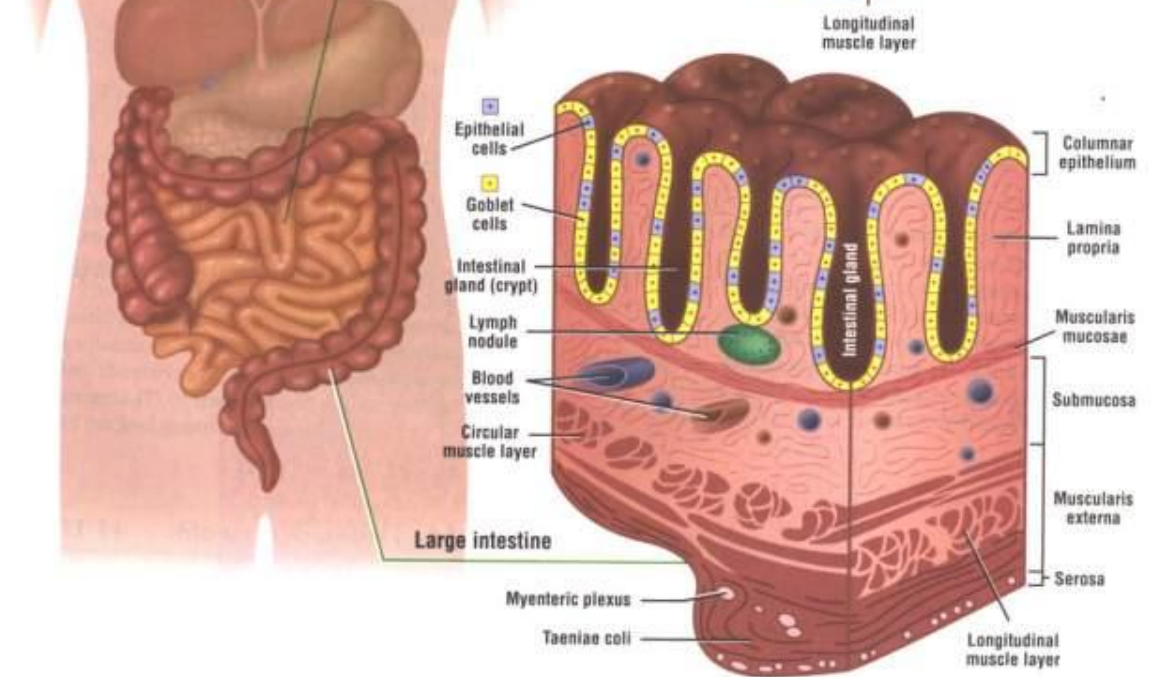
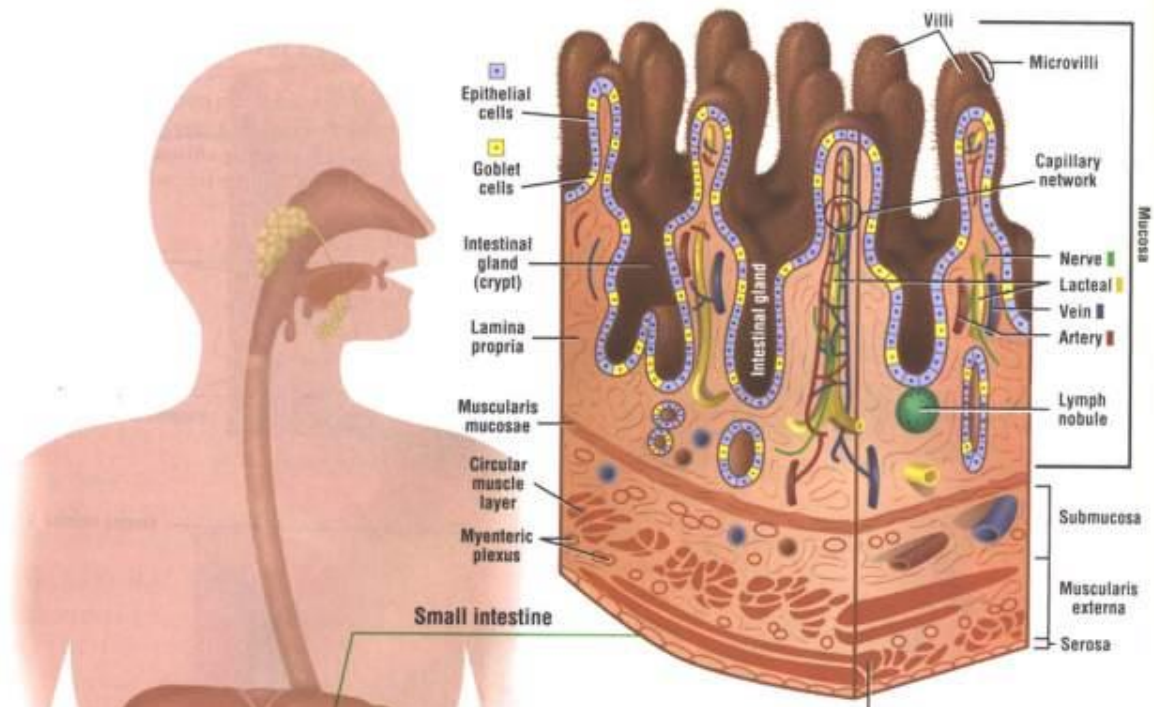


Cell Structure I

VIBS 443/602



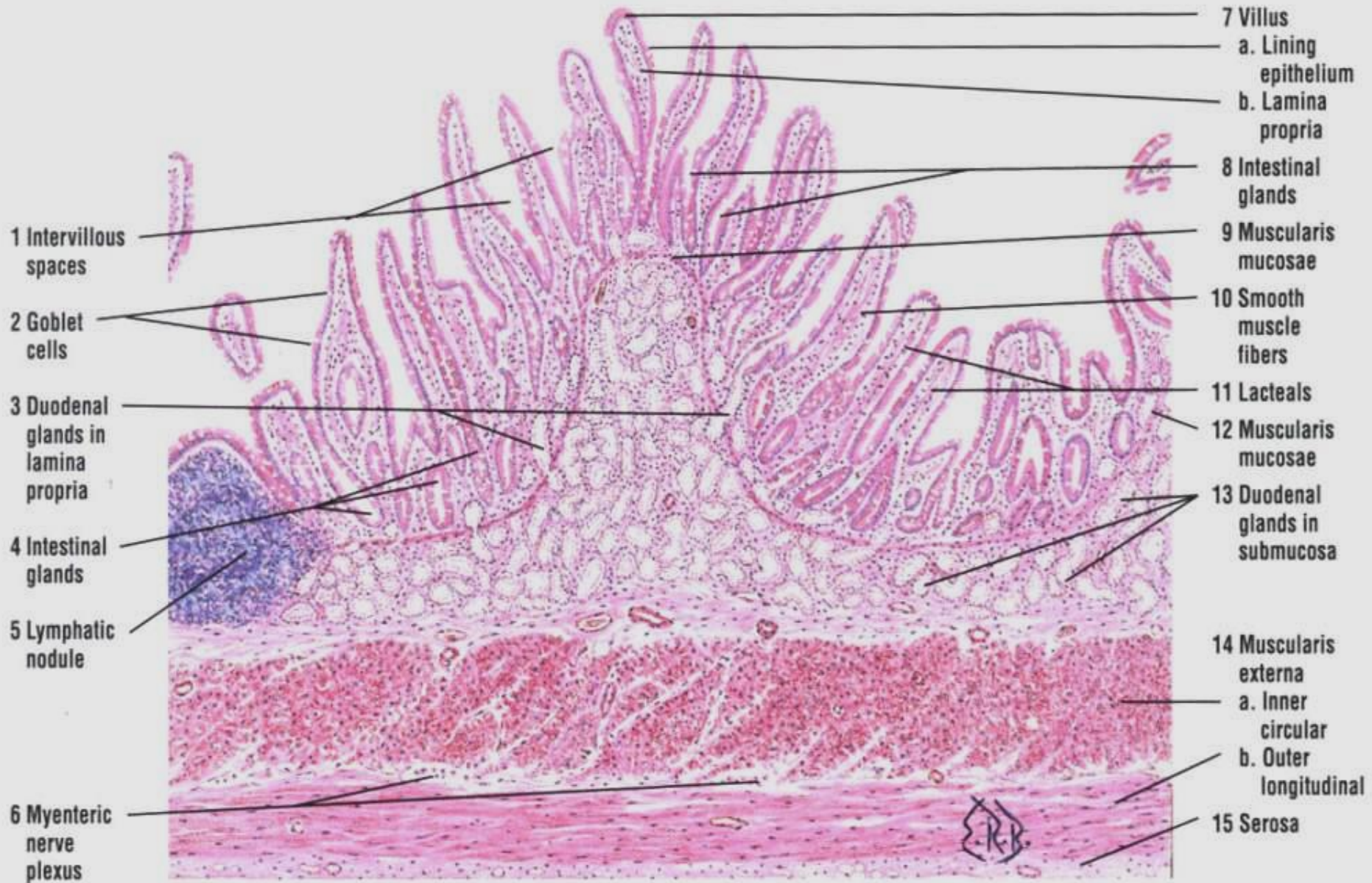
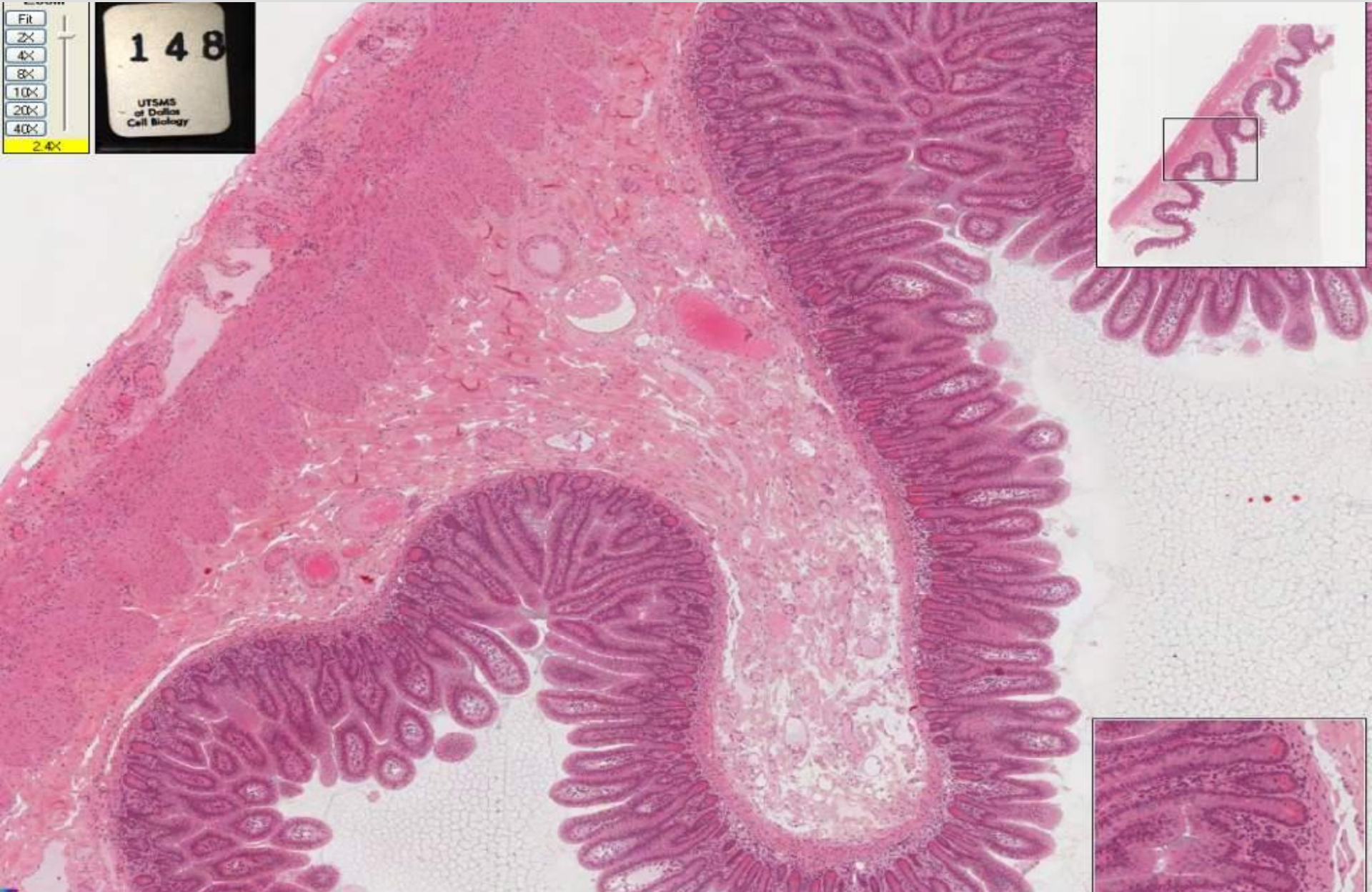


Fig. 12-1 Small Intestine: Duodenum (longitudinal section). Stain: hematoxylin-eosin. Low magnification.

