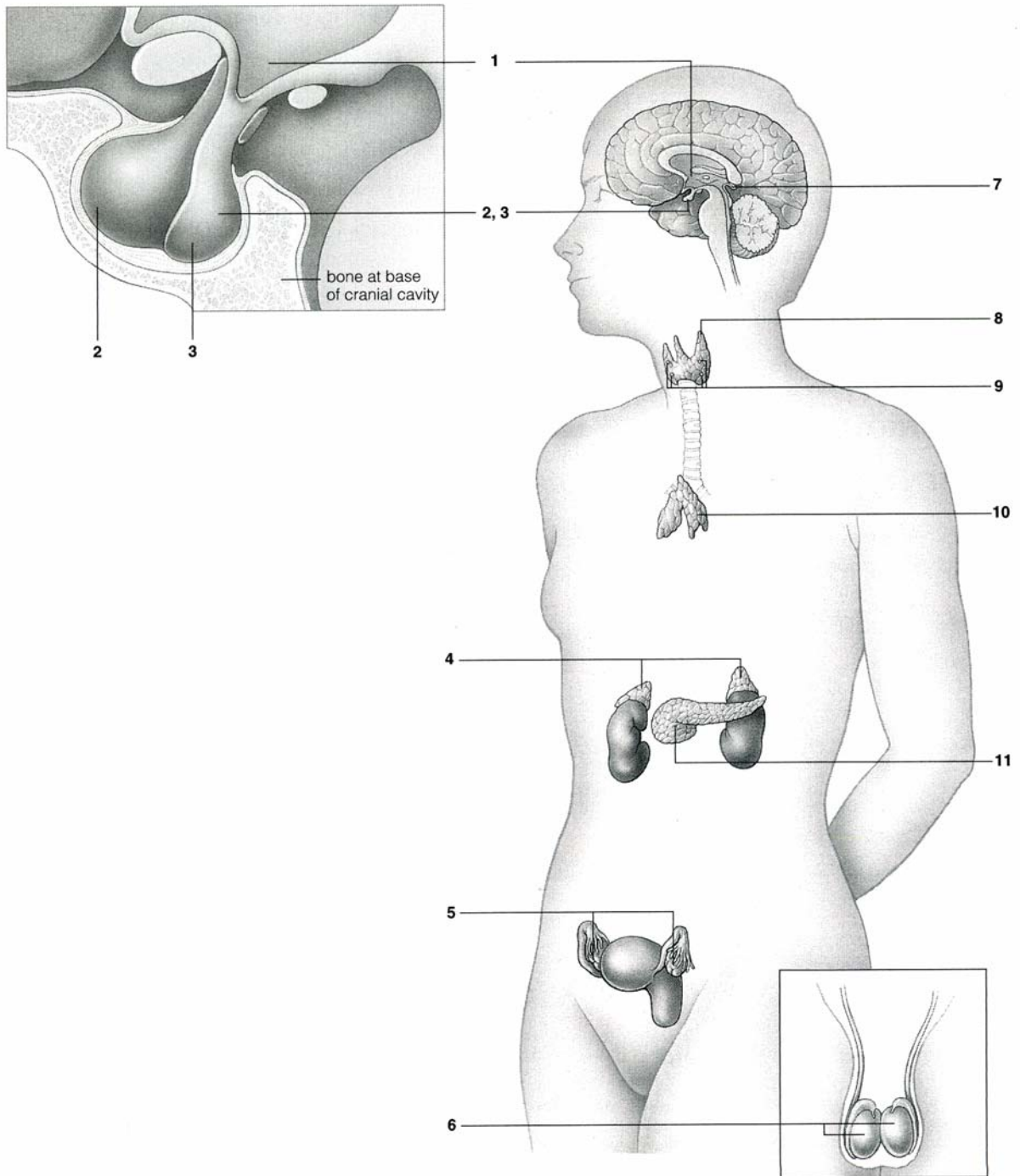


Endocrine System Lab

Dr. J. Lim

PART 1

1. Label the endocrine glands in the following diagram.
2. Using contrasting colors, color the endocrine organs in the figure below.



3. Examine the interior of a skull and locate the sella turcica that protects the pituitary gland. This bony structure's can be translated to mean _____

PART 2

Set 71 - Endocrine System

Study the microscopic anatomy of different endocrine glands utilizing Viewmaster Set 71 The Endocrine System. Drawings optional.

1. Pancreas (xs)
 - P – exocrine tissue which produces digestive enzymes
 - Arrow → points to islets which contain alpha and beta cells that produce endocrine products
 - Name these two endocrine products

Note how the endocrine and exocrine tissue differ though they are adjacent to each other
2. Pancreatic islets (of Langerhans) (xs)
 - Note how the islets differ from surrounding exocrine tissue
3. SKIP
4. SKIP
5. Adrenal Gland (xs)
 - Note the different presentation of the adrenal medulla and cortex
 - Neural tissue can be found in the _____
 - Glandular tissue can be found in the _____
 - The cortex is stimulated by _____
 - The medulla is stimulated by _____
6. SKIP
7. Pituitary gland (ls)
 - Note the similarity in presentation of the medulla and cortex to that of the adrenal gland in slide 5
 - Neural tissue can be found in the _____
 - Glandular tissue can be found in the _____
 - The anterior pituitary is stimulated by _____
 - The posterior pituitary is stimulated by _____
8. SKIP

PART 3

Hormone Abbreviations

1. ACTH _____
2. ADH _____
3. FSH _____
4. hGH _____
5. LH _____
6. NE _____
7. PRL _____
8. PTH _____
9. TSH _____

PART 4

Main Endocrine Organs and their Hormones

Write the name of the endocrine gland that secretes the following hormones

<u>Hormone</u>	<u>Endocrine Gland</u>
1. ACTH	_____
2. ADH	_____
3. androgens	_____
4. calcitonin	_____
5. cortisol	_____
6. epinephrine/NE	_____
7. estrogen/progesterone	_____
8. FSH	_____
9. glucagon	_____
10. hGH	_____
11. insulin	_____
12. LH	_____
13. melatonin	_____
14. oxytocin	_____
15. prolactin	_____
16. PTH	_____
17. TSH	_____
18. melanocyte stimulating h	_____

PART 5

Hormone Function

1. decreases blood glucose levels by transporting glucose into body cells _____
2. stimulates oocyte production and estrogen secretion _____
3. decreases blood calcium levels by inhibiting osteoclasts _____
4. darkens skin pigmentation _____
5. increases resistance to stress, increases blood glucose levels and decreases inflammation _____
6. stimulates production of milk _____
7. promotes the fight-or-flight response _____ & _____
8. triggers ovulation and stimulates secretion of estrogen/progesterone _____
9. increases metabolism and basal metabolic rate _____
10. increases sex drive in females _____
11. decreases water loss by increasing reabsorption of water into blood and decreasing urine production _____
12. stimulates secretion of hormones by the adrenal cortex _____
13. stimulates uterine contractions and milk release during suckling _____
14. increases blood glucose levels by stimulating the liver to break down glycogen into glucose _____
15. stimulates the secretion of testosterone _____
16. stimulates sperm production _____