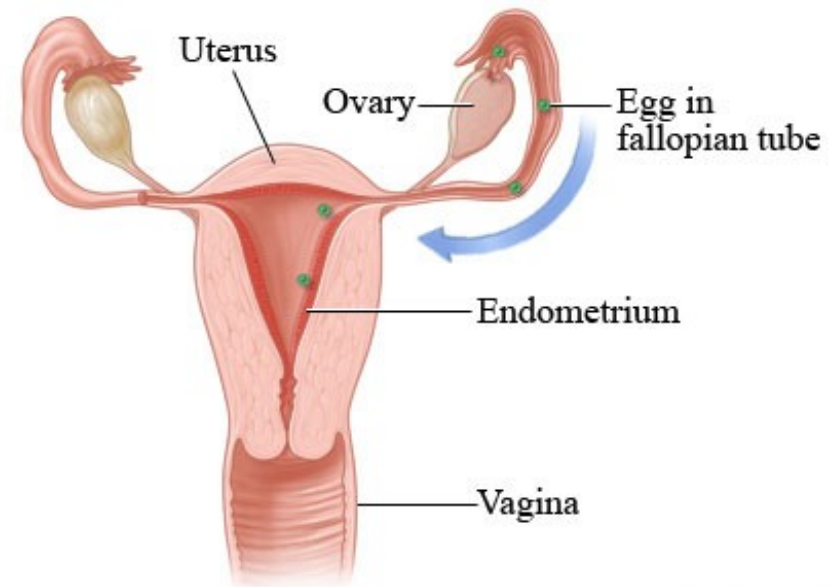




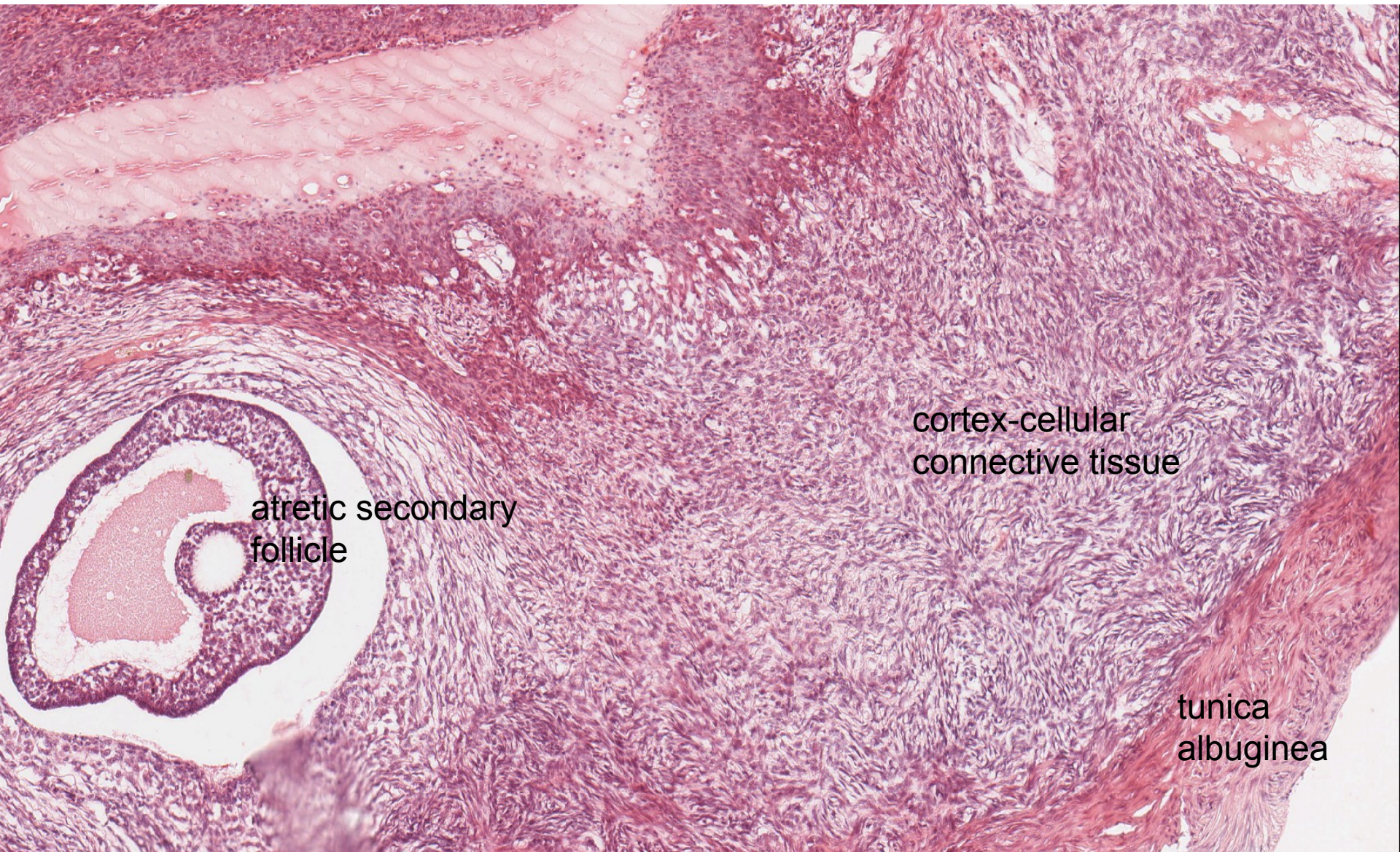
# FEMALE REPRODUCTIVE SYSTEM I

- **ovary** (ovarium, oophoron)
- **oviduct** (tuba uterina, tuba Fallopii, salpinx)
- **uterus** (uterus, metra, hystera)