148

Ileum



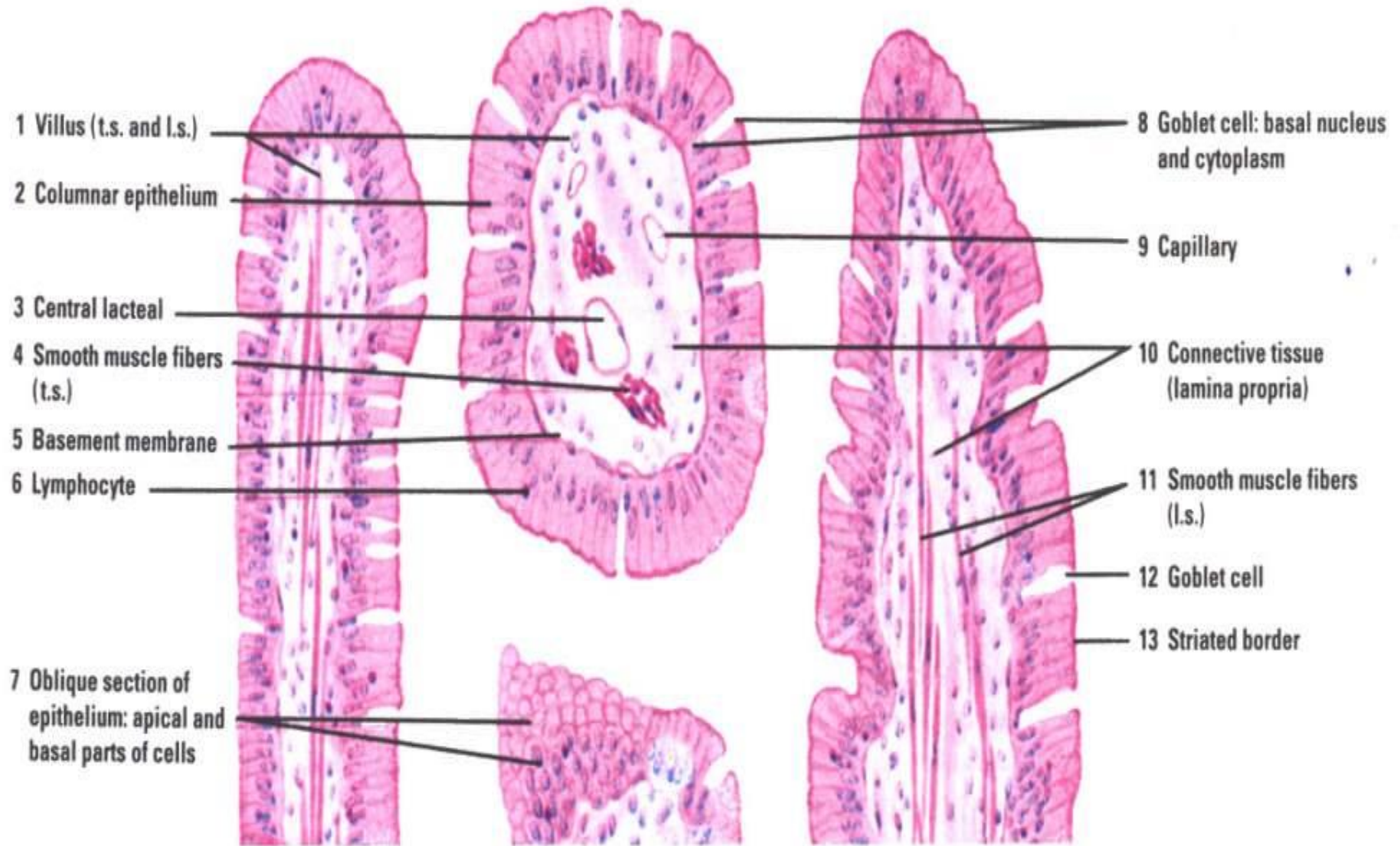
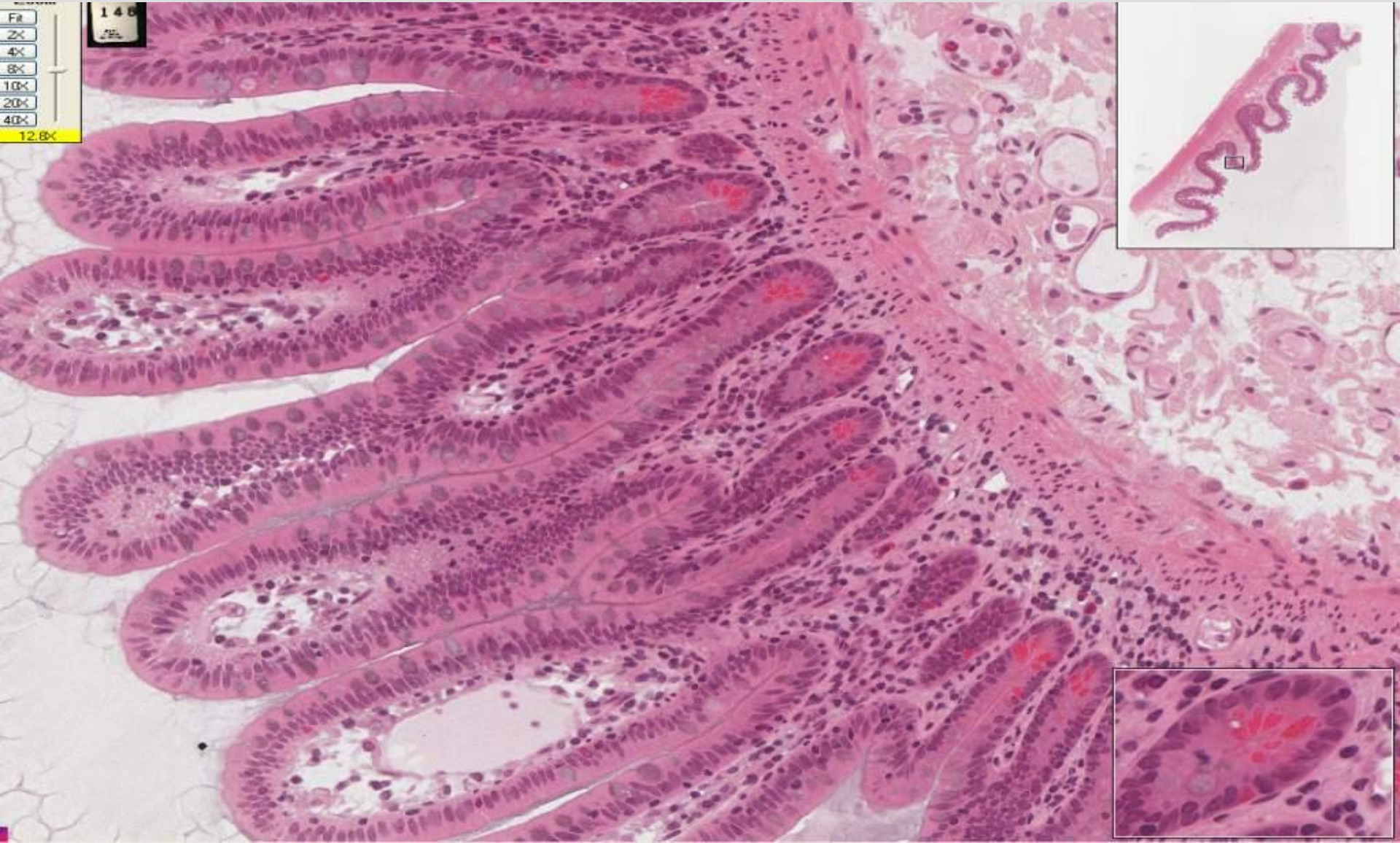


Fig. 1-5 Simple Columnar Epithelium: Cells With Striated Borders and Goblet Cells (Small Intestine). Stain: hematoxylin-eosin. Medium magnification.

