

5-year DDS program

Slides and structures required for the practical exam (light microscope):

Consult “Review of slides” on our website, numbers refer to images:

Epithelial tissue: identification of different epithelia is necessary for identification of various organs, “isolated” epithelia will not be shown during the exam.

Connective tissue: 4 – mast cells, 5,6,7

Cartilage and bone: all

Blood: 2

Muscle tissue: all

Nervous tissue: 1,3,4

Vascular system: all

Lymphatic system: all

Respiratory system: all

Integument: 1,2,3,4,5,6,7,8

Oral cavity: all

Tooth: all

Alimentary canal: 1,2,3,4,5,6,7,9,11,12

Liver & pancreas: 1,2,3,4,7,8

Endocrine system: 1,2,3,4,5,8,10

Urinary system: 1,2,3,4,5,7,8

Male reproductive system: 1,2,4,5

Female reproductive system: 1,2,3,4,5,8,11,12,14

List of structures required for identification in electron micrographs

The electron micrographs presented during the lab exam will be slightly different from those shown at the labs. All the micrographs listed below can be found in the folders used during the labs and in the textbook.

1. Cell - structural components of cell nucleus, nuclear pores, all organelles
2. Epithelial tissue: brush border, cilia, basal lamina, intercellular junctions
3. Connective tissue: collagen fibrils, plasma cell, macrophage, mast cell
4. Bone: osteocyte, osteoclast, ruffled border
5. Blood: neutrophil, eosinophil, lymphocyte, monocyte
6. Muscular tissue: components of the sarcomere (bands and lines), T-tubule, muscular triad, intercalated disc in cardiac muscle
7. Nervous tissue: unmyelinated and myelinated nerve fibres in cross-section, synapse
8. Circulatory system: capillary vessel (continuous or fenestrated) in cross-section
9. Respiratory system: air-blood barrier, pneumocyte type II
10. Urinary system: filtration barrier, proximal & distal tubule cell
11. Digestive system: taste bud, parietal cell, intestinal absorptive cell, goblet cell, sinusoidal and canalicular domains of hepatocyte, pancreatic exocrine cell
12. Endocrine system: steroid-producing cell, B-cell of the pancreatic islet, DNES (enteroendocrine) cell in epithelium
13. Male reproductive system: Leydig cell with Reinke crystal, spermatozoon tail in cross-sections
14. Female reproductive system: primary ovarian follicle with oocyte, zona pellucida and follicular cells