ovary-human



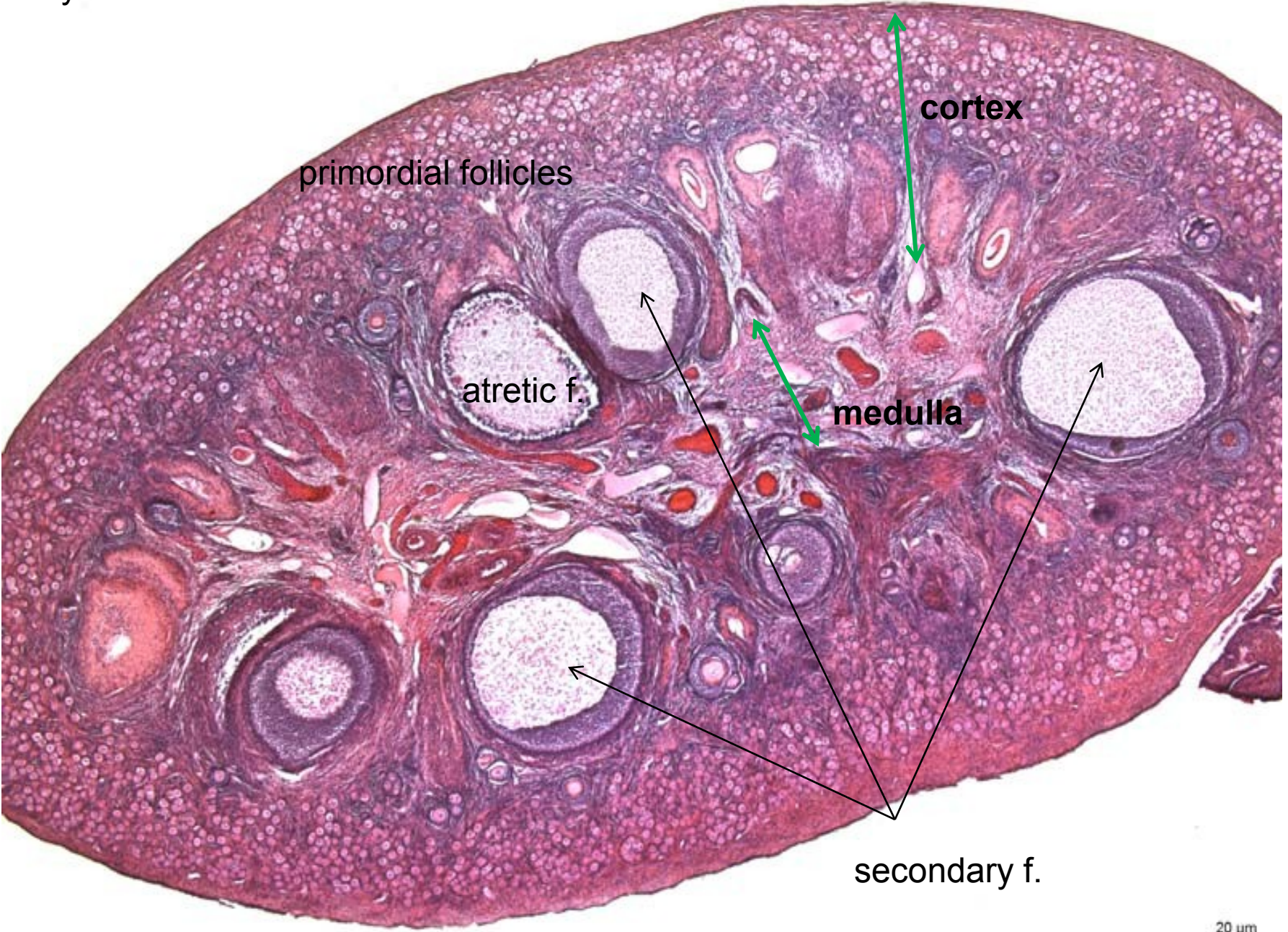
atretic secondary  
follicle

cortex-cellular  
connective tissue

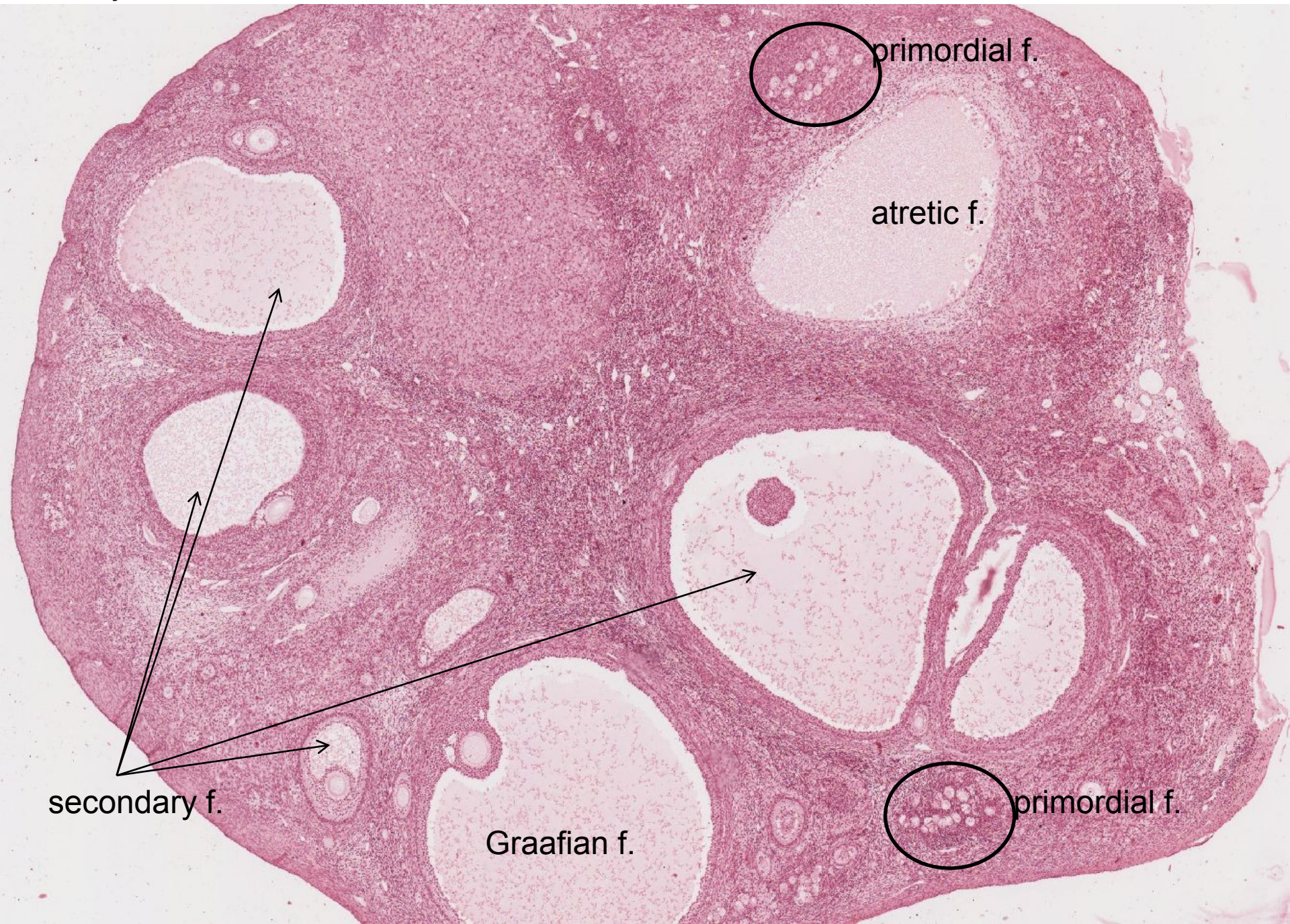
tunica  
albuginea



ovary-cat







primordial f.

atretic f.

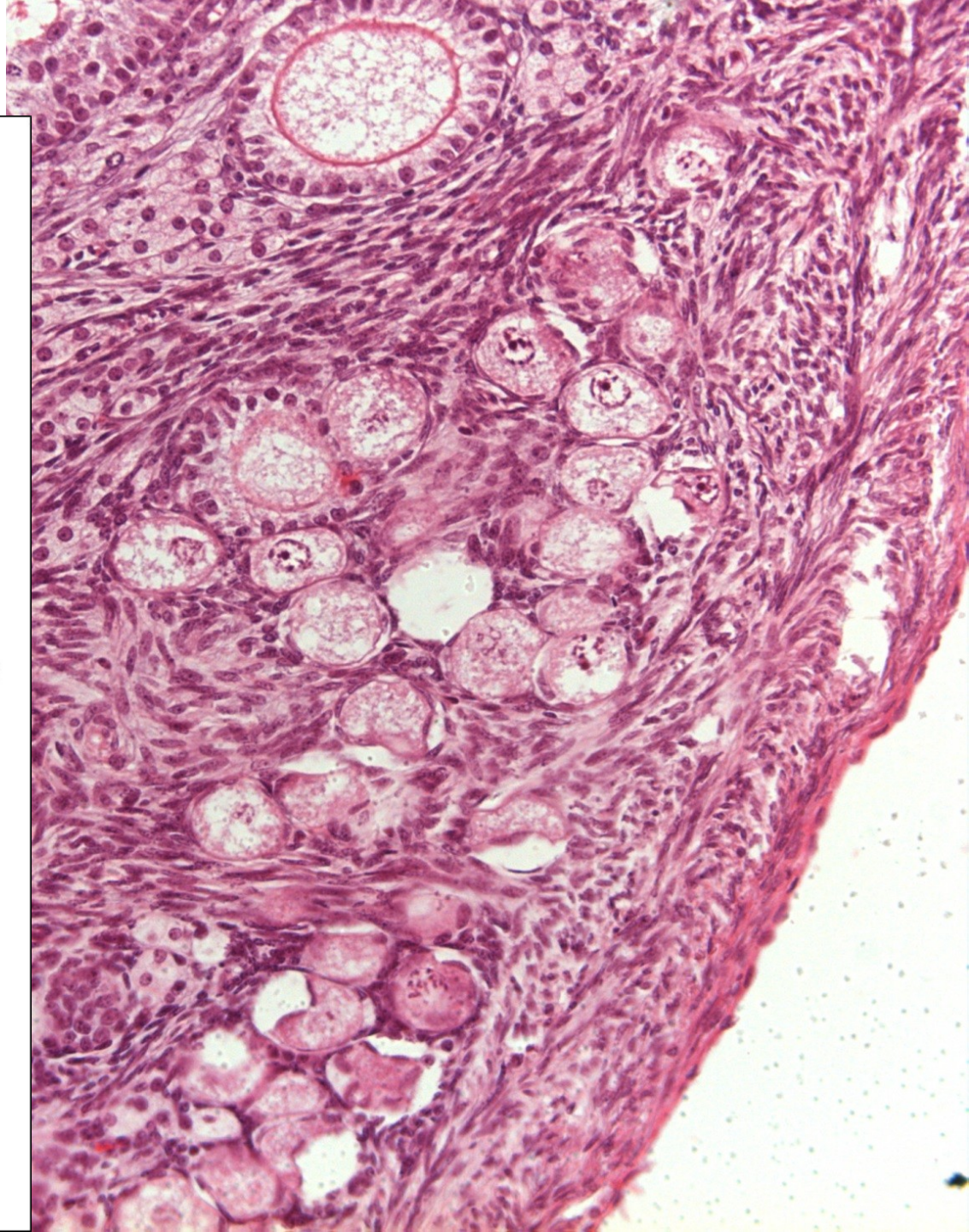
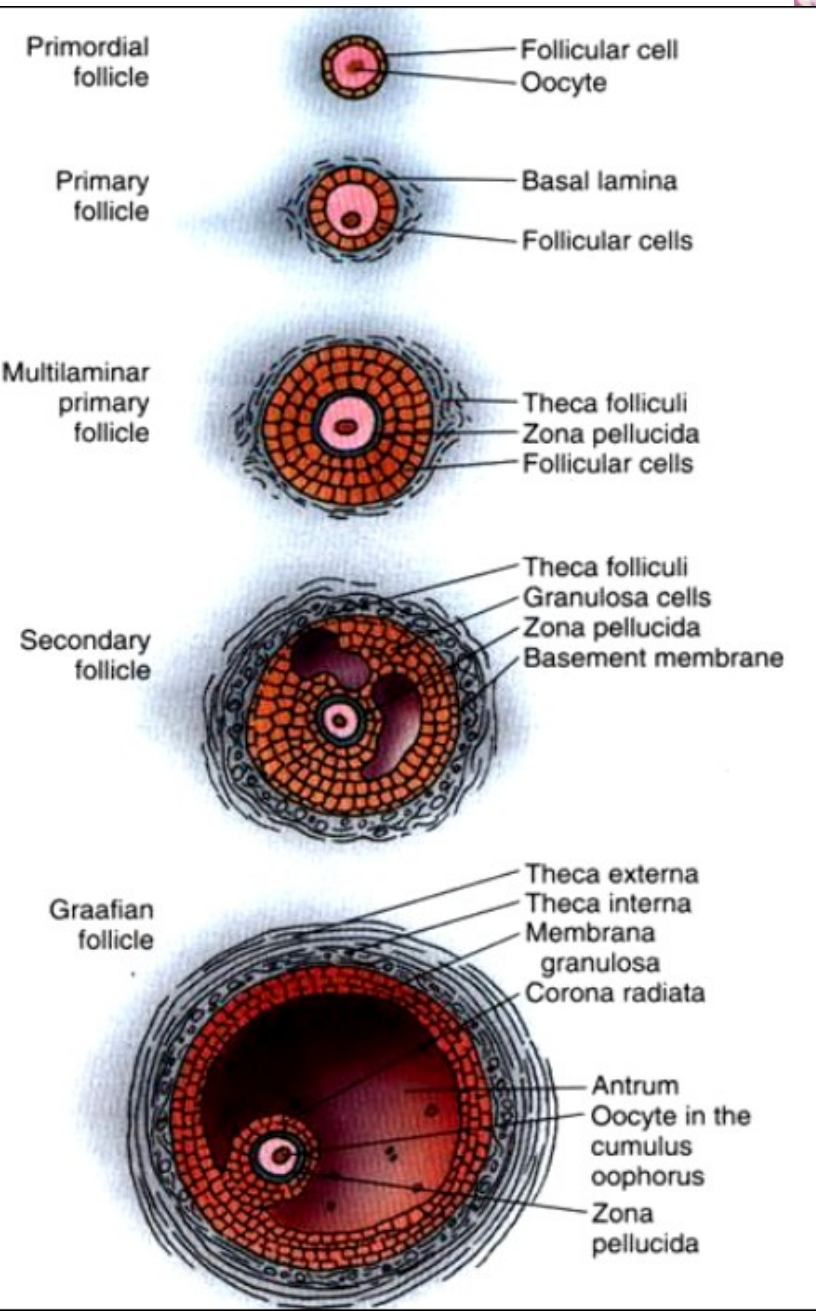
secondary f.

Graafian f.

primordial f.