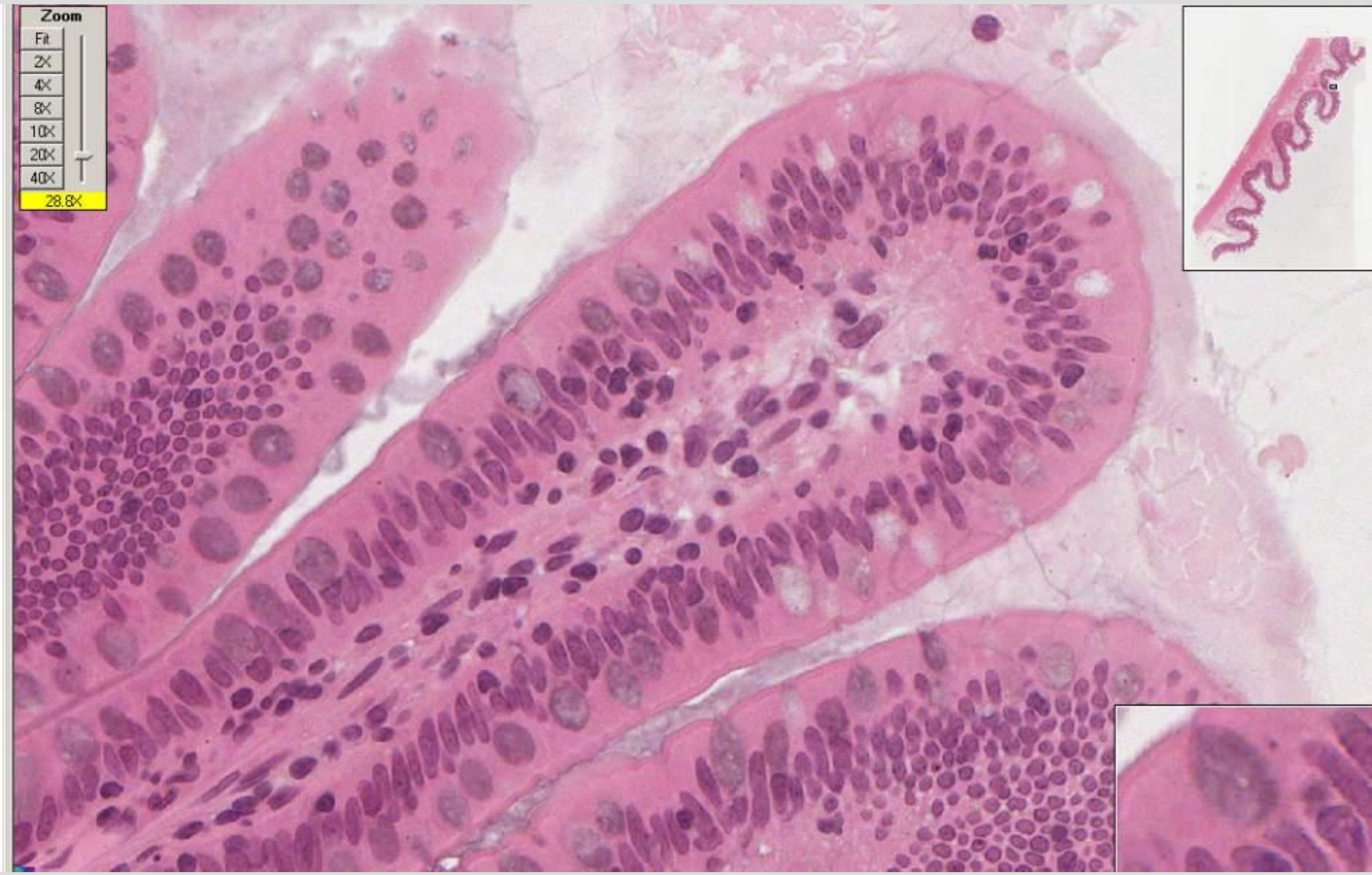
148

Ileum



148

Ileum



PAS

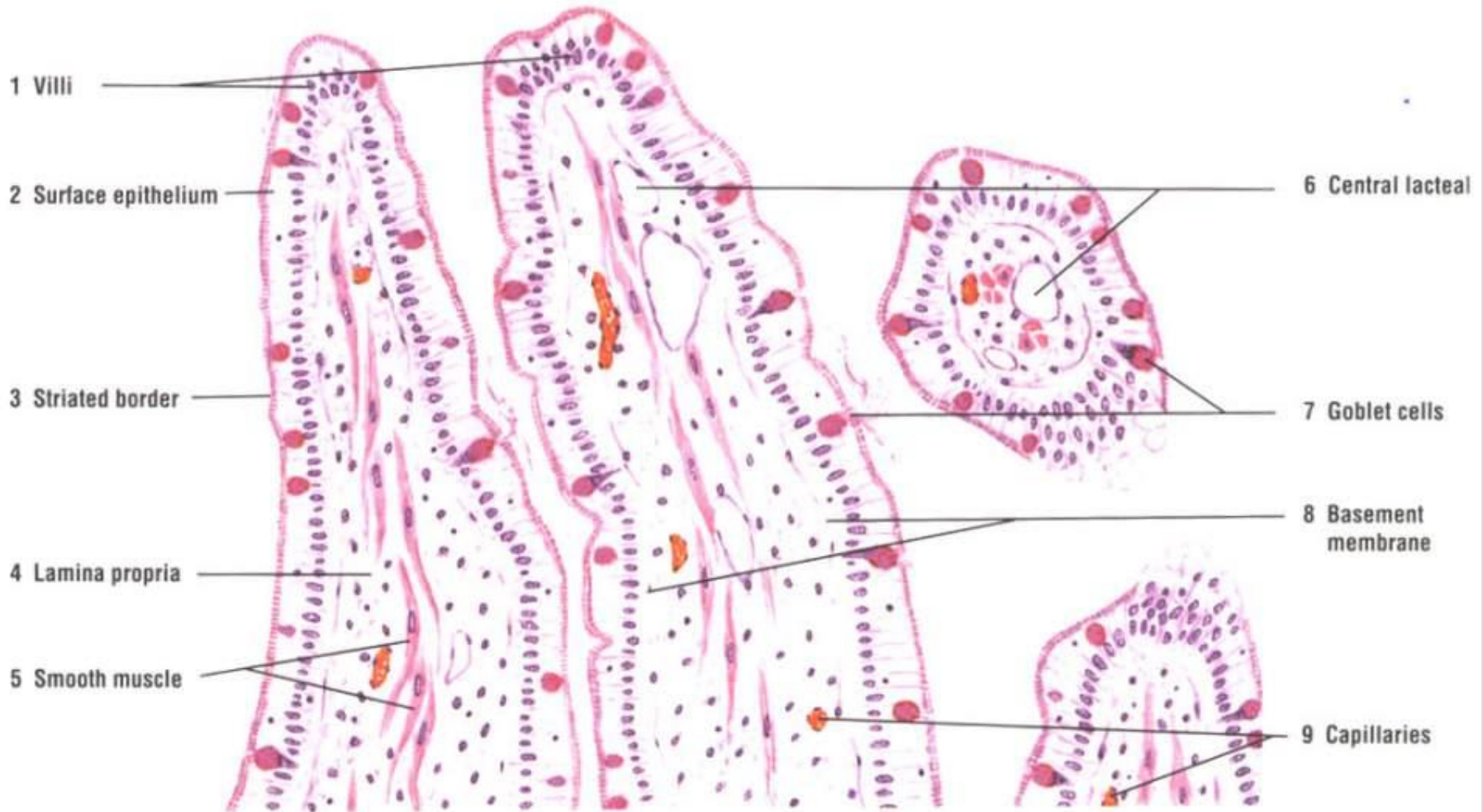


Fig. 12-5 Small Intestine: Villi. Stain: PAS. Medium magnification.

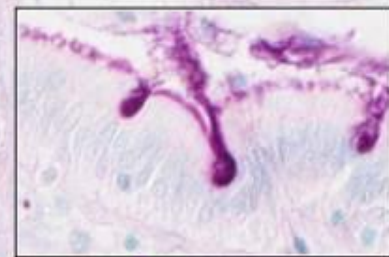
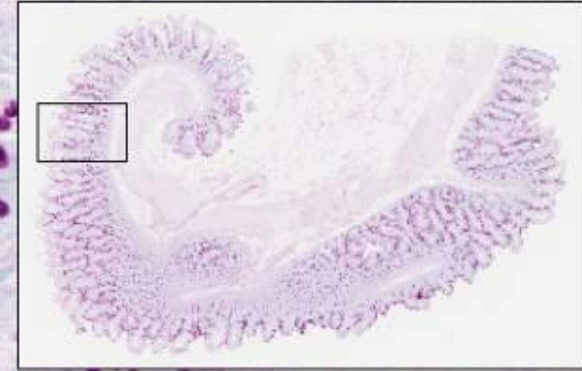
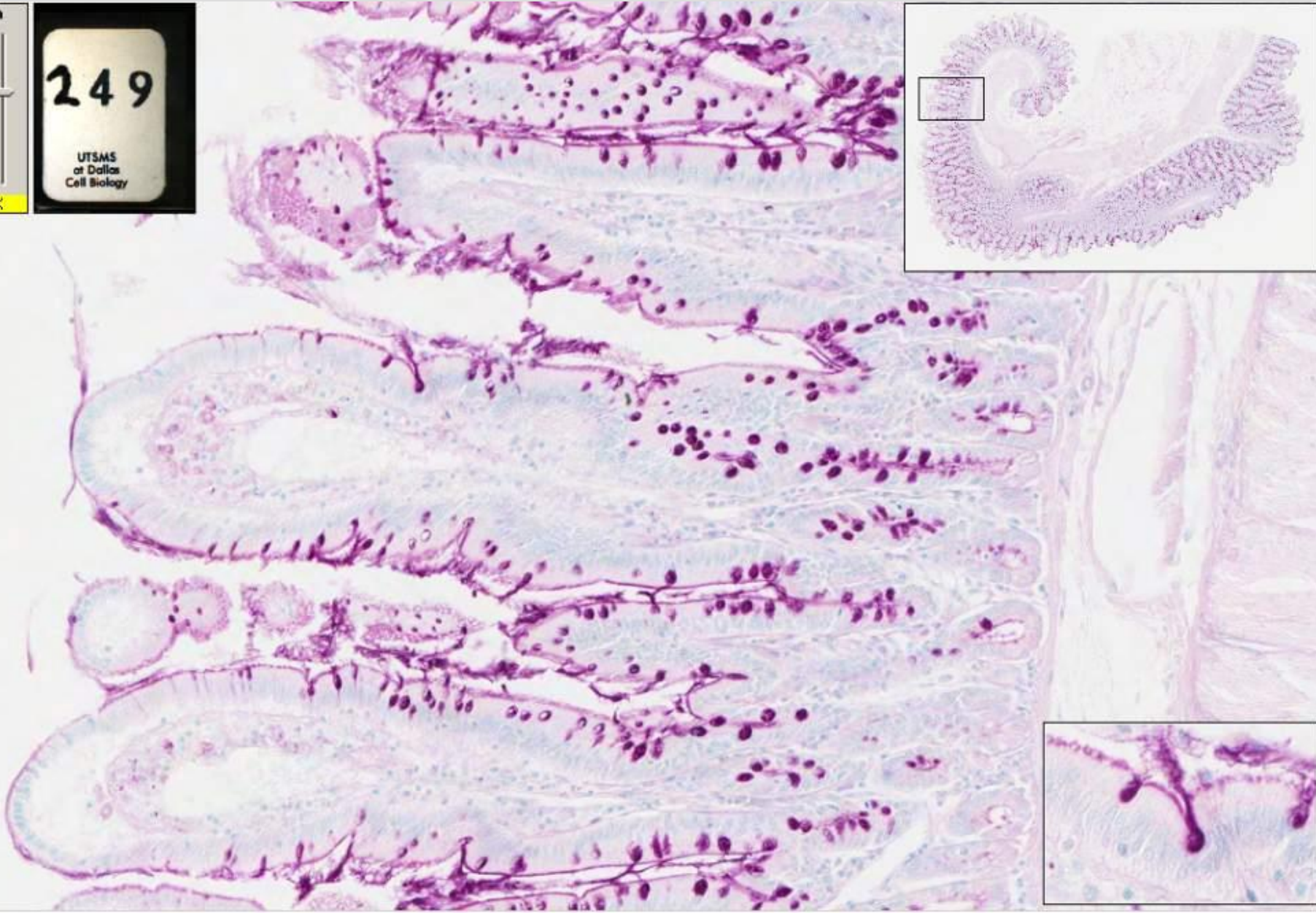
249

Ileum, monkey (PAS)

