Mechanisms of Human Disease
Endocrine Histology Objectives

Pituitary Gland

On low power and high power sections distinguish the adenohypophysis (anterior pituitary) from the neurohypophysis (posterior pituitary).

List the 2 hormones that are secreted by the hypothalamus and stored in the posterior pituitary.

Define “Hering Body”.

Explain in general terms the staining patterns of chromophobes, basophils and acidophils of the anterior pituitary.

List the 6 hormones secreted by the anterior pituitary and the cell type by which they are each secreted.

Thyroid Gland

On H&E stained sections, identify thyroid follicles and colloid.

Describe the cell type that lines thyroid follicles.

List the hormone produced by the parafollicular cells of the thyroid gland.

Parathyroid gland

List the two cell types of the parathyroid glands.
Adrenal Gland

On low power distinguish the adrenal cortex from the medulla.

On low power distinguish the zona glomerulosa, zona fasciculata, and zona reticularis and list the hormones secreted by each.

List the substances secreted by the chromaffin cells of the adrenal medulla.

Endocrine Pancreas

On low power distinguish the Islets of Langerhans.

List the hormones produced by the alpha, beta, delta and PP cells.