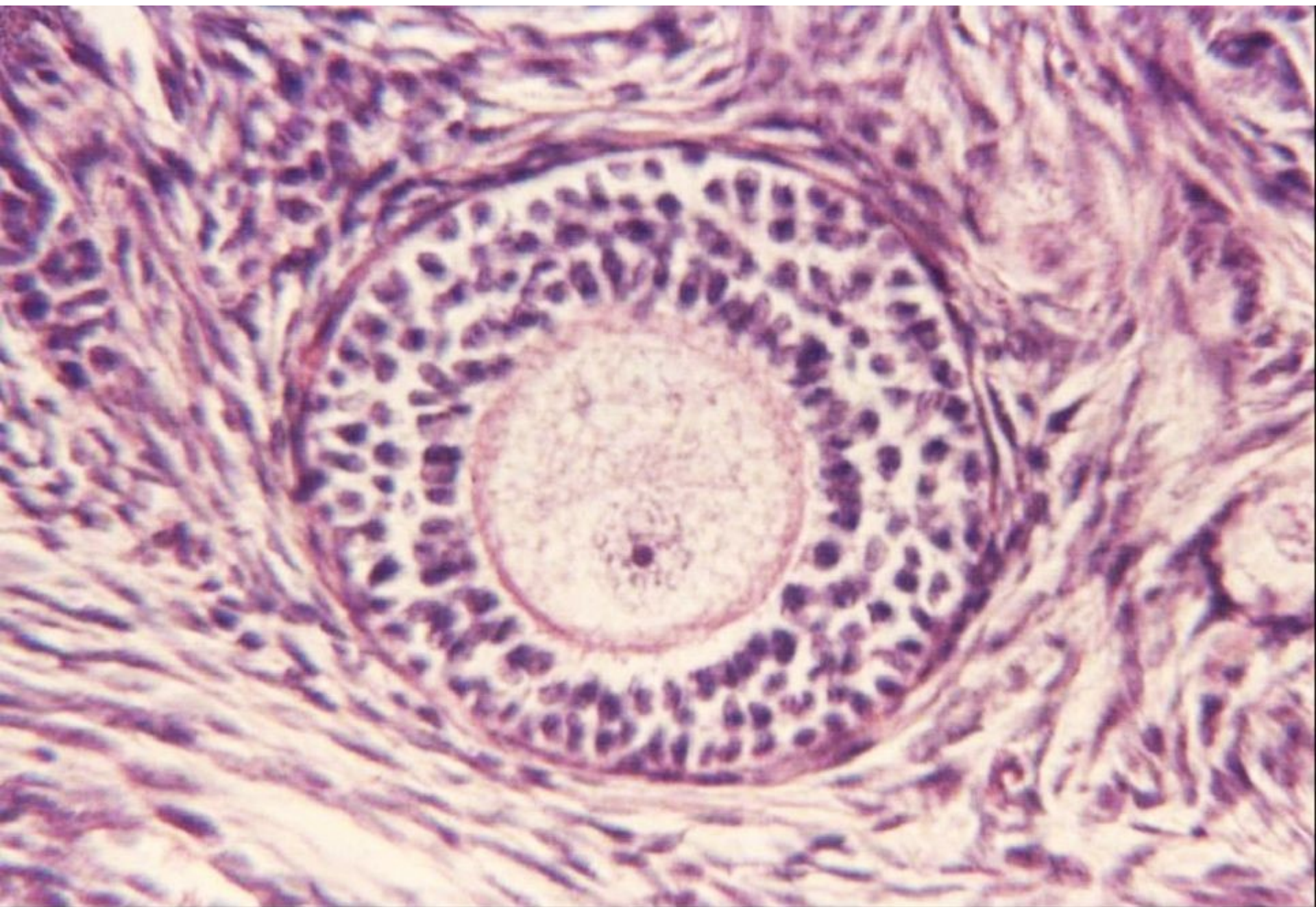


# primordial and primary unilaminar follicles





primary multilaminar follicle





ovarian follicle -TEM

fibroblasts

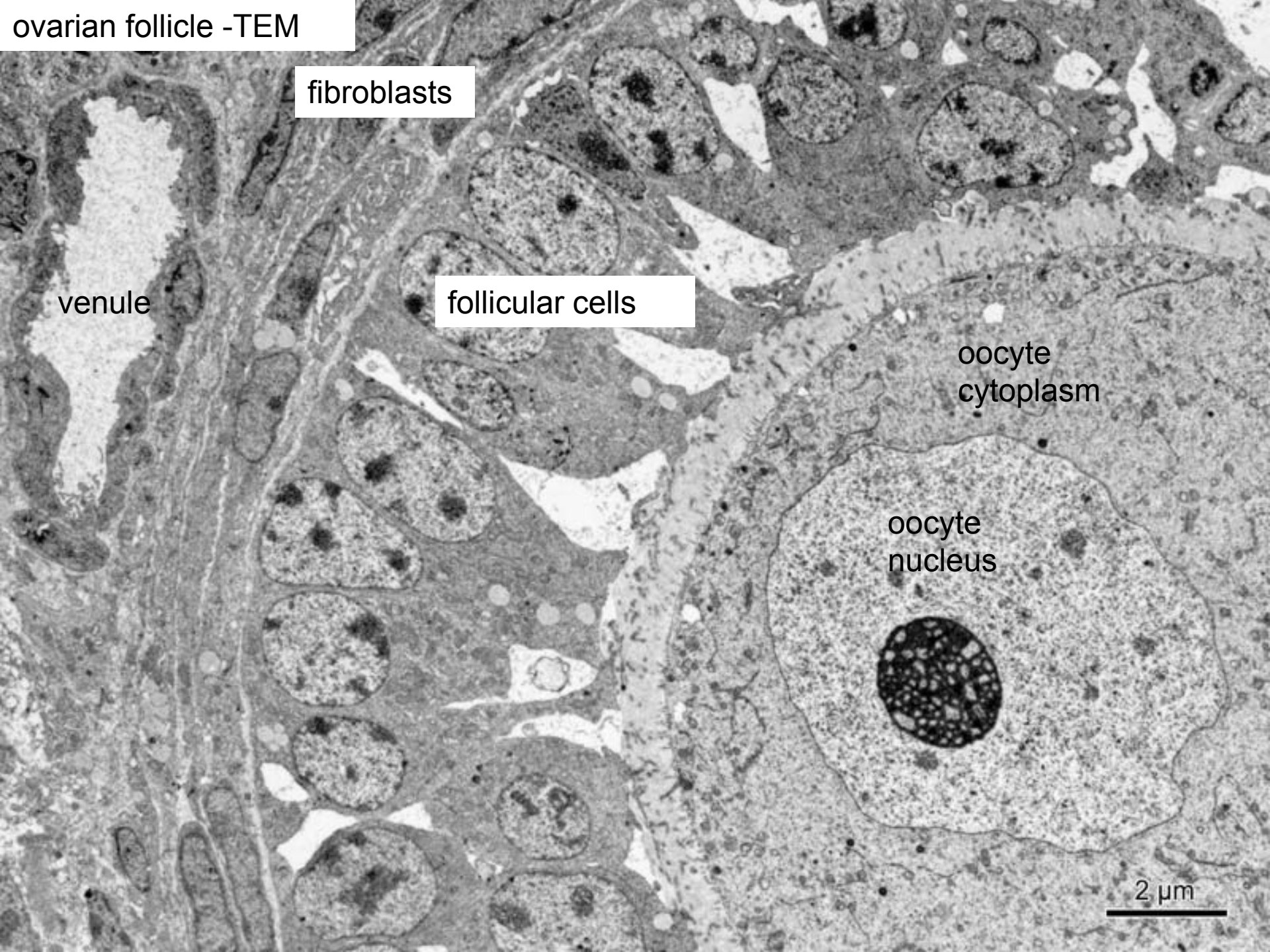
follicular cells

venule

oocyte  
cytoplasm

oocyte  
nucleus

2  $\mu$ m





secondary follicle

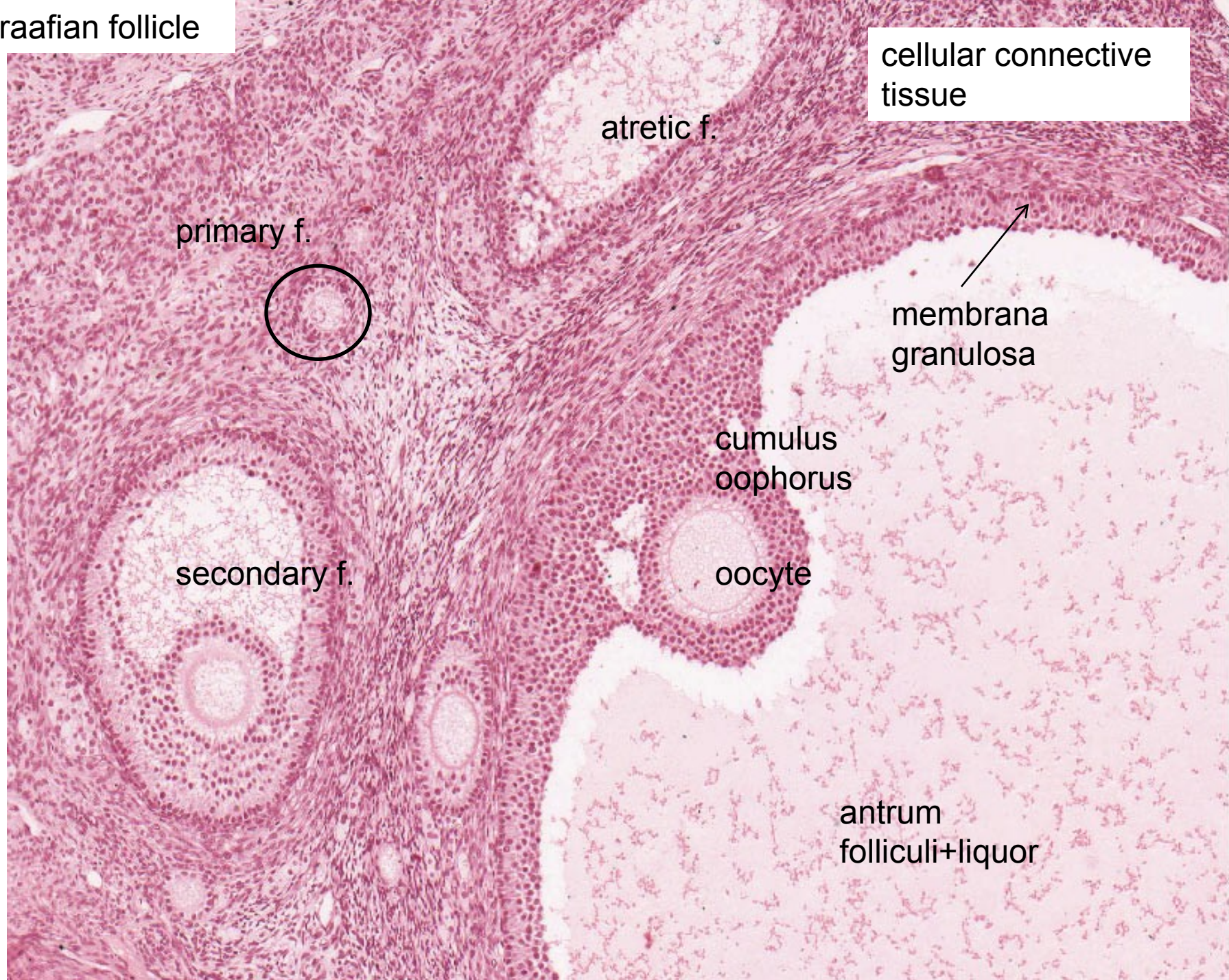


*theca f.  
interna*

*membrana  
granulosa*



# Graafian follicle





germinative epithelium