Zoom
Fit
2X
4X
8X
10X
20X
40X
10.0X

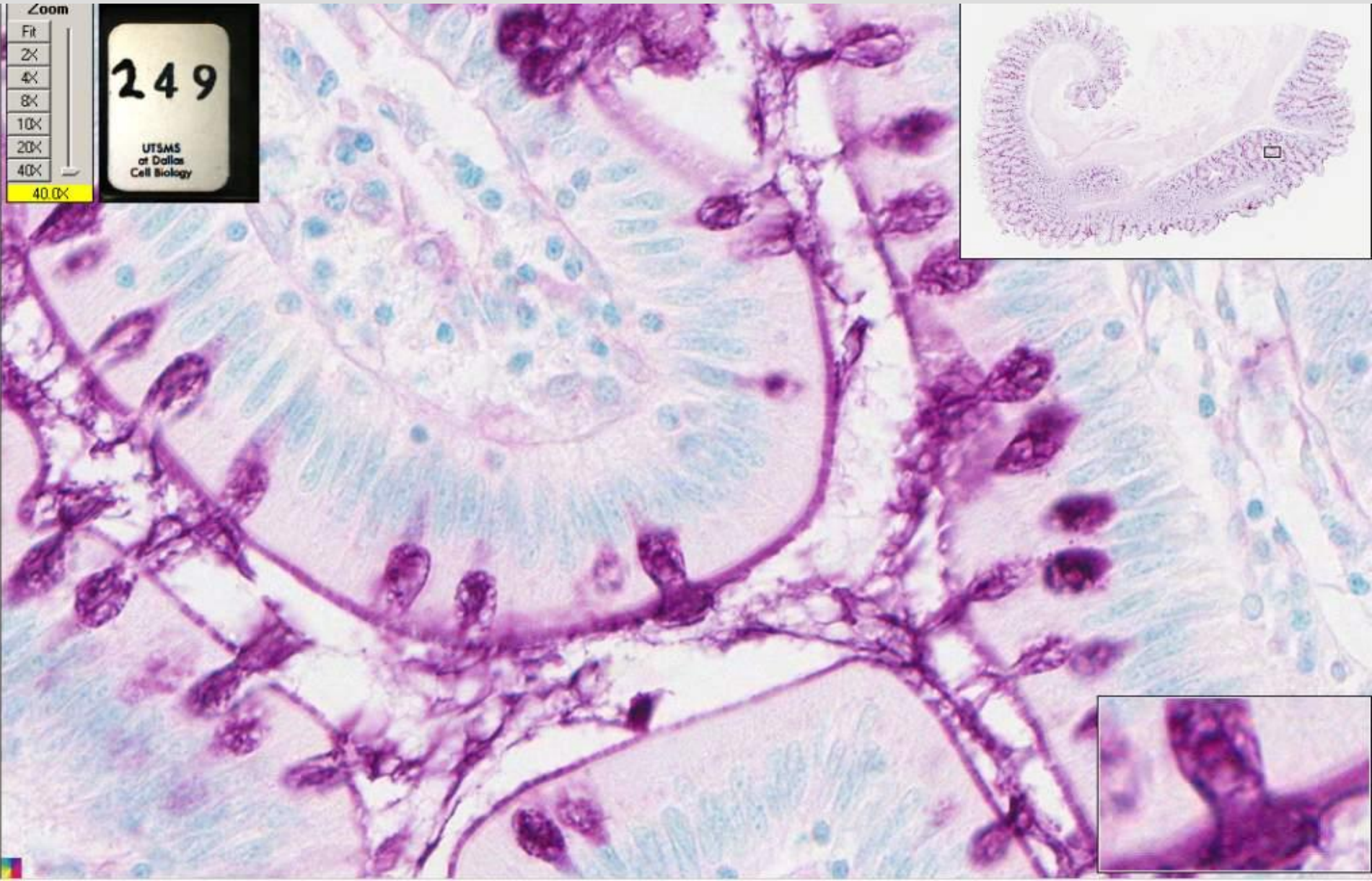
249

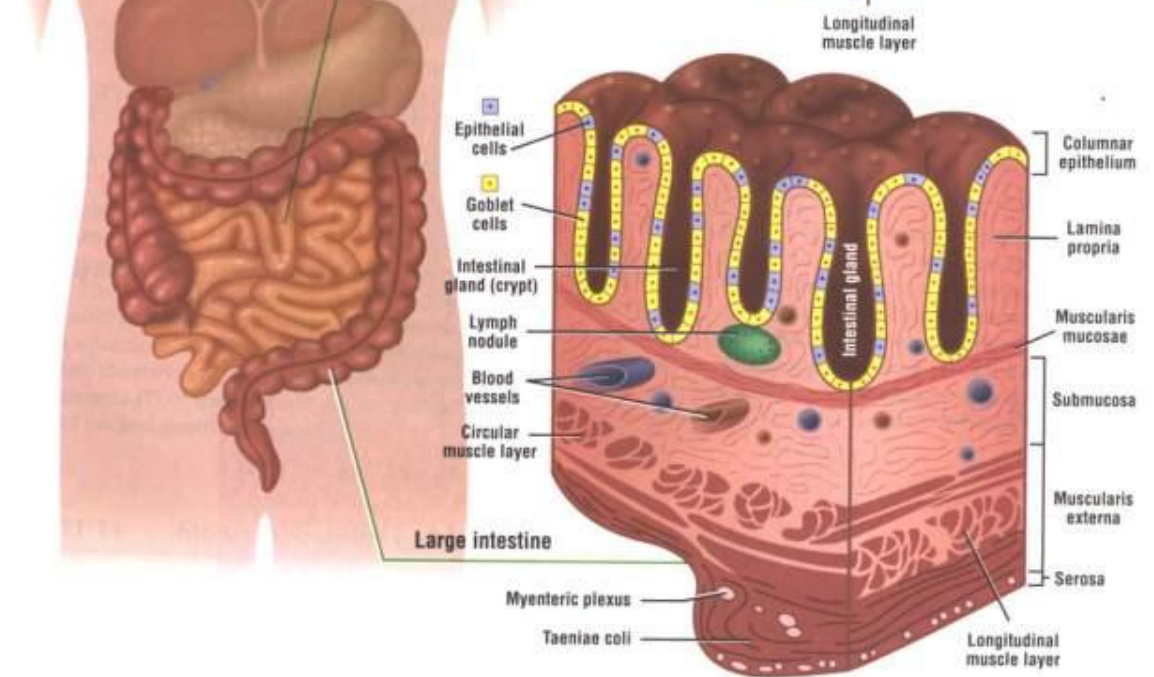
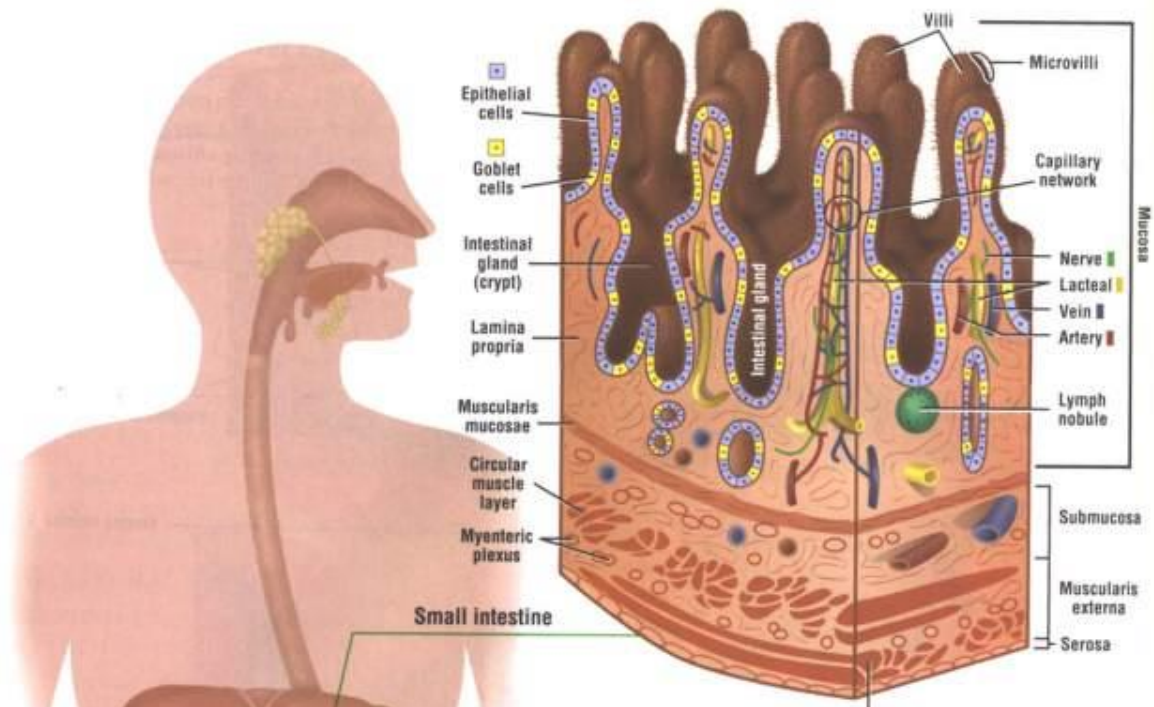
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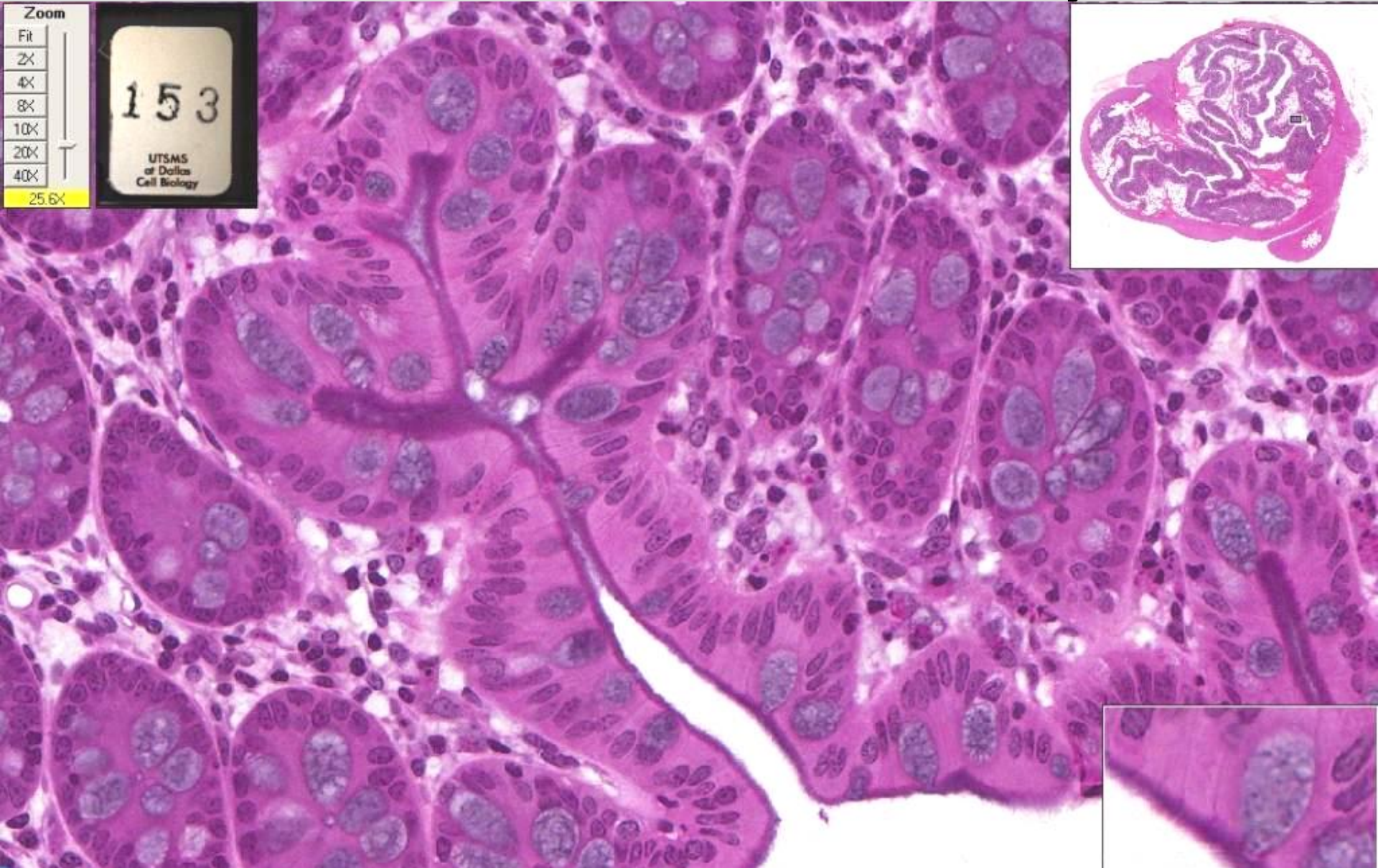
Ileum, monkey (PAS)



