ENDOCRINE SYSTEM

1. Divide the cells of the adenohypophysis according to the staining properties. Name the hormone of each cell type.
2. Describe the hypothalamo-hypophyseal portal system. Is it a venous or an arterial portal system? How is the production of adenohypophyseal hormones regulated? Is there a negative feedback loop?
3. What are Herring bodies? Which hormones do they contain?
4. Describe the embryonic development of the hypophysis.
5. How does the thyroid gland differ from the other endocrine glands (in terms of histological structure)? What is the composition of colloid? What do the parafollicular (C-) cells produce?
6. Name the cells of the parathyroid gland. Which hormone do they produce? Which pharyngeal pouches give rise to the parathyroid glands? Are they endodermal or ectodermal?
7. What is the brain sand (*acervulus cerebri/corpora arenacea*)? Where can we find it? Which hormone is produced by this particular gland?
8. Which embryonic structures give rise to adrenal (suprarenal) gland?
9. Describe the morphology of the zones of the adrenal (suprarenal) cortex and types of hormones produced there. Which hormones are produced in the adrenal (suprarenal) medulla?

SLIDES:
52. Hypophysis cerebri
53. Epiphysis
54. Glandula thyreoidea
55. Glandula parathyroidea
56. Corpus suprarenale
23. Pancreas – islets of Langerhans

ATLAS EM:
12. Steroidogenic cells (Ovary)
66. Pancreas - islets of Langerhans