tunica albuginea

theca f. externa

theca f. interna

estrogens synthesis

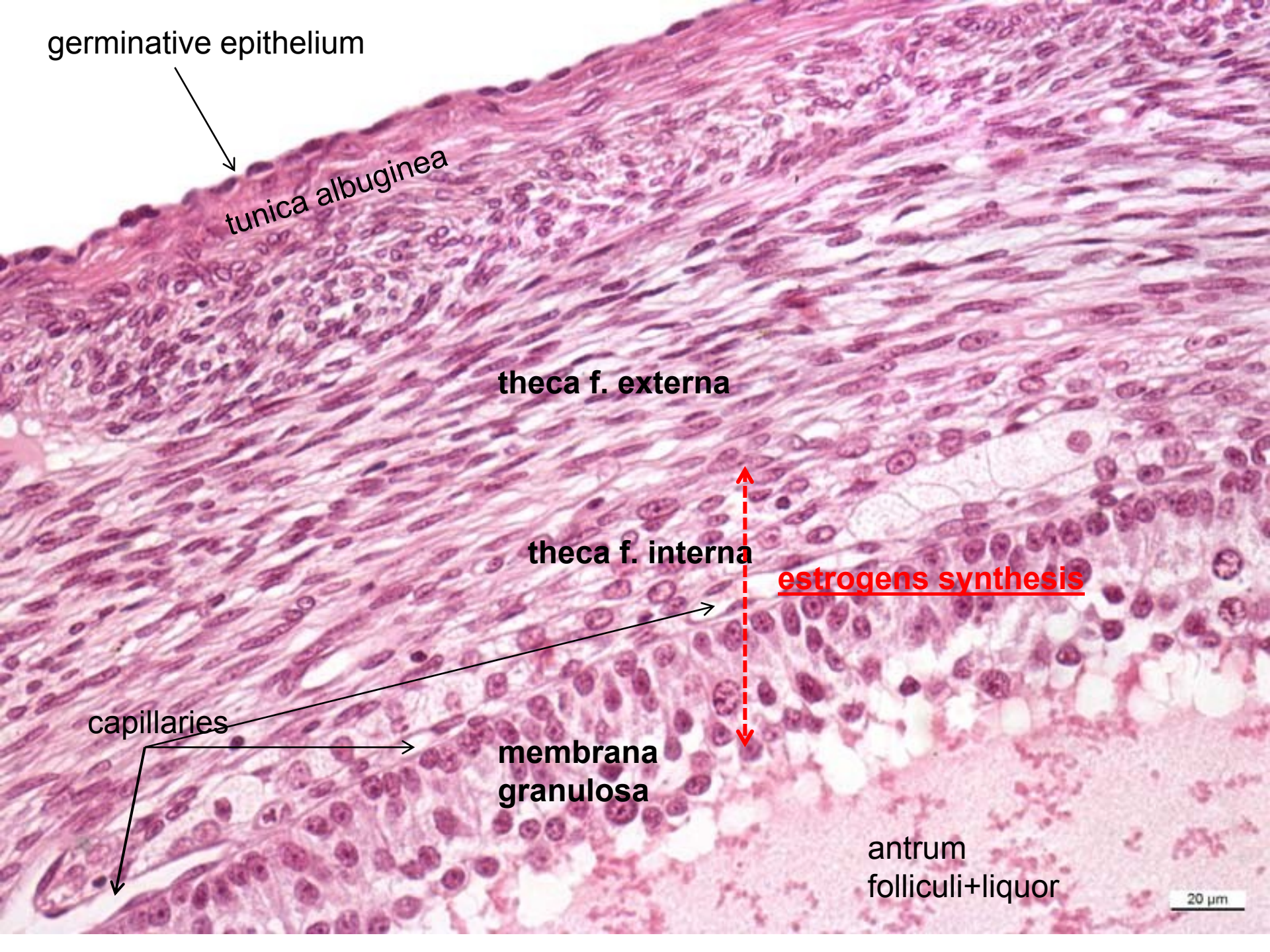
capillaries



membrana granulosa

antrum  
folliculi+liquor

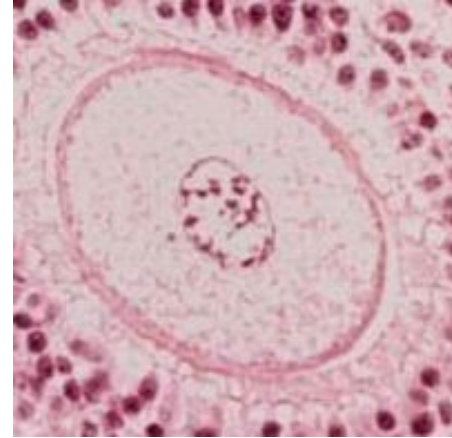
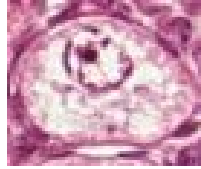
20 μm





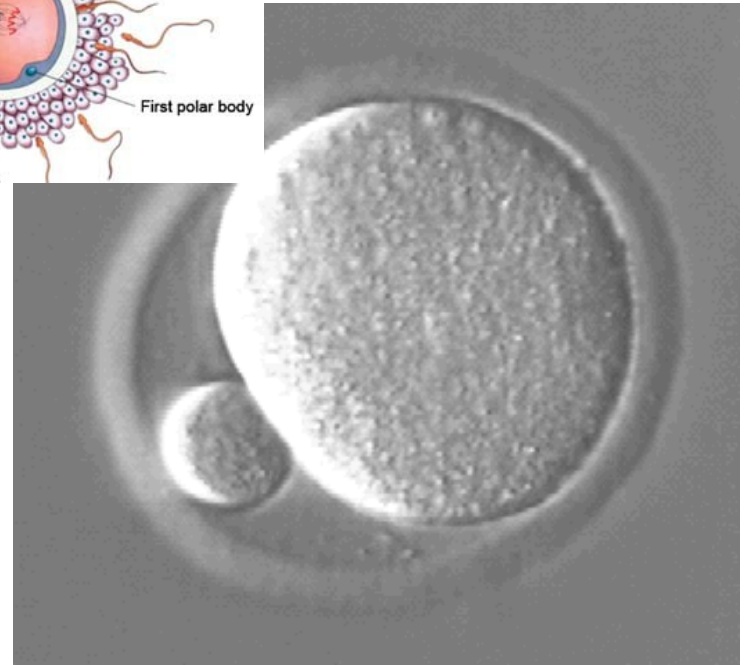
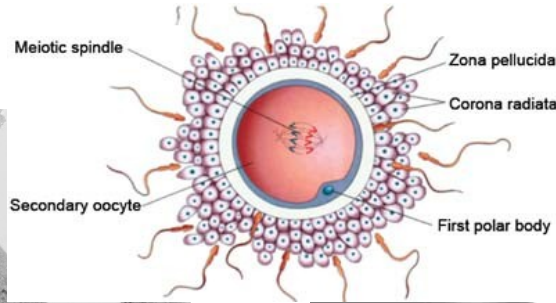
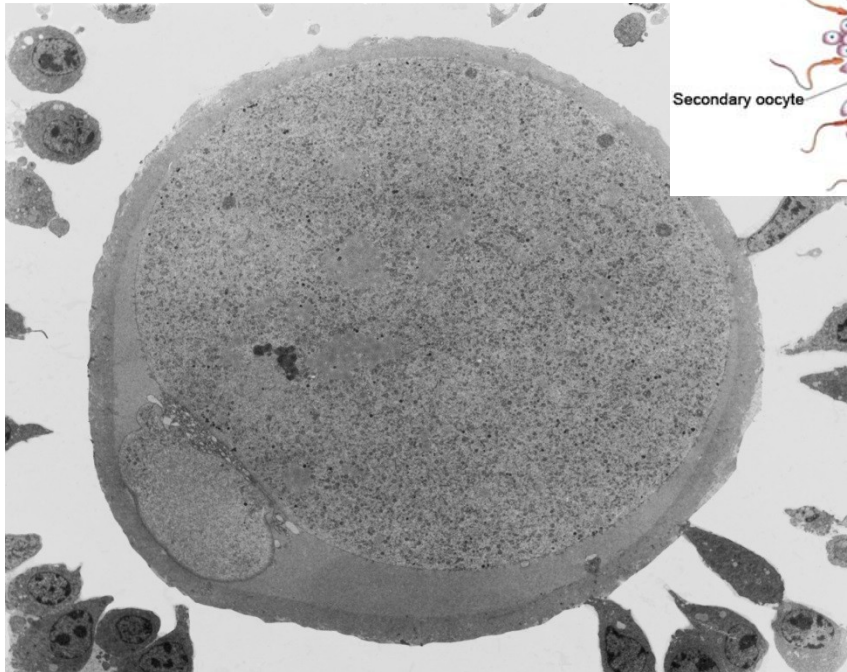
# oocyte during 1st meiotic division