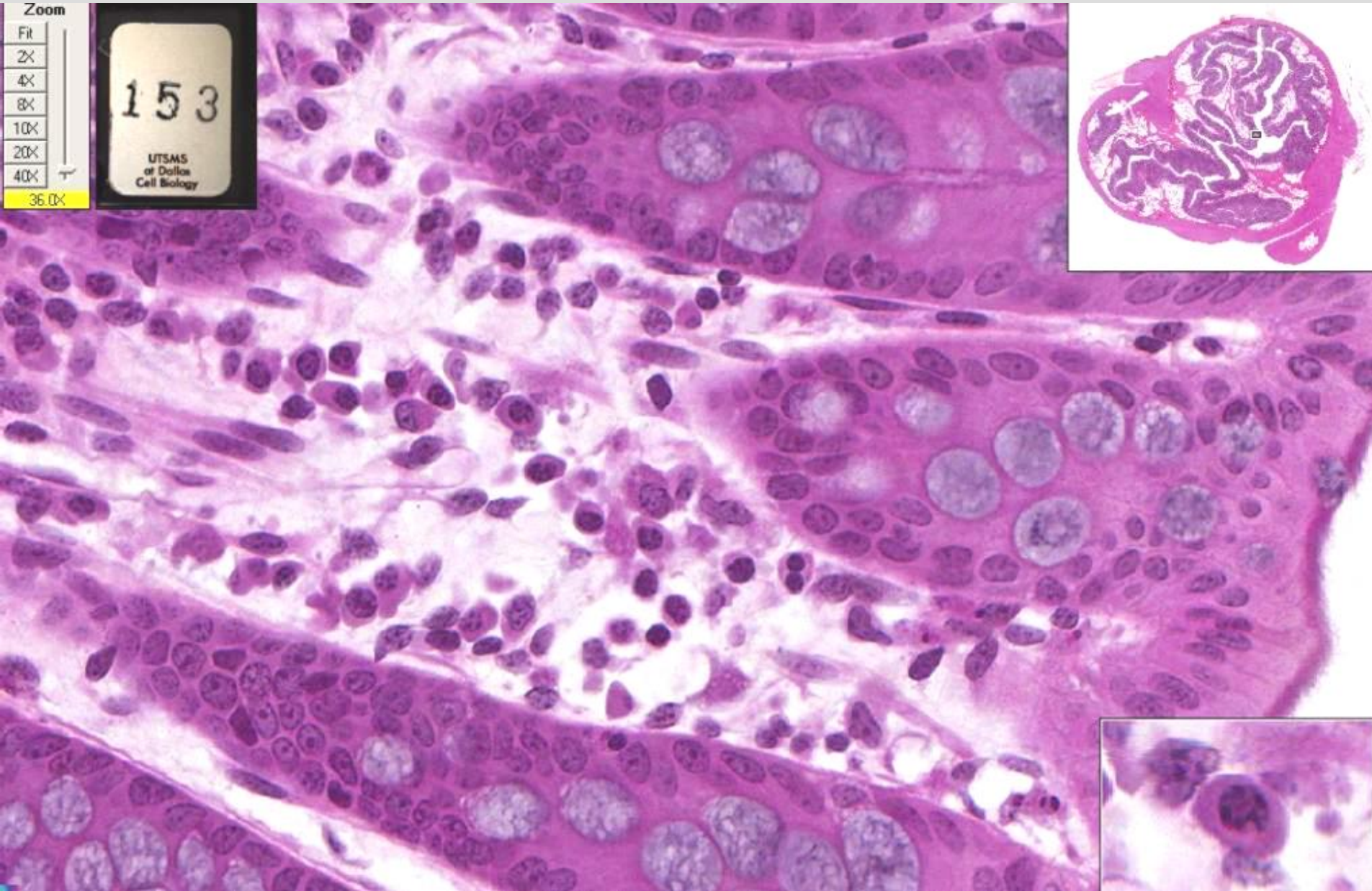


153

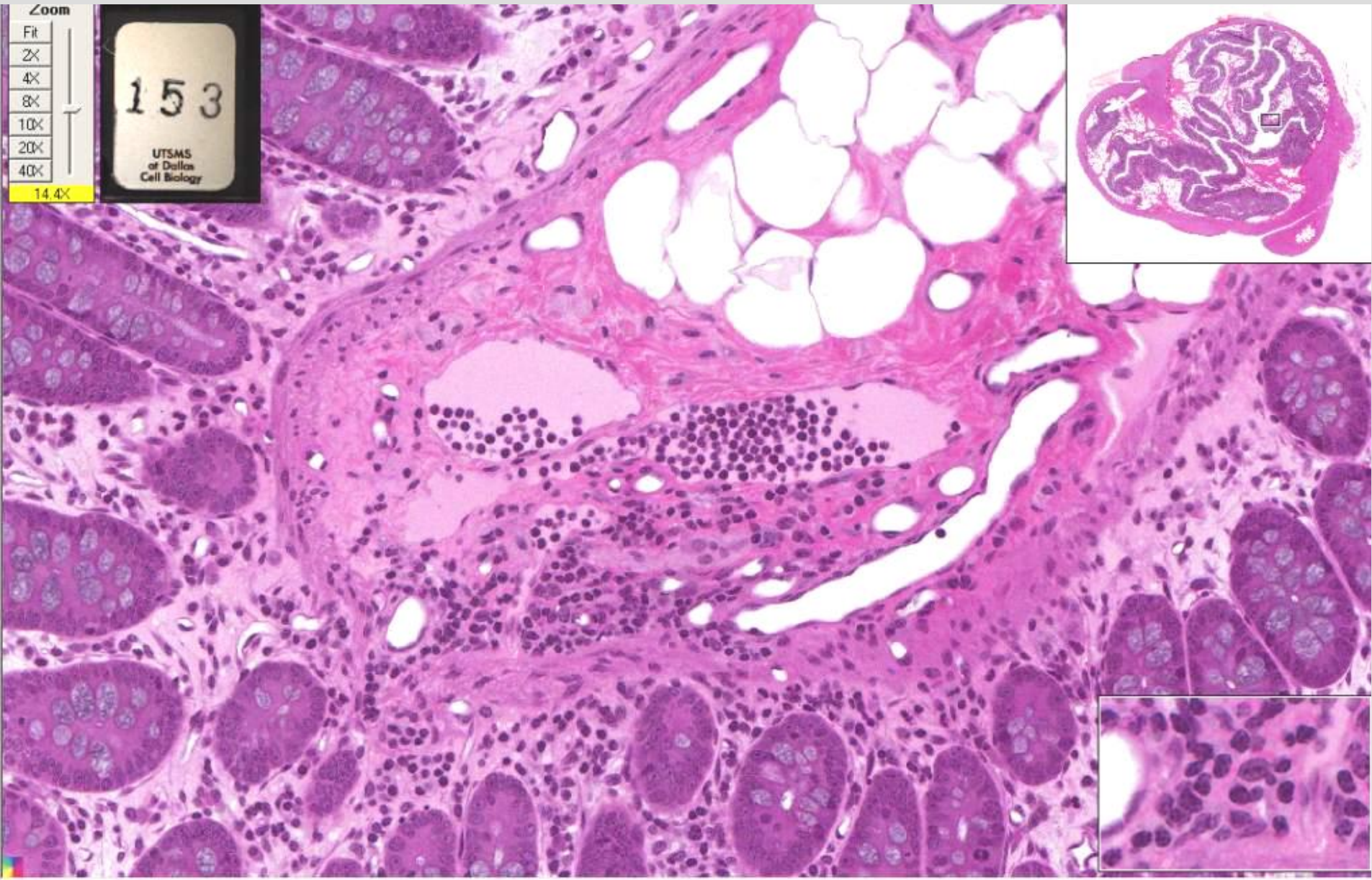
Goblet cells of large intestine of Colon, monkey



153 Plasma cells large intestine in Colon, monkey

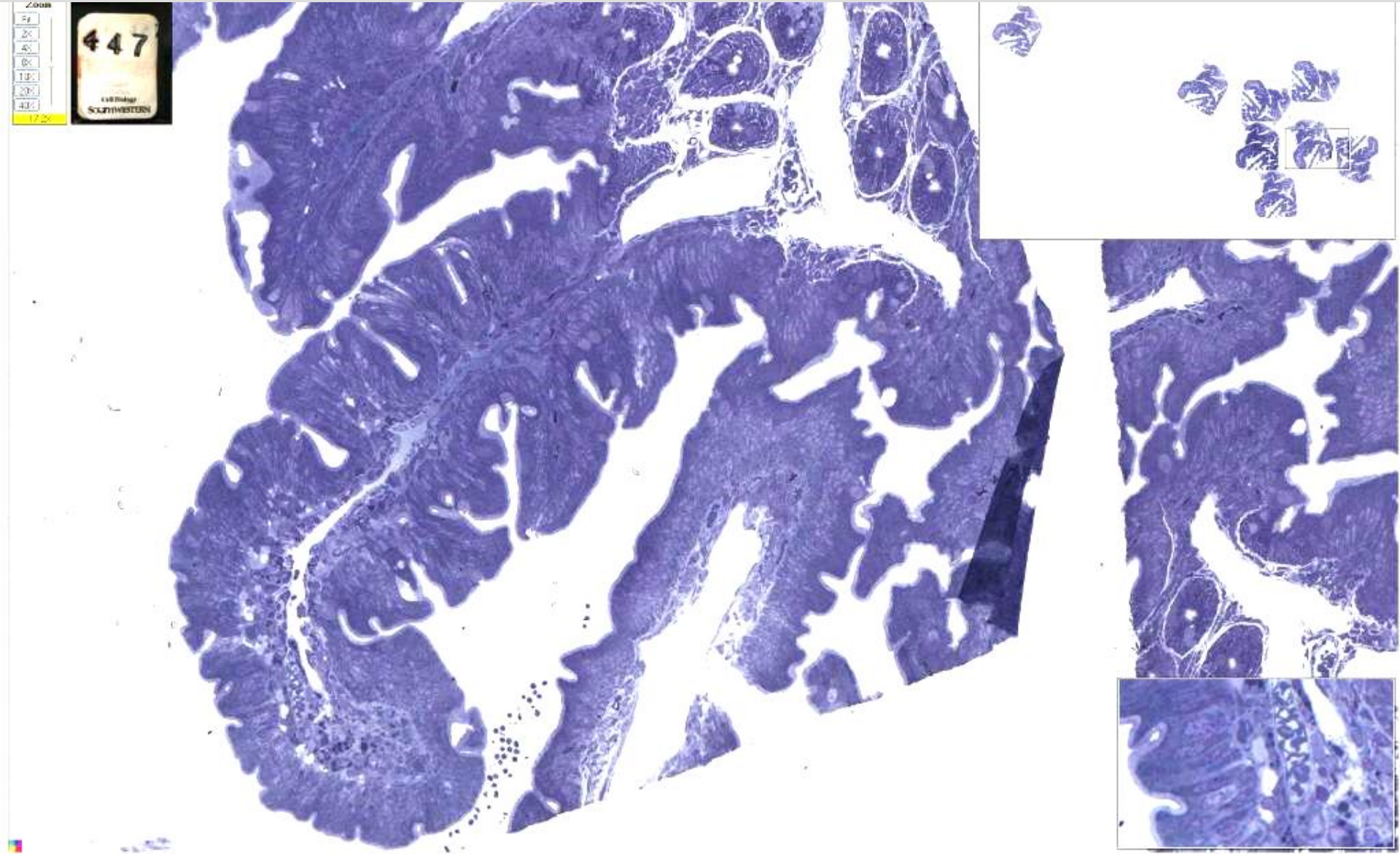


153 Large intestine or Colon, monkey



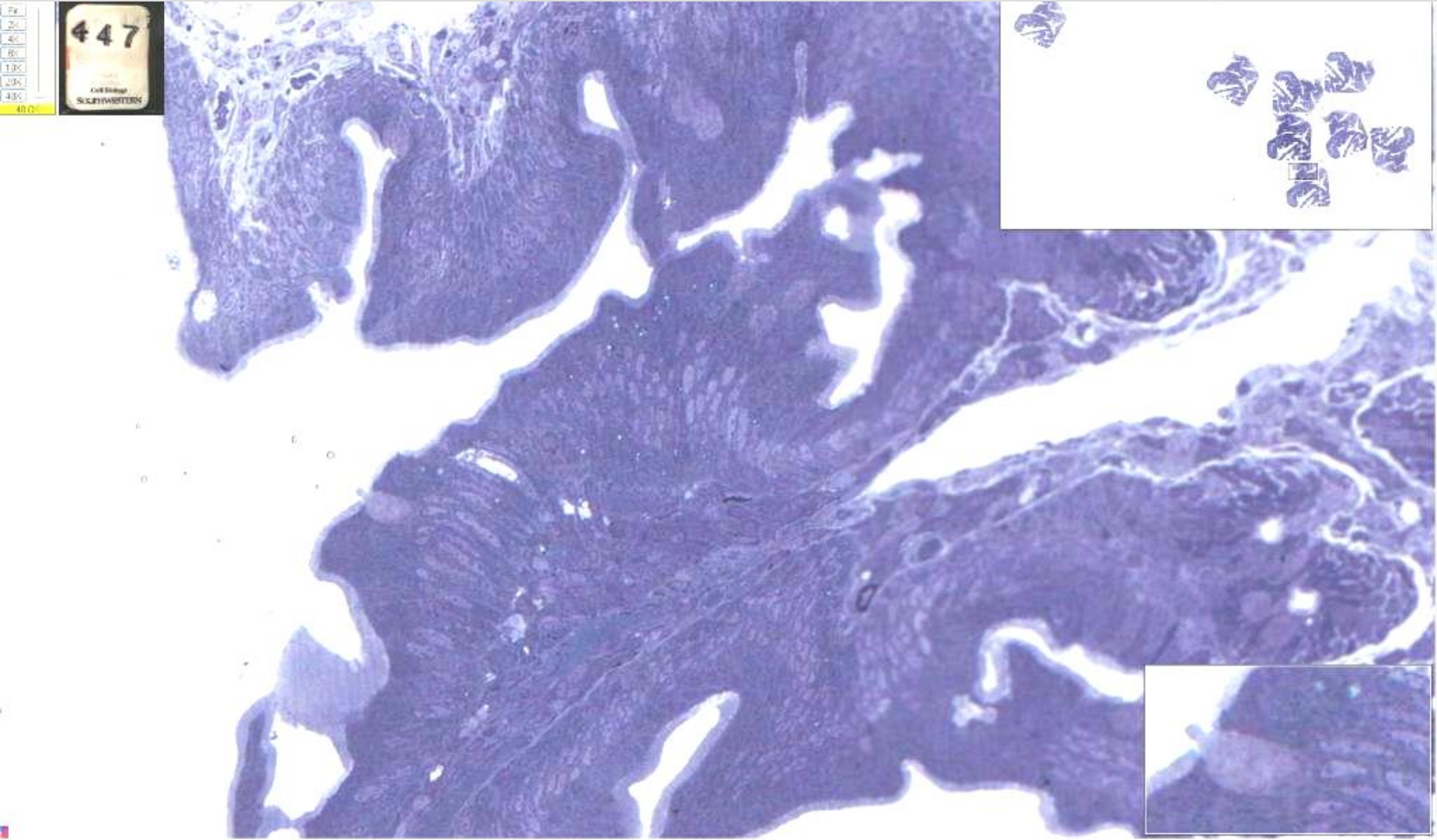
447

Duodenum, monkey (toluidine blue)



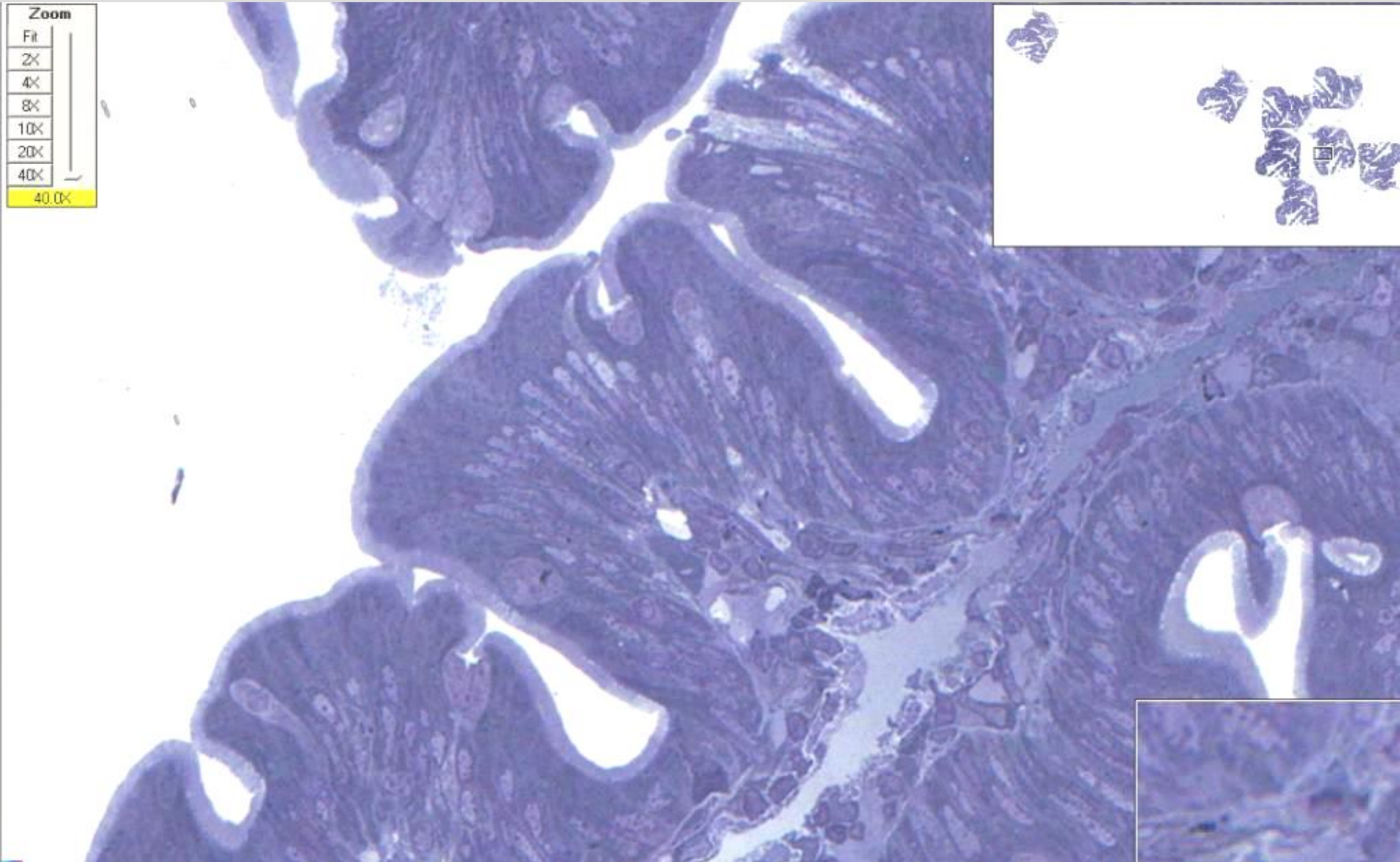
447

Duodenum, monkey (toluidine blue)



447

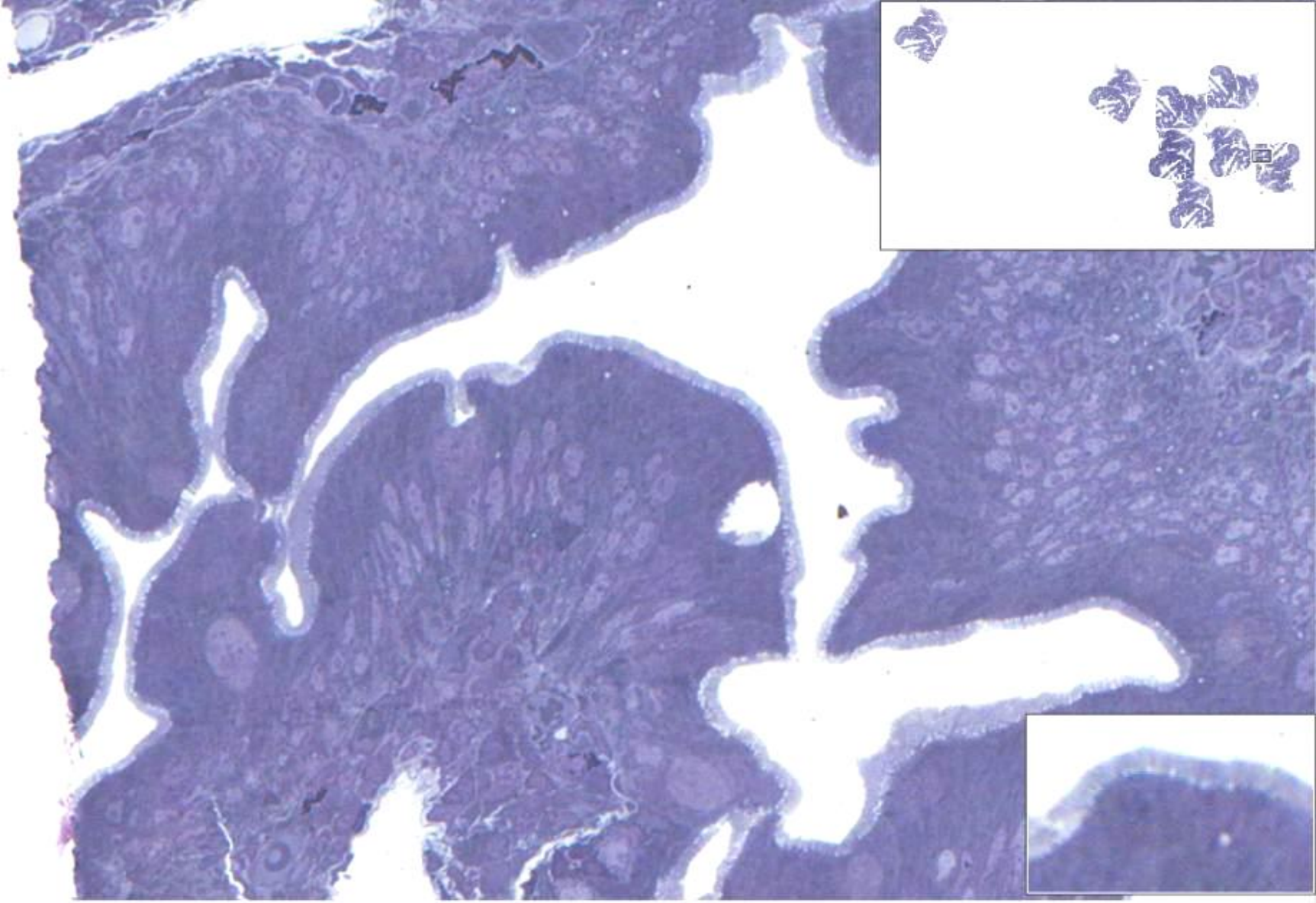
Duodenum, monkey (toluidine blue)



447

Duodenum, monkey (toluidine blue)