30  $\mu\text{m}$



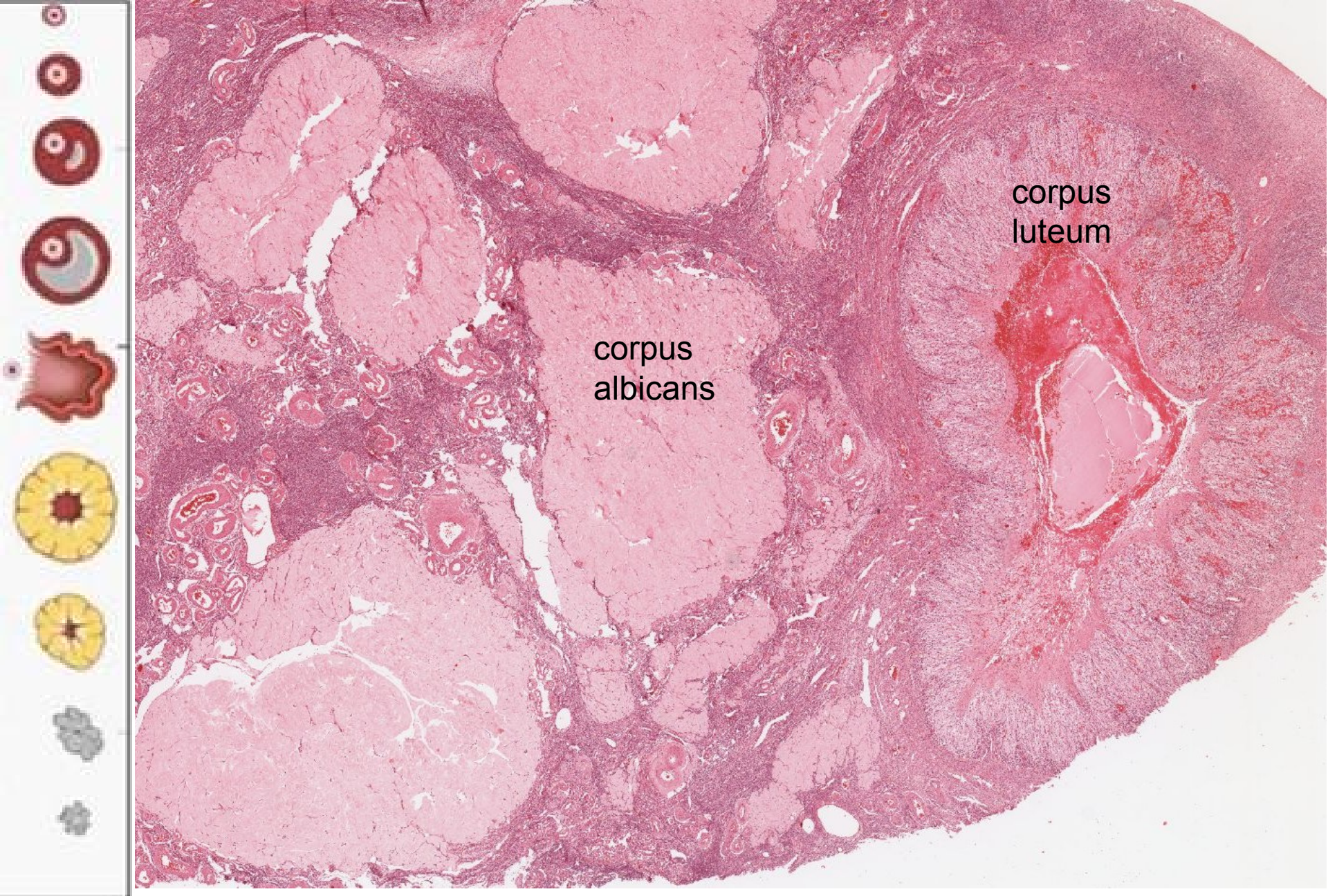
130  $\mu\text{m}$

# oocyte during ovulation





ovary-corpora luteum





ovary-corpus luteum



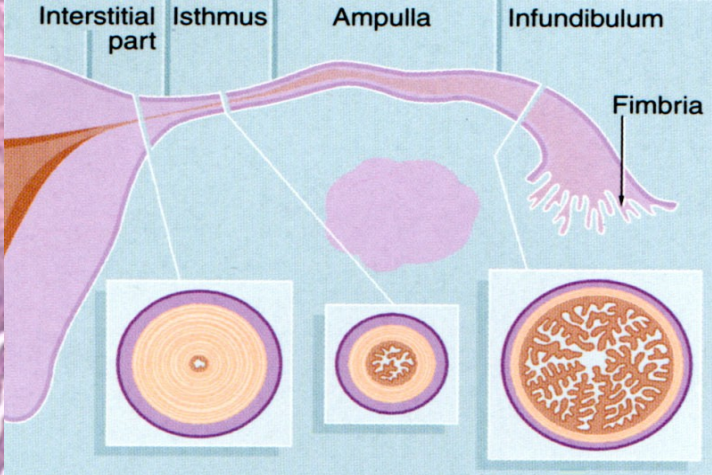
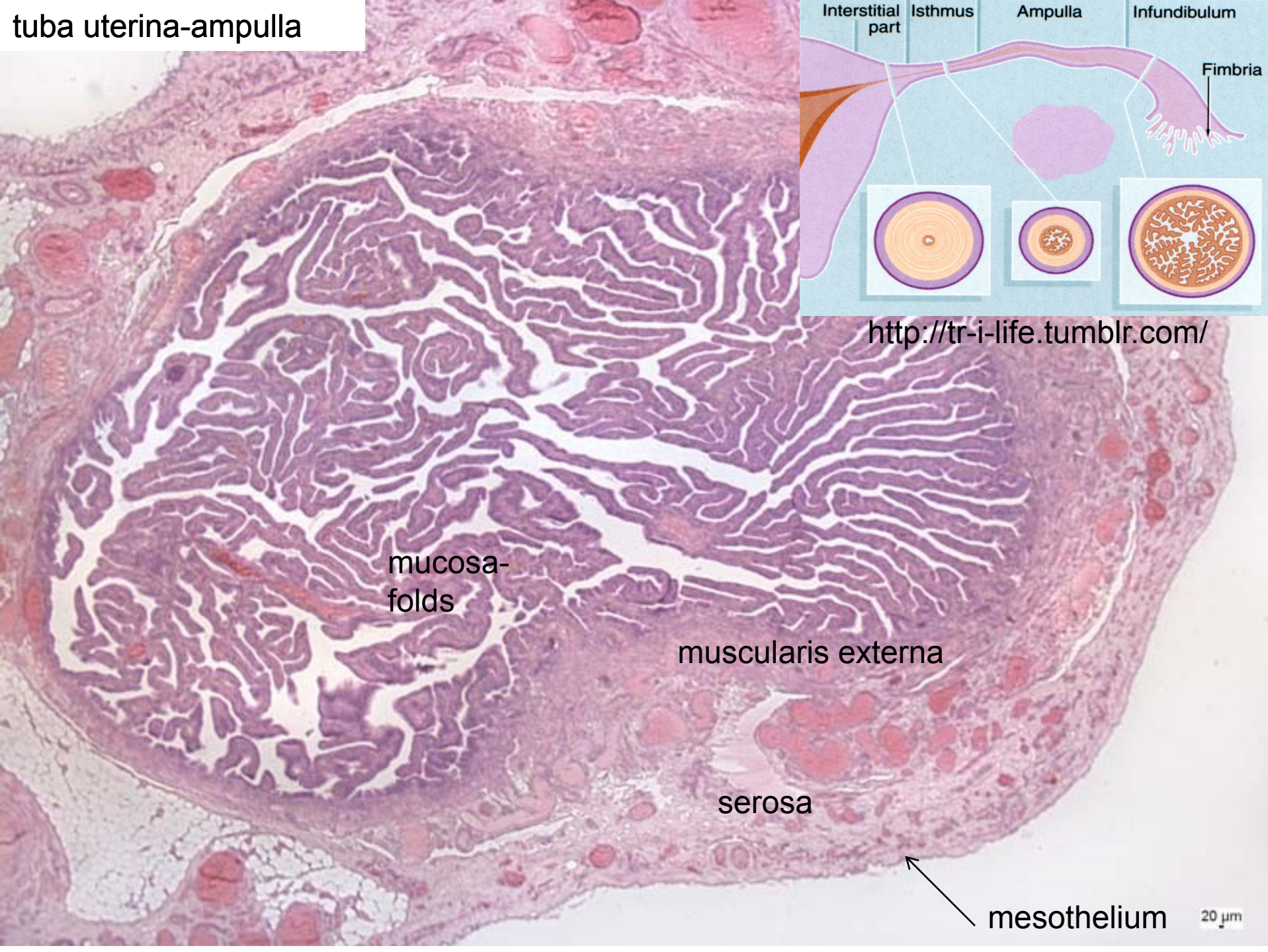
granulosa-lutein cells

blood coagulum

theca-lutein cells



tuba uterina-ampulla



<http://tr-i-life.tumblr.com/>

mucosa-folds

muscularis externa

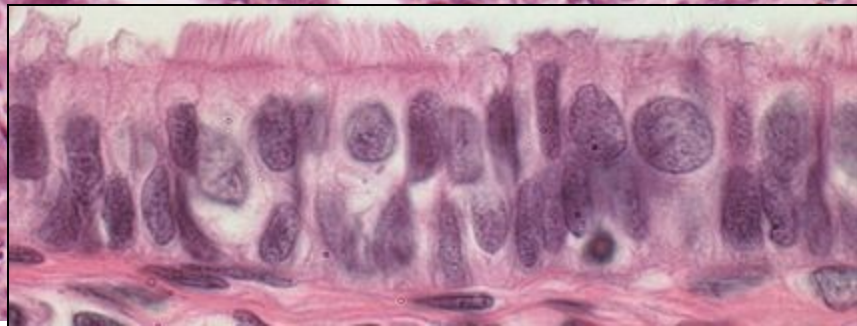
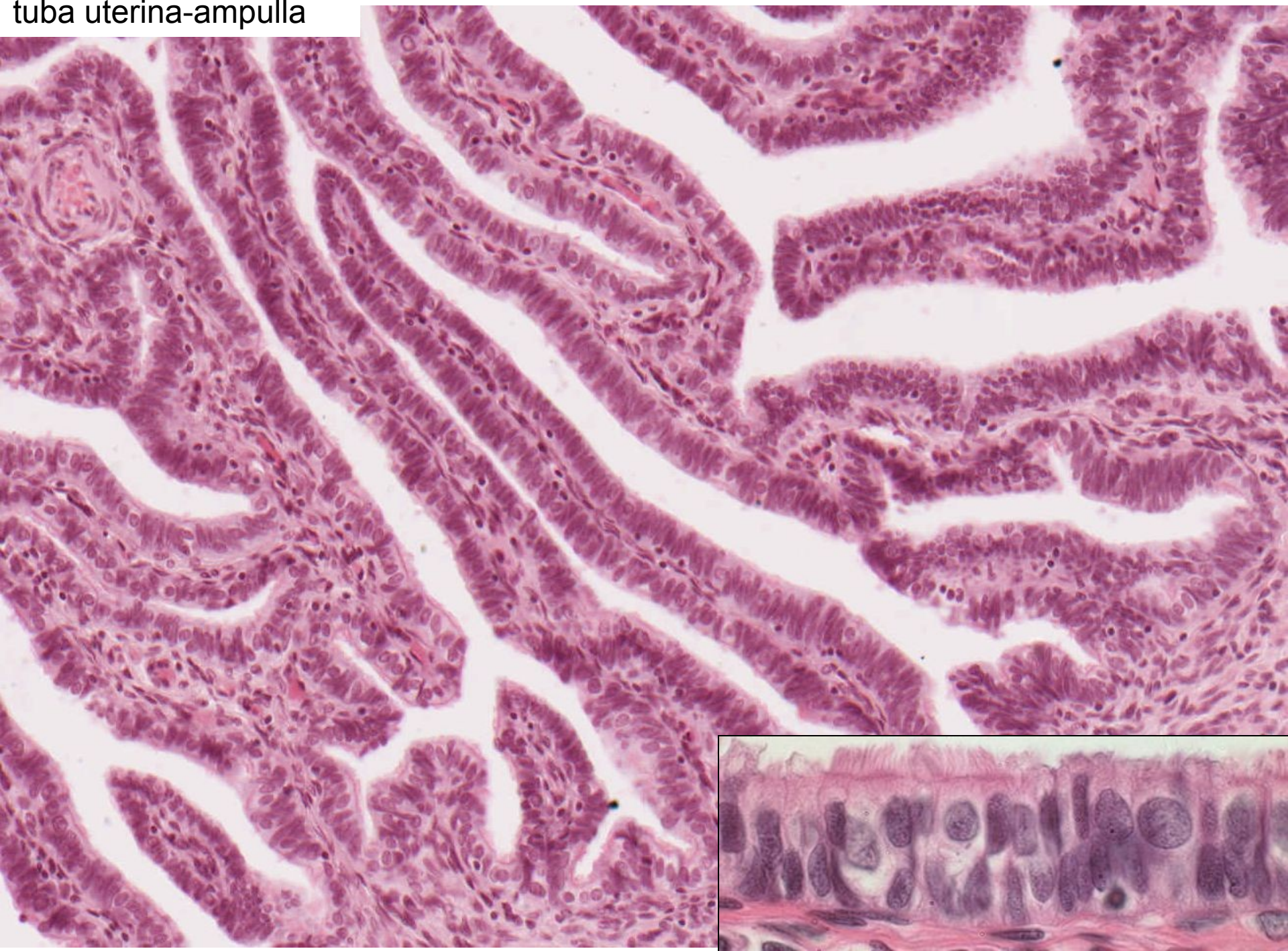
serosa