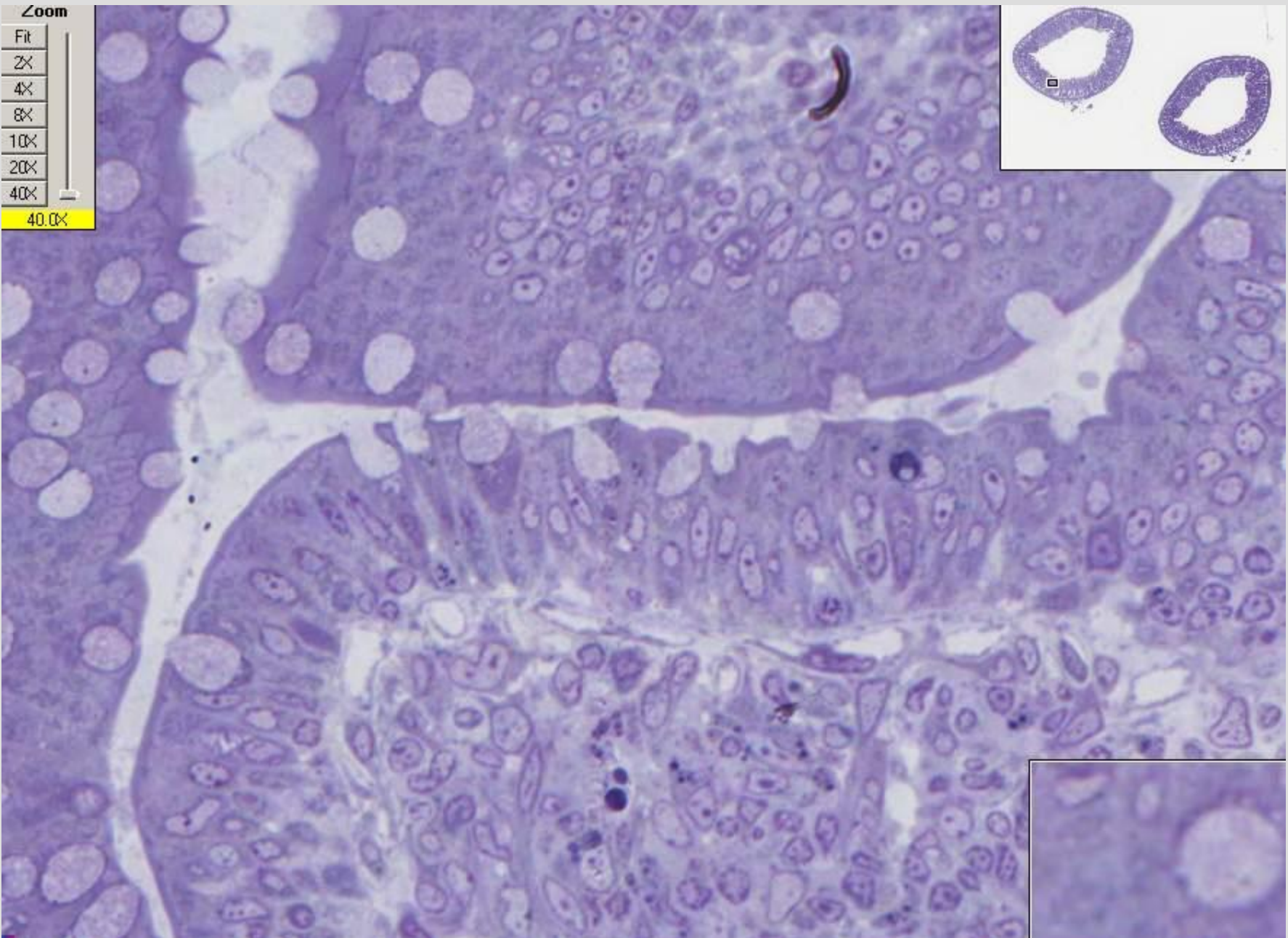
Zoom
Fit
2X
4X
8X
10X
20X
40X
40.0X



32409 rat intestine



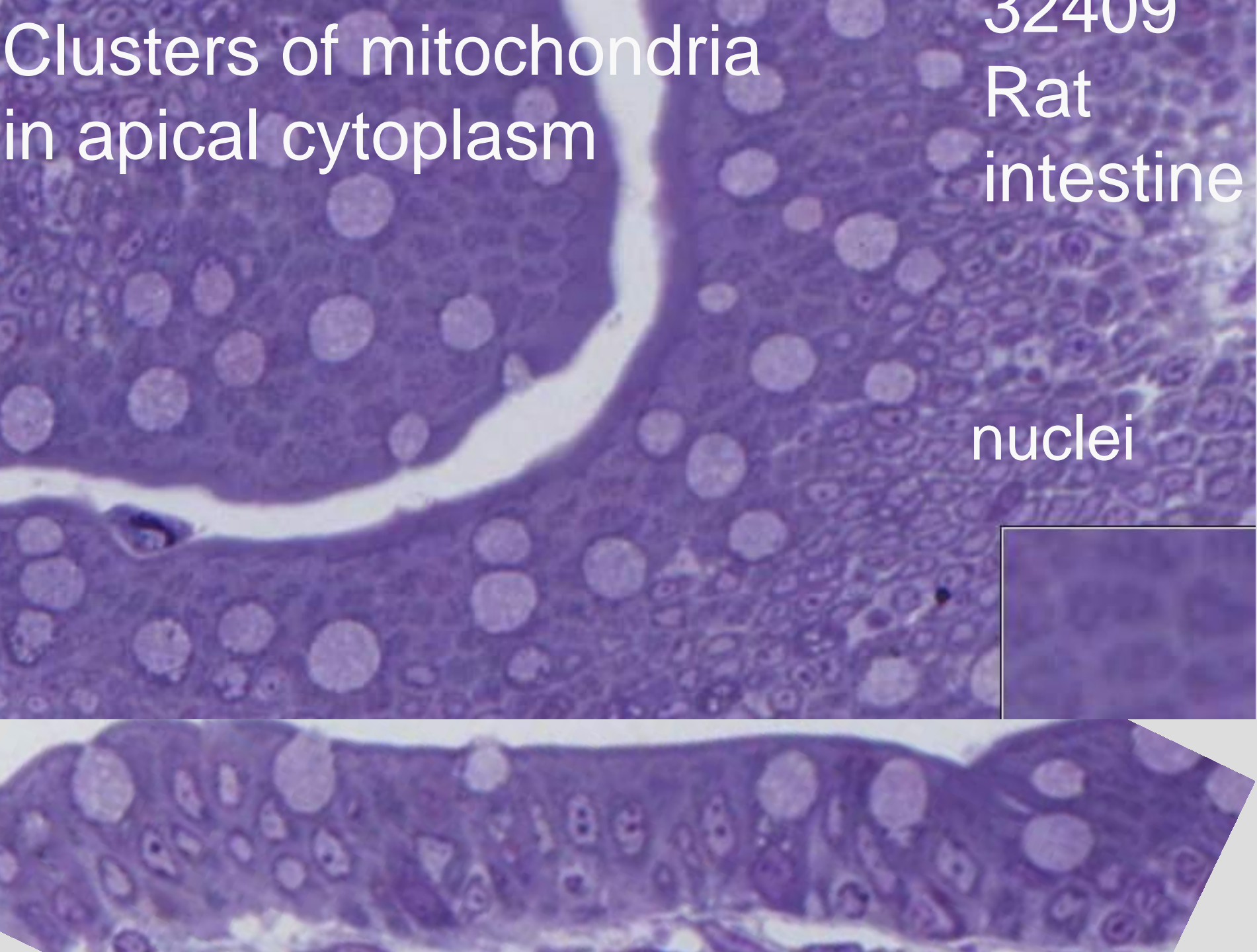
32409 rat intestine

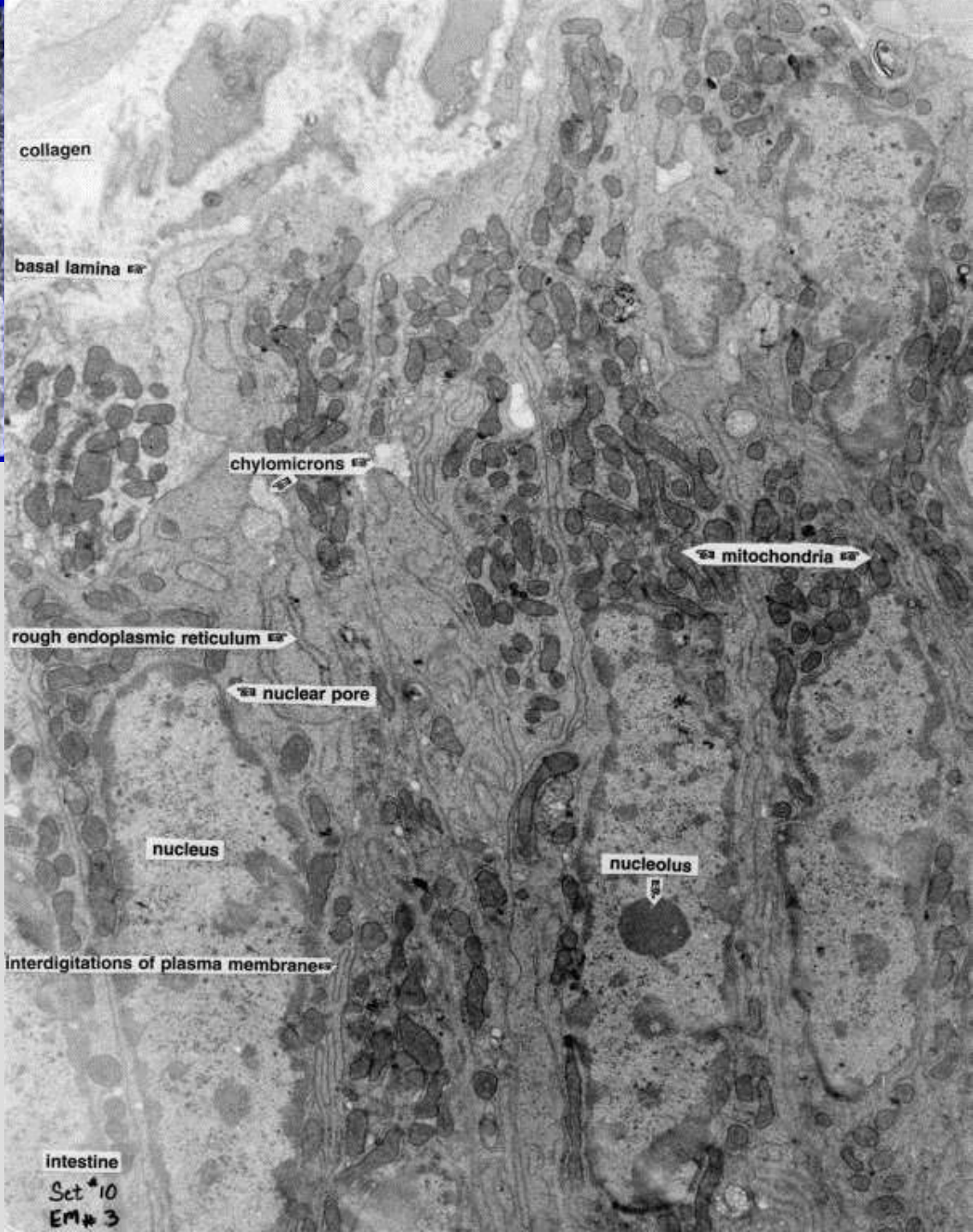
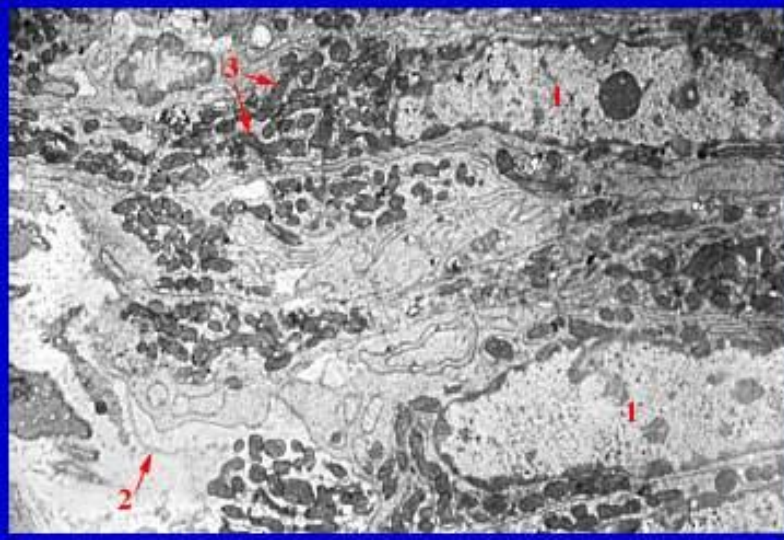


Clusters of mitochondria
in apical cytoplasm

32409
Rat
intestine

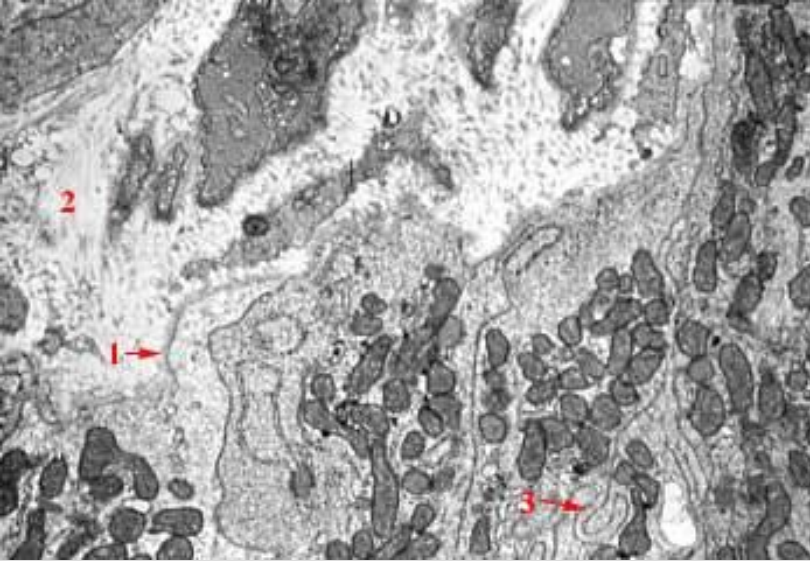
nuclei





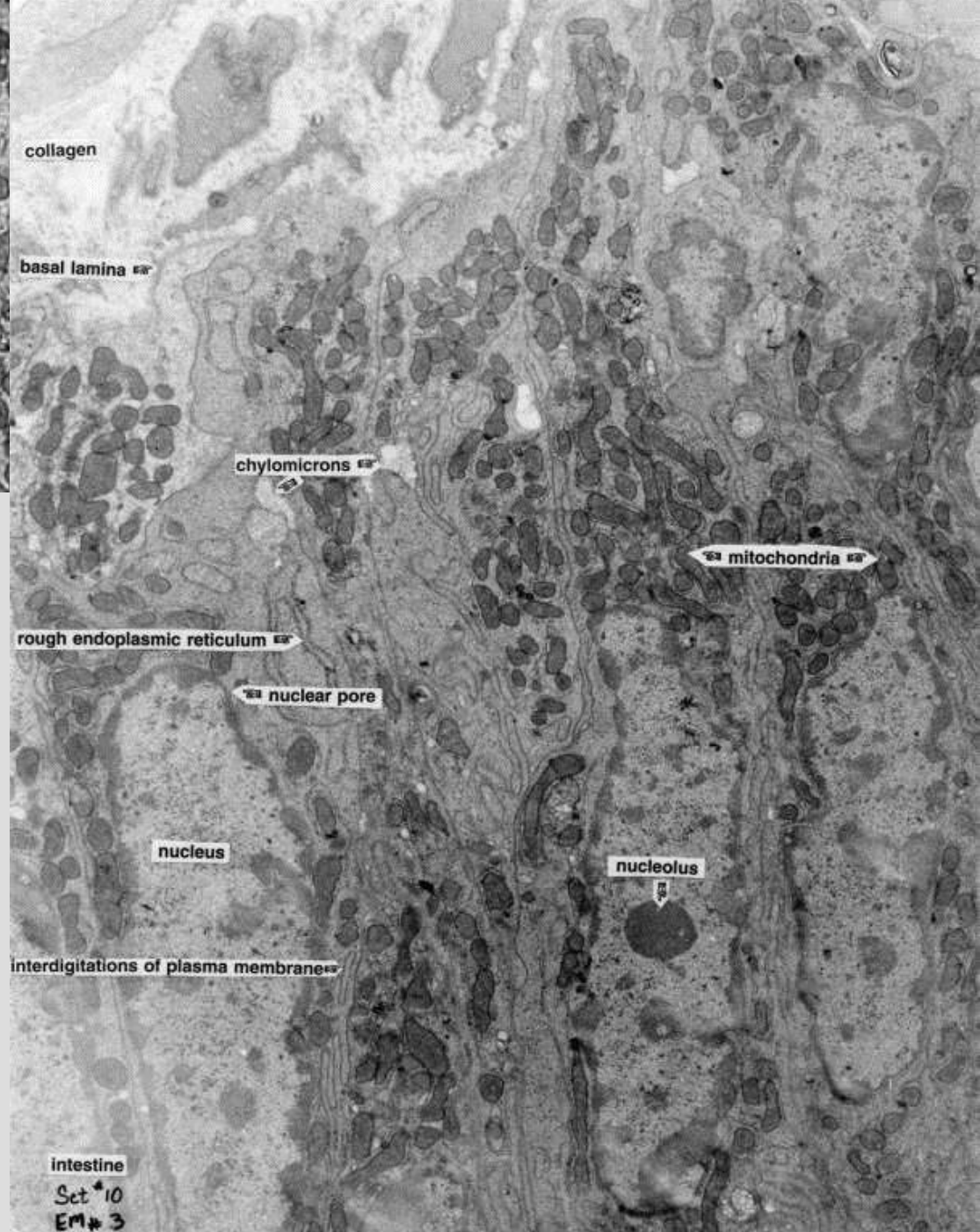
EM 3: Basal portion of intestinal absorptive cells with basement membrane region at the bottom of the image.

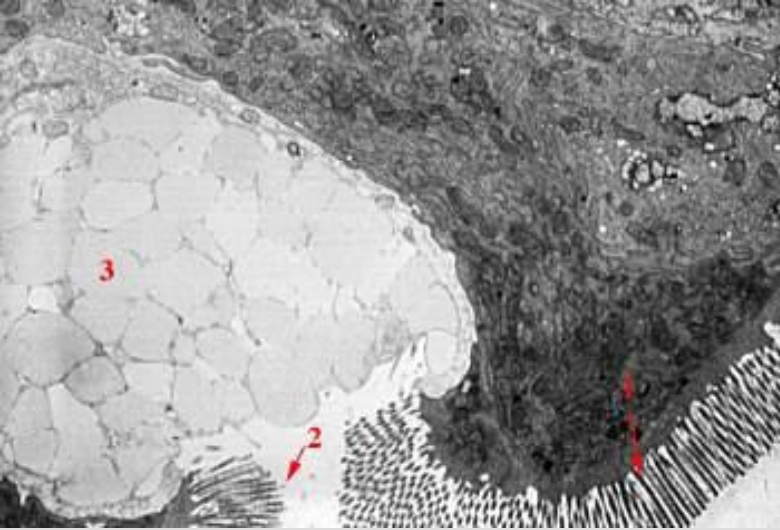
1. Nucleus of intestinal absorptive cell
2. Basal lamina
3. Mitochondria



EM 3: (enlargement of section from class print):
 The basement membrane region contains collagen fibrils and a fuzzy basal lamina that is adjacent to the plasma membrane at the basal end of the intestinal absorptive cells.