mesothelium

20 μm

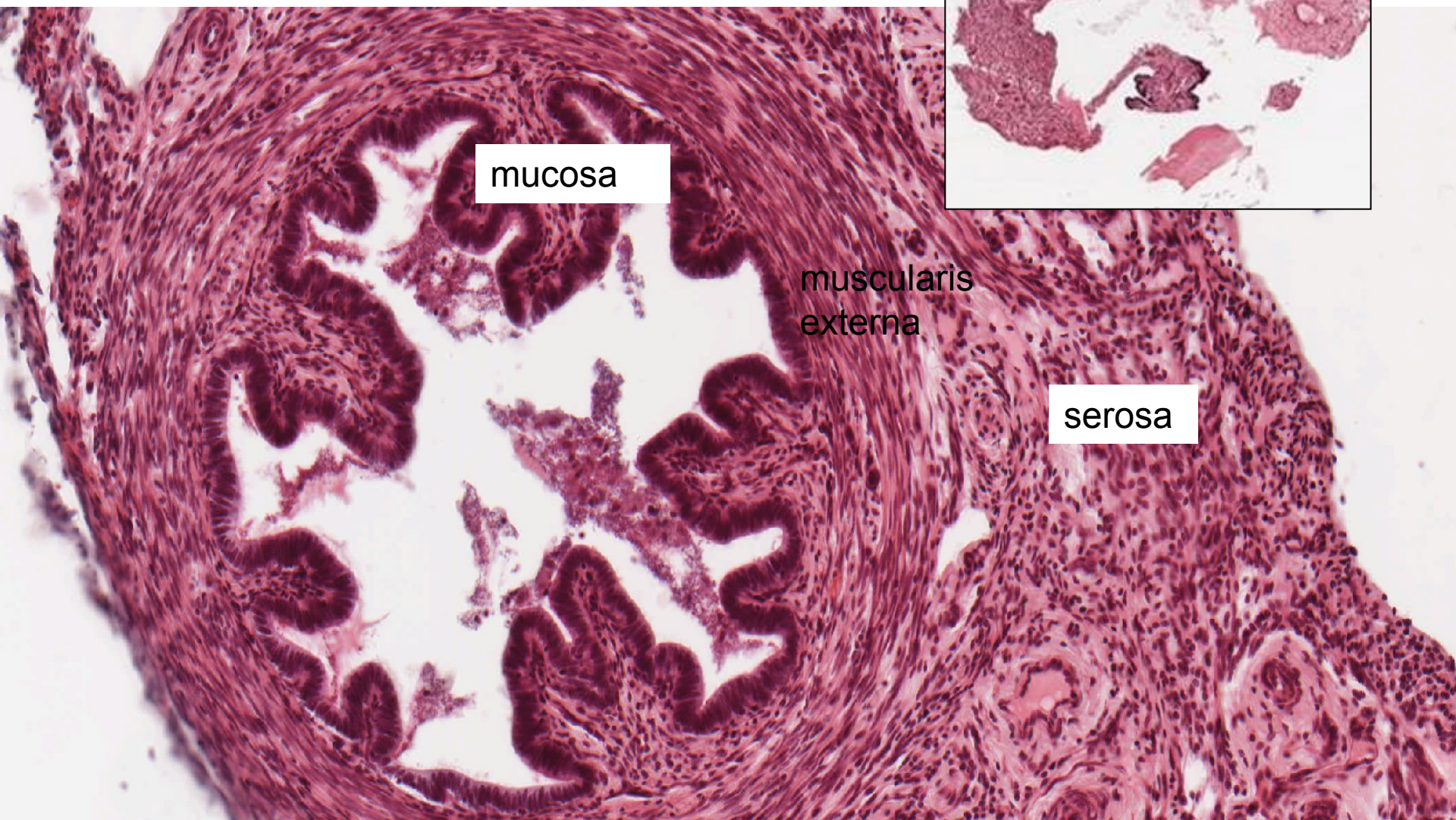


tuba uterina-ampulla





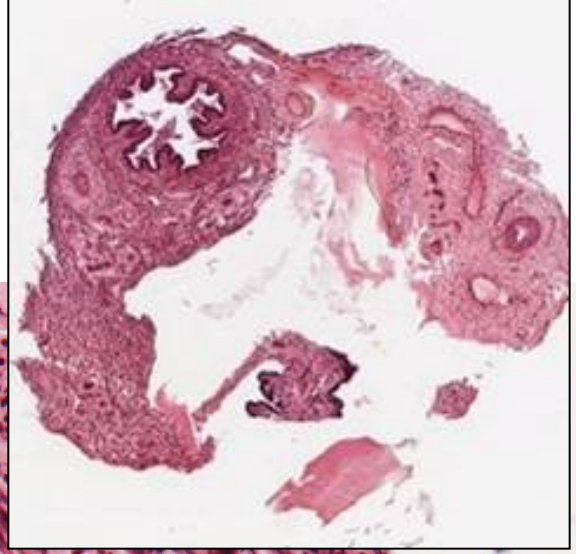
tuba uterina-isthmus



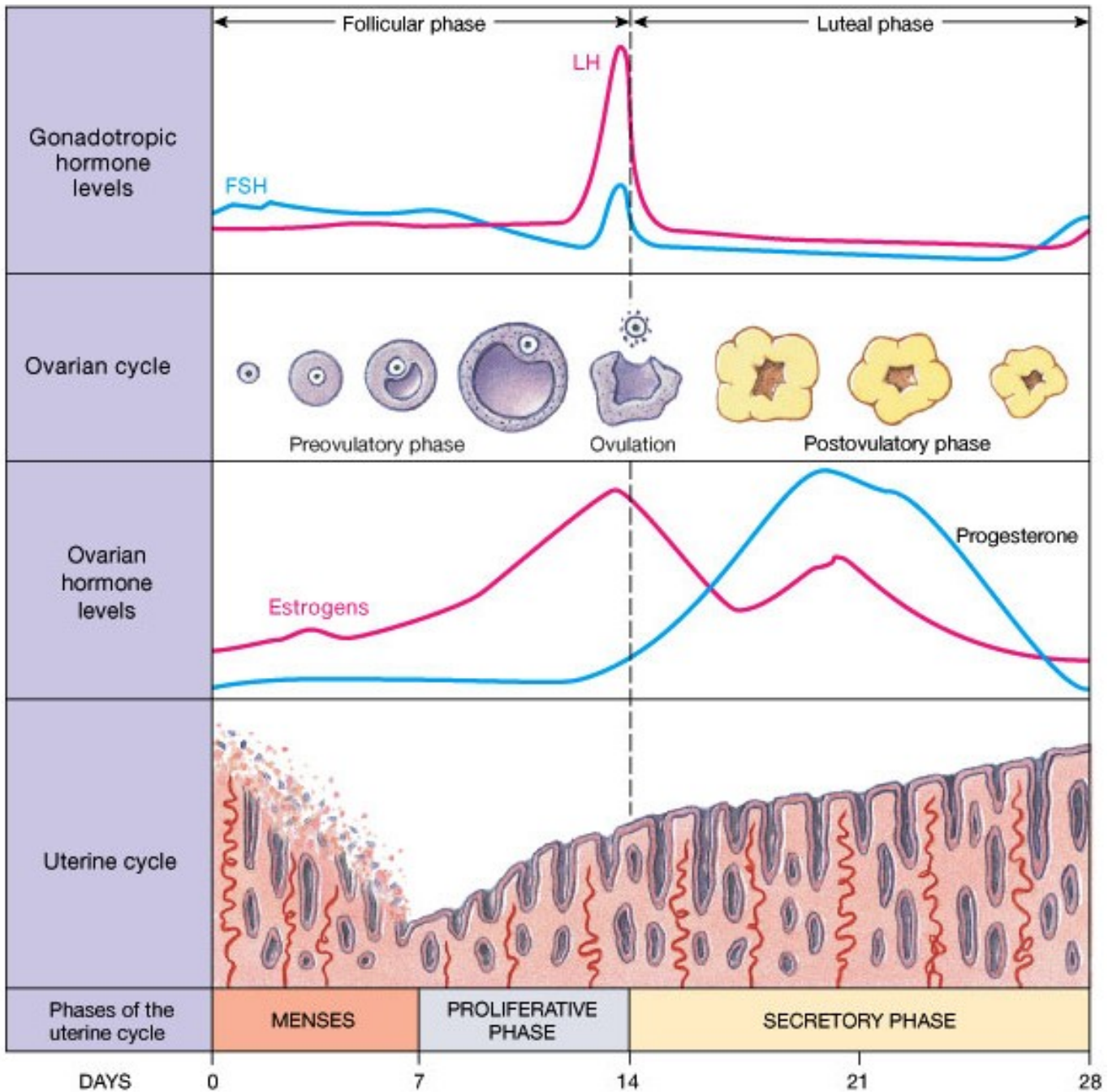
mucosa

muscularis  
externa

serosa

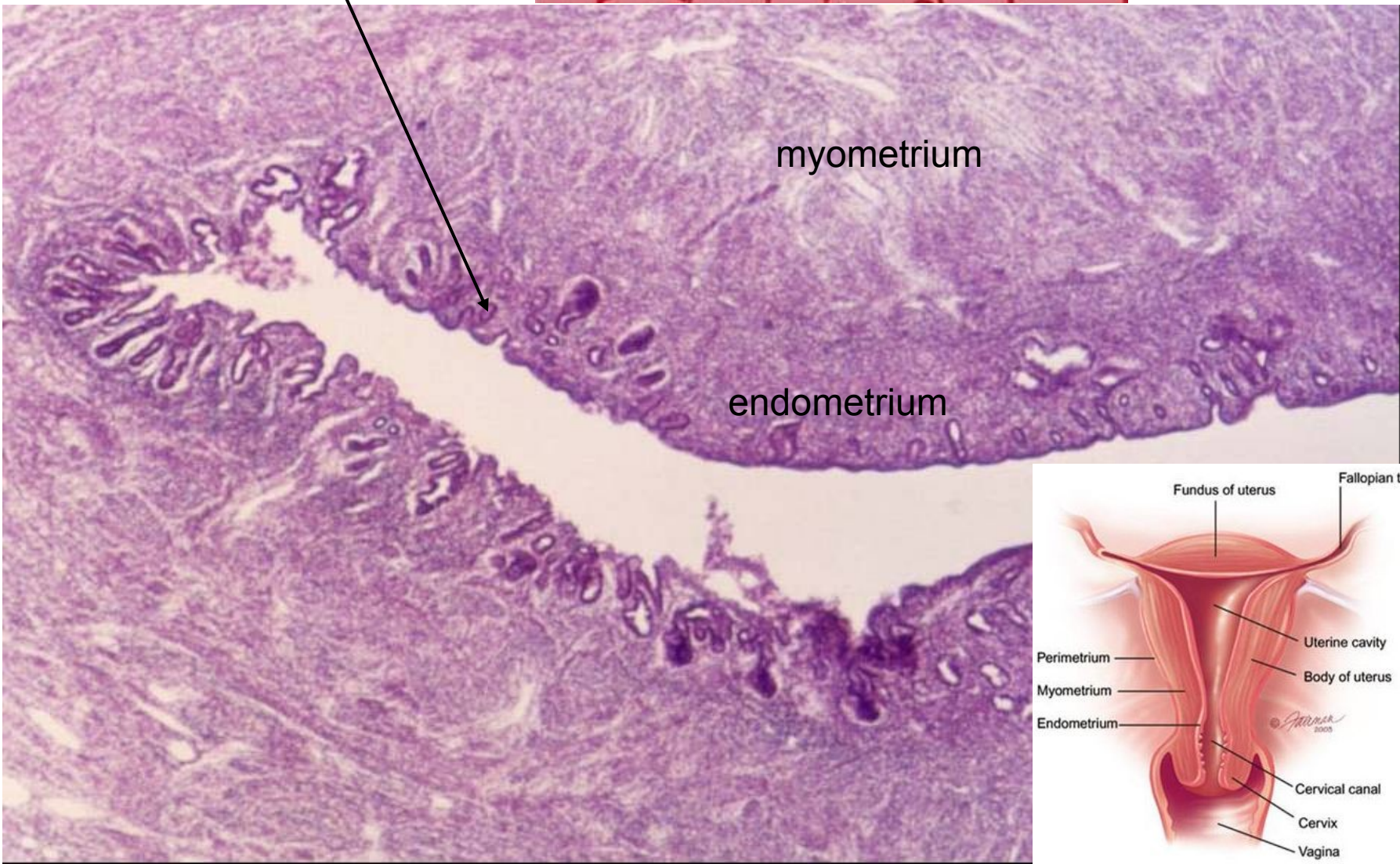
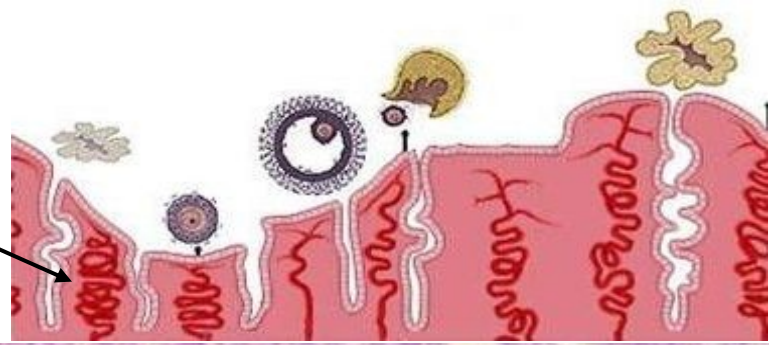






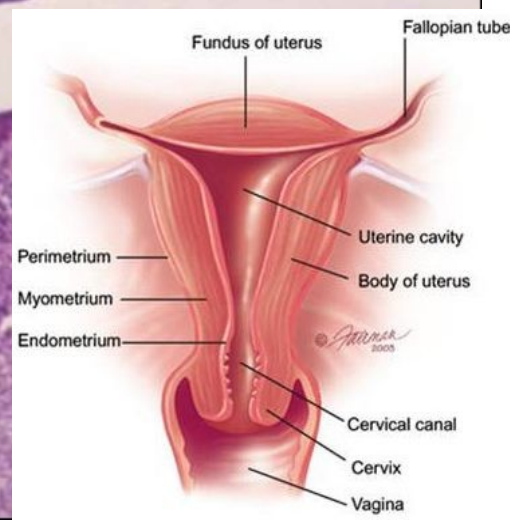


# Ovarian and menstrual cycle



myometrium

endometrium



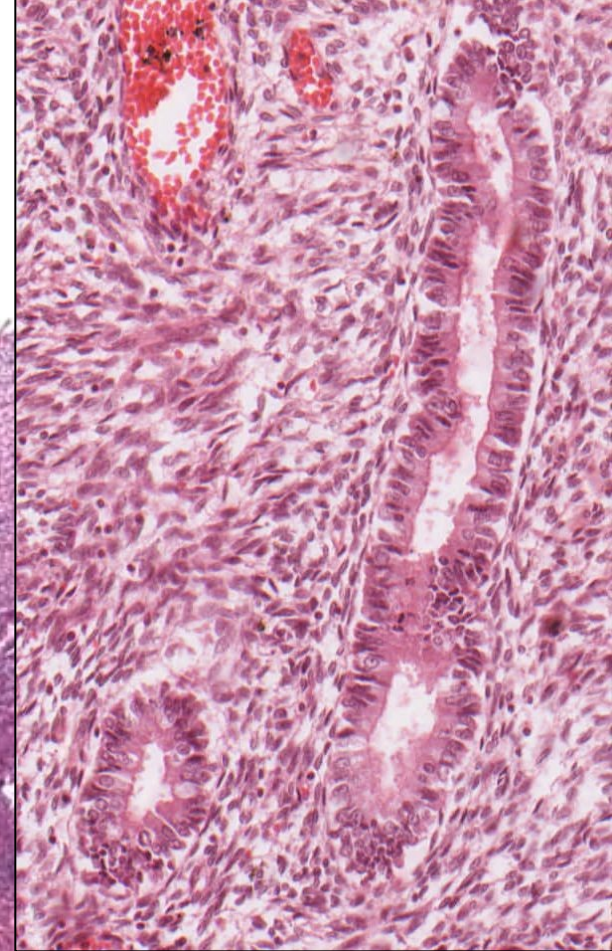


**Endometrium – proliferative phase  
– glandulae uterinae**

3-4  
mm

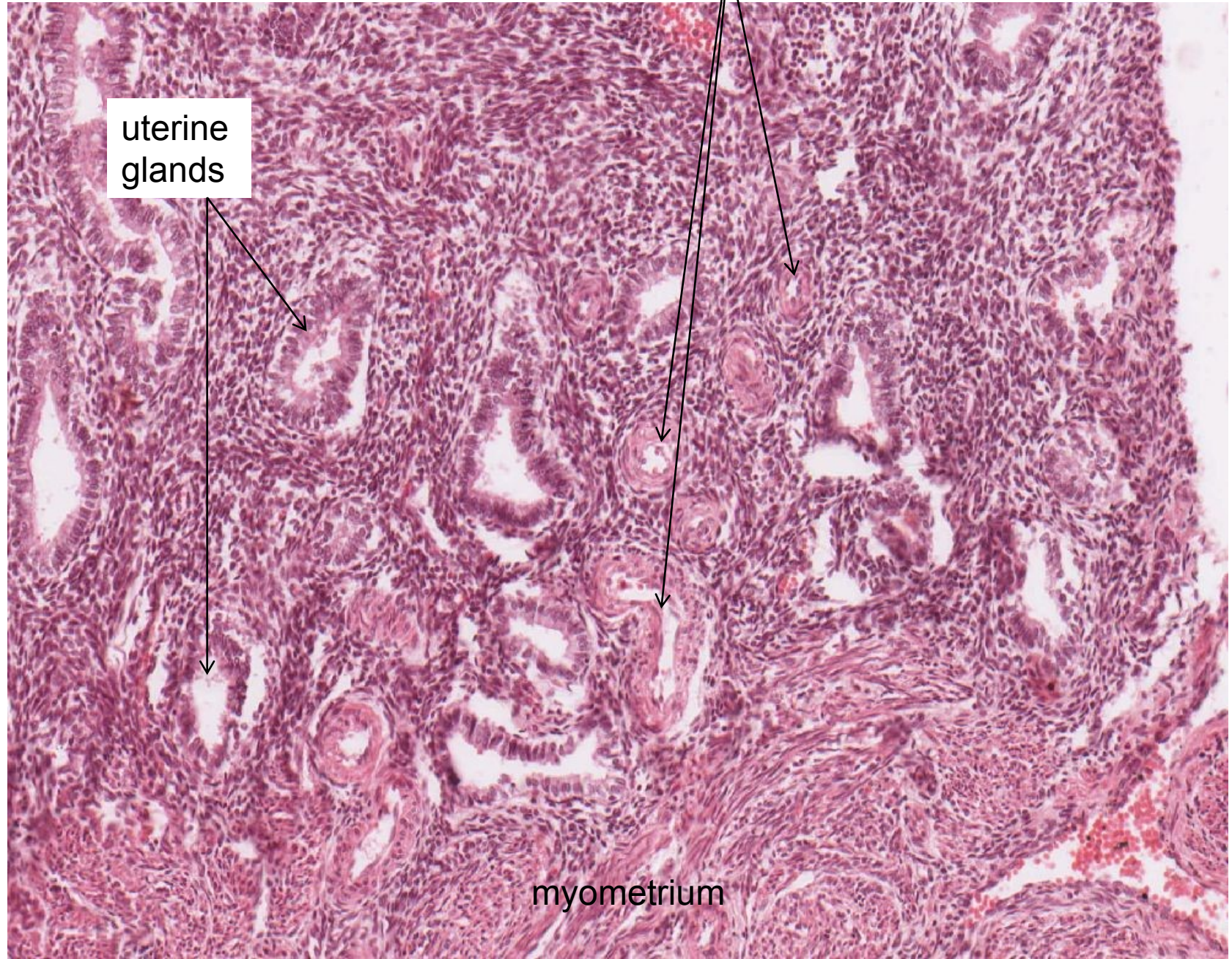
Zona functionalis

Zona basalis



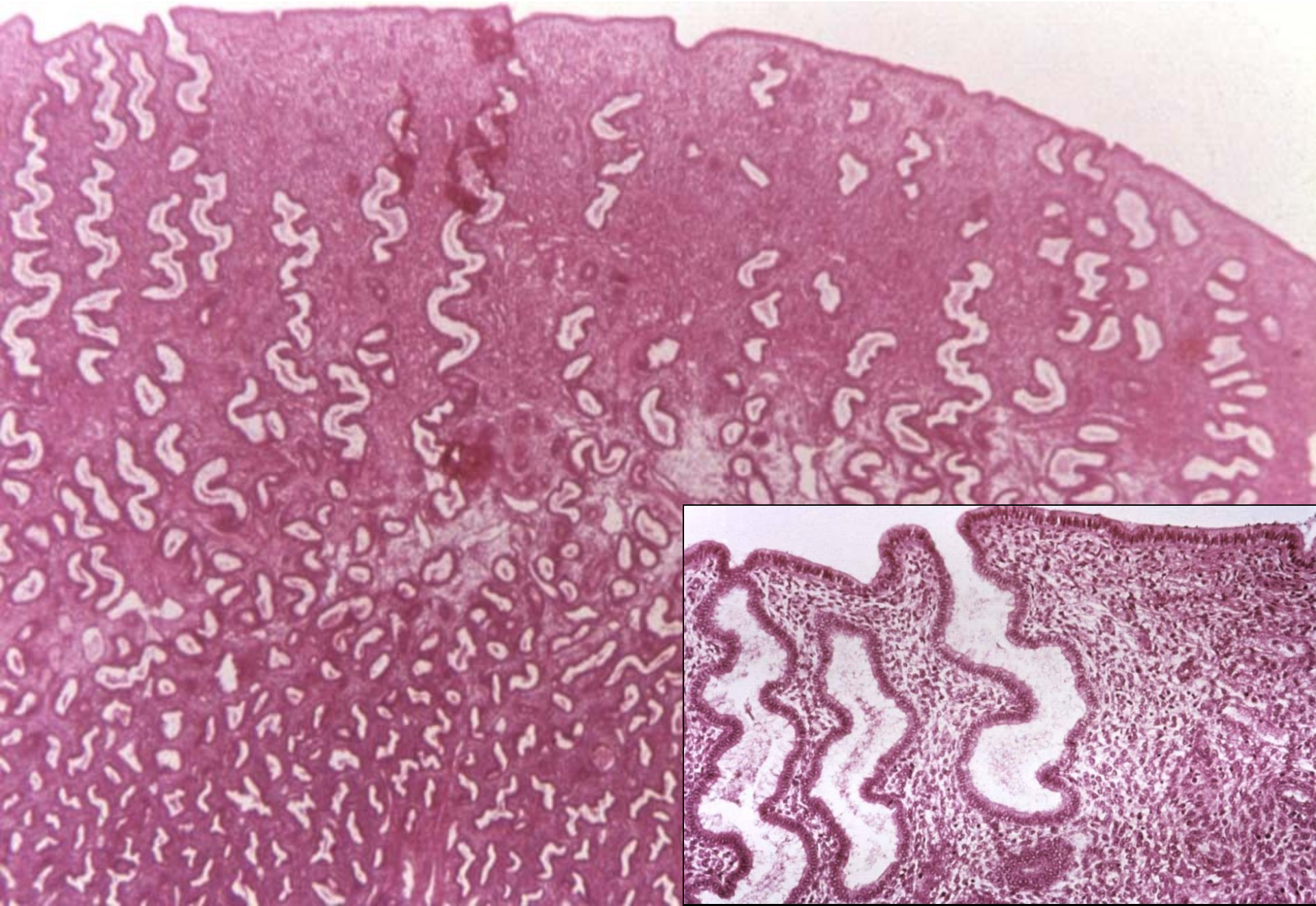


**Endometrium – proliferative phase – arteriae helicinae, connective tissue stroma rich in cells**





## Endometrium – early secretory phase



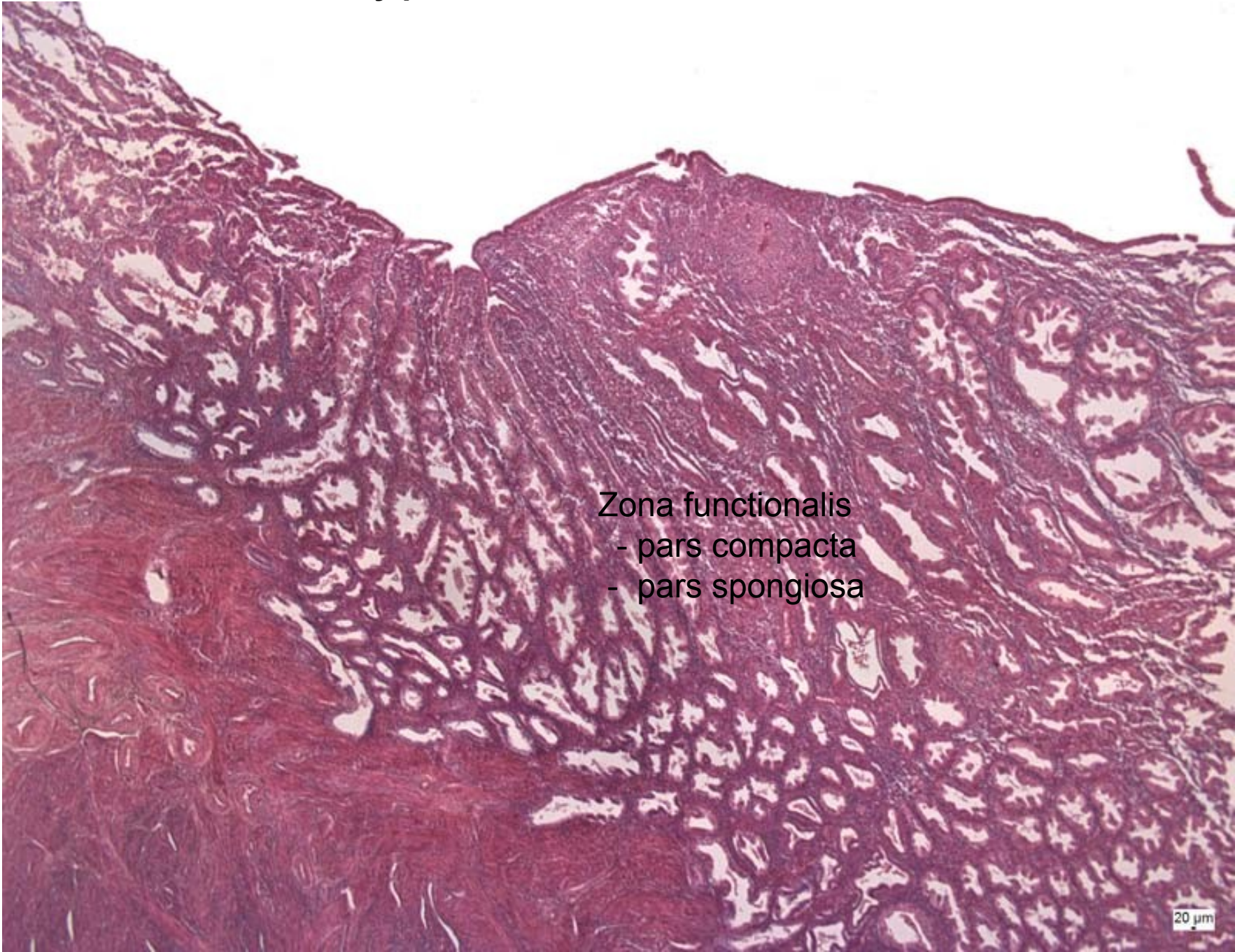


# Endometrium – midsecretory phase

5-7  
mm

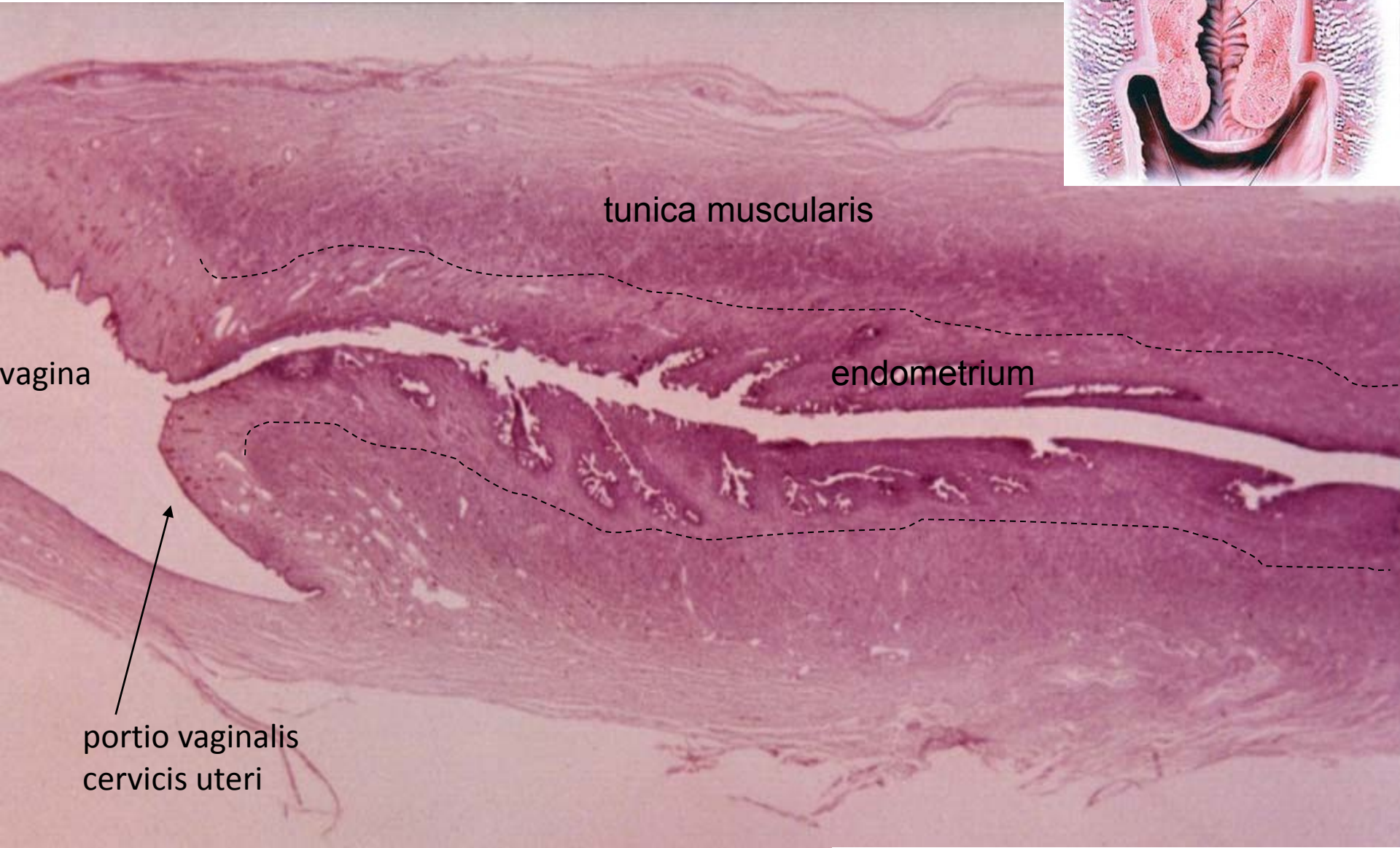
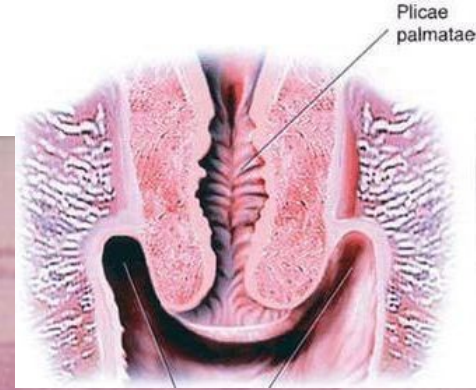