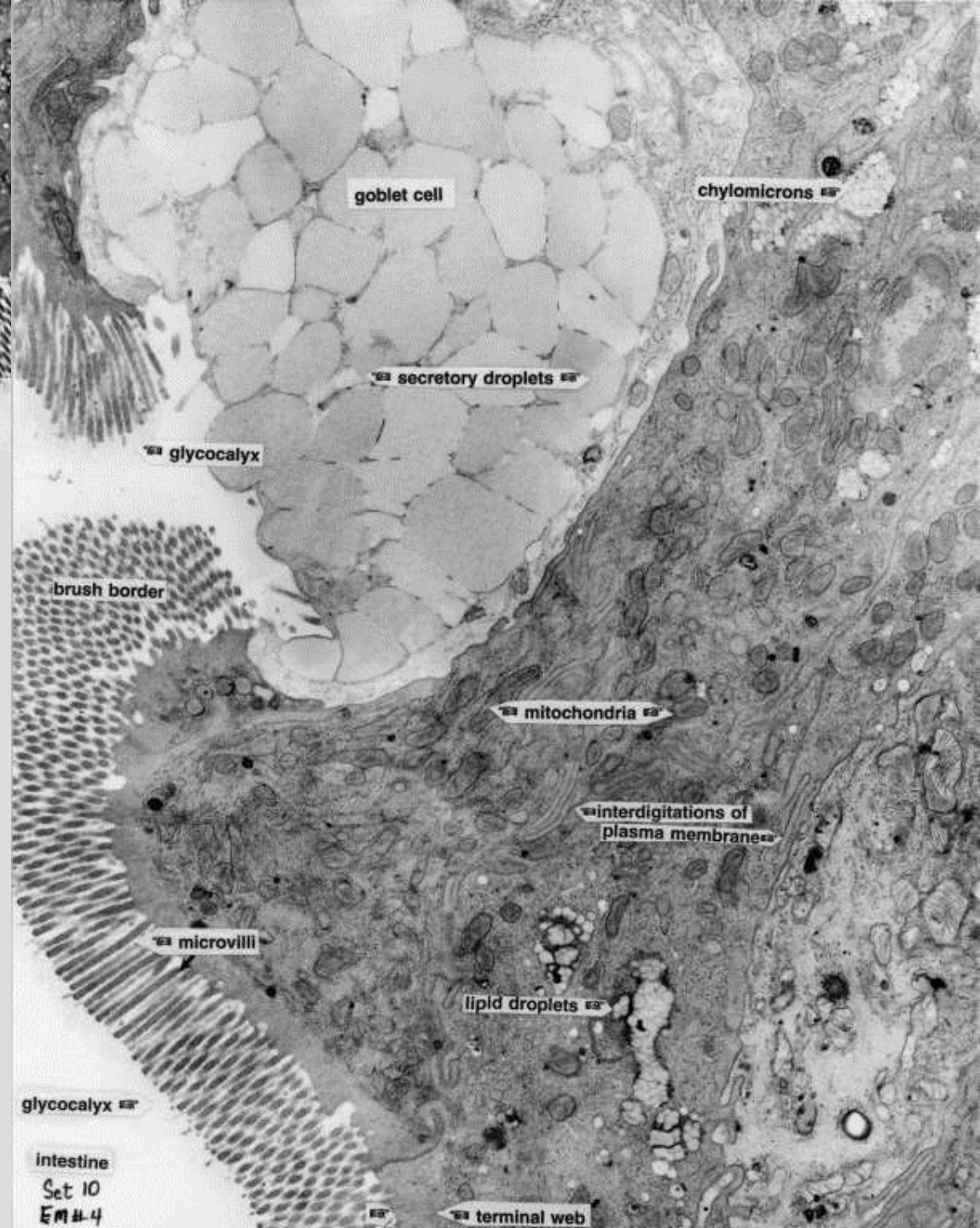
- Basal lamina
- Collagen
- Interdigitation of plasma membrane

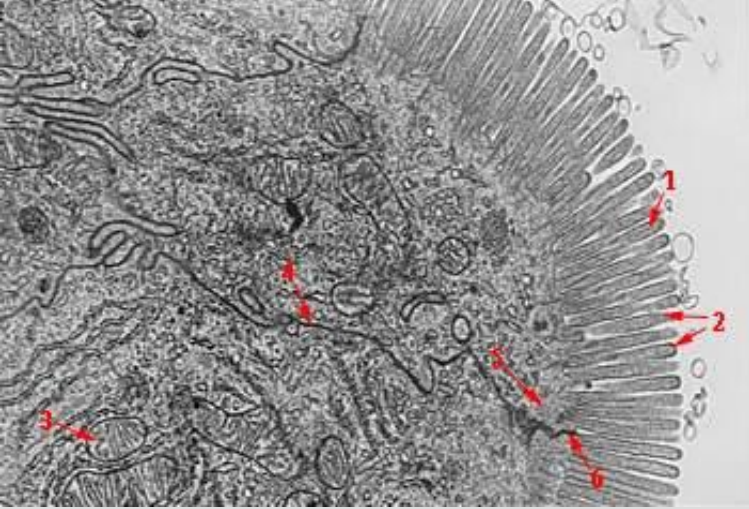




EM 4: Apical end of intestinal absorptive cell with prominent brush border visible. The microvilli of the brush border are coated with a glycocalyx which appears as a fuzzy layer on the luminal aspect of the brush border. A goblet cell occupies part of the image.

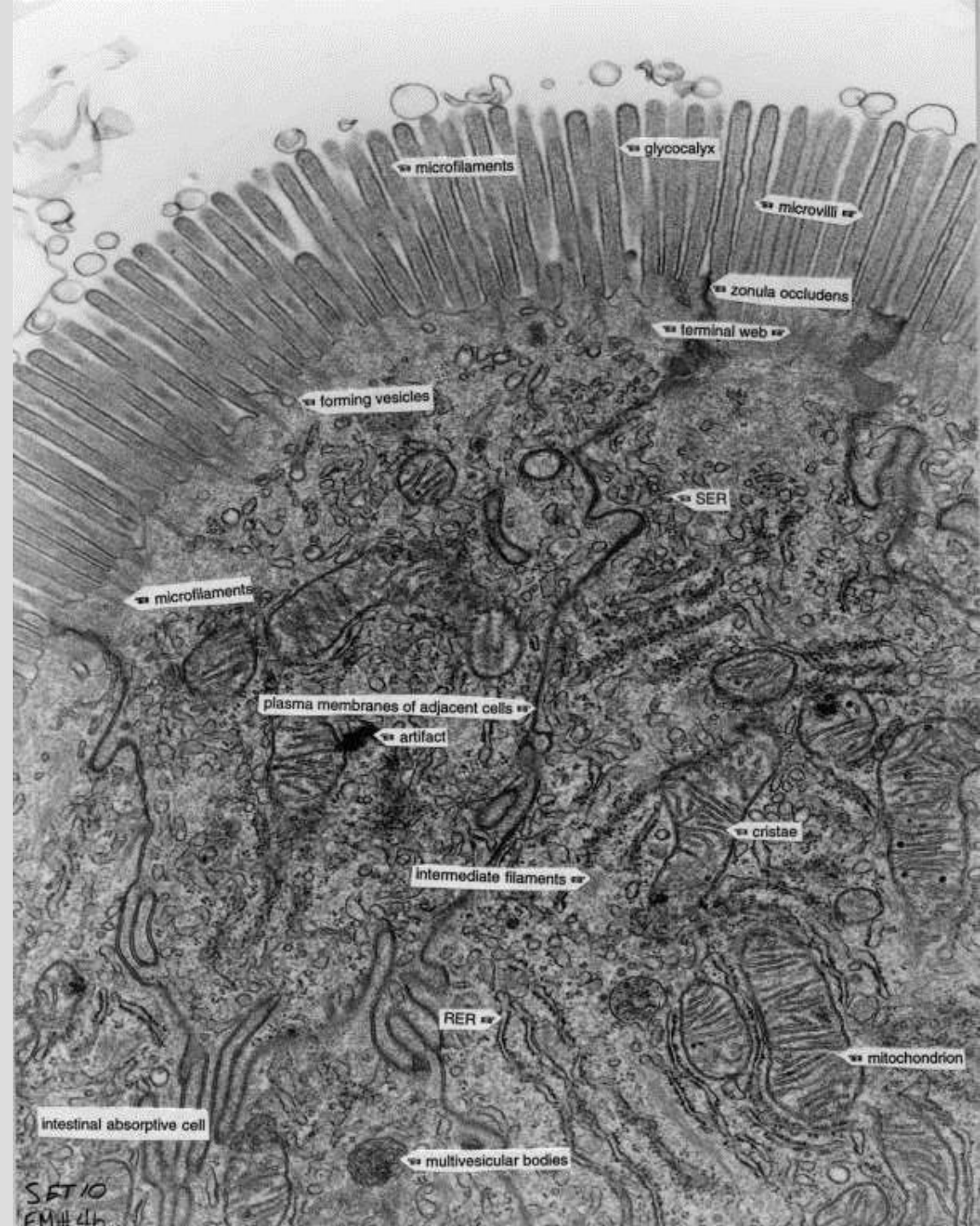
1. Microvilli
2. Glycocalyx
3. Goblet cell

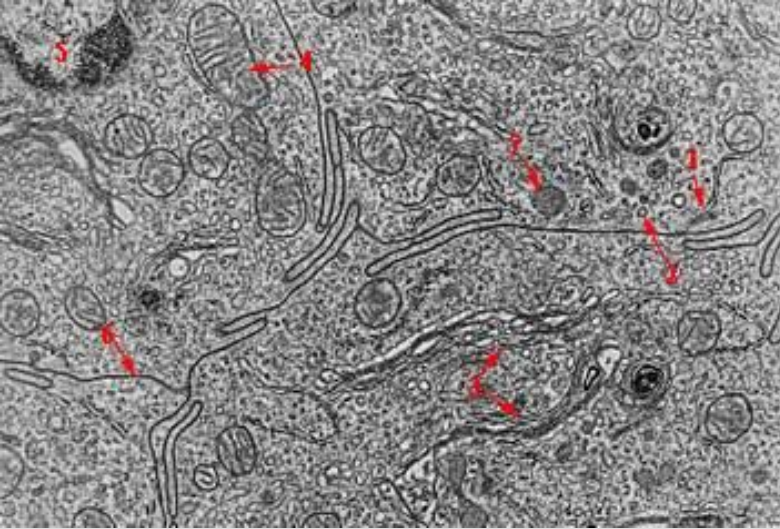




EM 4b: Intestinal absorptive cell (apex);
60,000x.

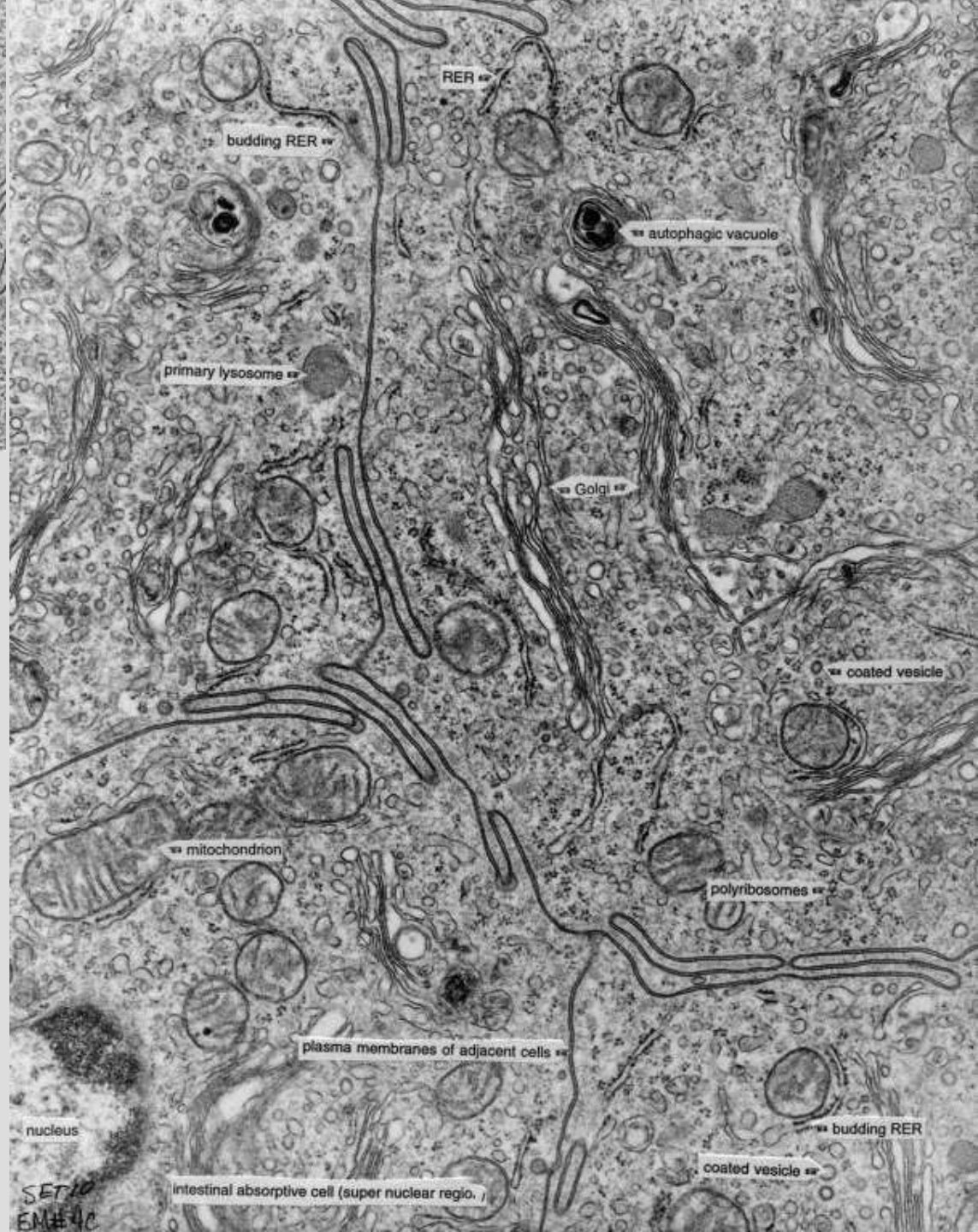
1. Microfilaments
2. Microvilli
3. Mitochondria
4. Plasma membranes of adjacent cells
5. Terminal web
6. Zonula occludens





EM 4c: Intestinal absorptive cell
(super nuclear region); 60,000x.

1. Budding RER
2. Coated vesicle
3. Golgi
4. Mitochondria
5. Nucleus
6. Plasma membrane
7. Primary lysosome



SETIO
EM#4c

intestinal absorptive cell (super nuclear regio.)