Zona functionalis  
- pars compacta  
- pars spongiosa

20  $\mu$ m





# Cervix uteri



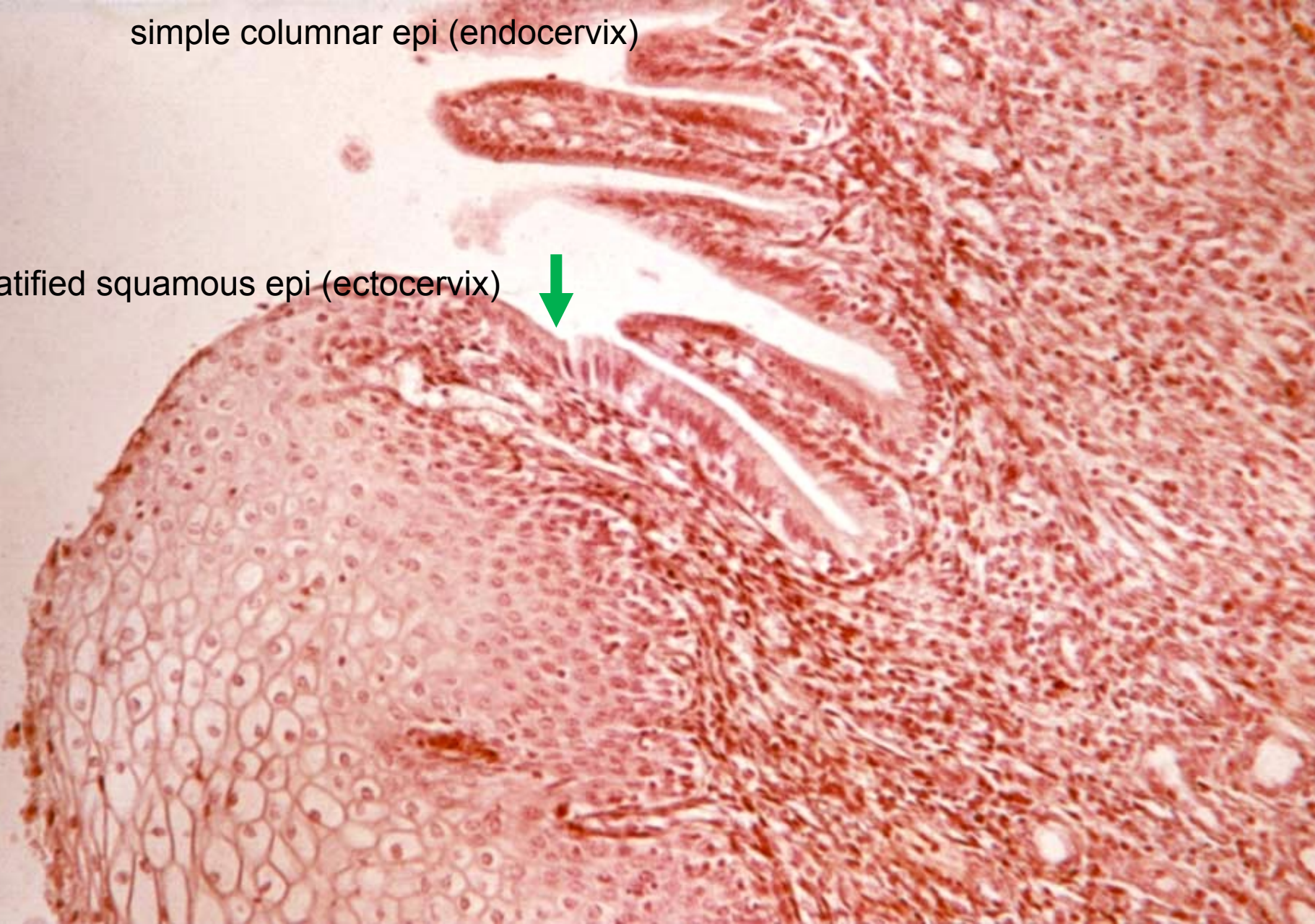
**cervical glands – cervical mucus**



# Portio vaginalis cervicis uteri - squamocolumnar junction

simple columnar epi (endocervix)

stratified squamous epi (ectocervix)







# FEMALE REPRODUCTIVE SYSTEM I

## Slides:

- 42. Ovarium
- 43. Ovarium – cat
- 44. Corpus luteum
- 45. Tuba uterina – ampulla
- 46. Tuba uterina – isthmus
- 47. Uterus – proliferative phase
- 48. Uterus – secretory phase

## Atlas EM:

- Human primary ovarian follicle (72)
- From gametes to early embryo (74)