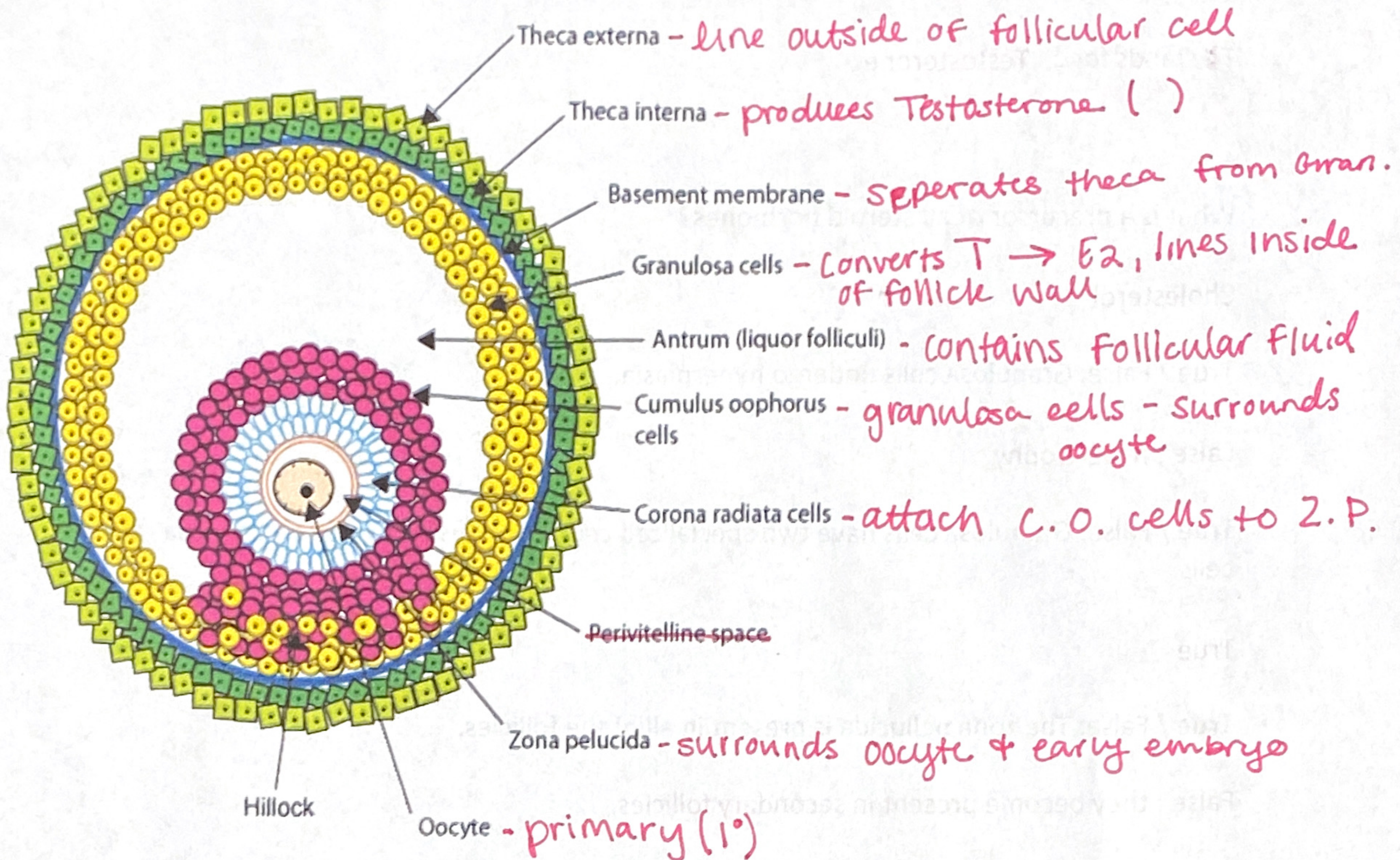


What does each layer of cells do?



What muscles tire out easily? What muscle do NOT tire easy?

Skeletal muscle ; smooth muscle

Is there germ cells in the germinal epithelium?

No, only in the cortex

What are small luteal cells? What are large luteal cells?

Theca cells ; Granulosa cells

Which cells have a FSH receptor? LH receptor?

Granulosa cells ; Theca cells

P4 stands for..... **Progesterone**

E2 stands for..... **Estrogen**

T stands for..... **Testosterone**

What is a precursor of all steroid hormones?

**Cholesterol**

True / False: Granulosa cells undergo hyperplasia.

**False ; hypertrophy**

True / False: Granulosa cells have two specialized cells, cumulus oophorus and corona radiata cells.

**True**

True / False: The zona pellucida is present in all of the follicles.

**False ; they become present in secondary follicles.**

True / False: The largest cell of the body is a primary oocyte.

**True**

What does the antrum look like and what is in it?

- a. **Blisters; holds hormones the follicle has secreted**
- b. Yellow; dense granulosa cells or large luteal cells
- c. White; scar tissue from the corpus luteum.
- d. Receptors that only accept testosterone.

The basement membrane begins to degenerate right before ovulation, what is the enzyme responsible for this?

- a. Aromatase
- b. **Collagenase**
- c. Progestin
- d. Estradiol

Oocyte maturation occurs in 4 stages, what are they?

Prenatal, nuclear arrest, cytoplasmic growth, resumption of meiosis

Draw the 2-Cell/2-Gonadotropin theory

Big picture:

cholesterol



Progesterone (P<sub>4</sub>)



Testosterone (T)

Theca cells

Basement



membrane

Estradiol/Estrogen (E<sub>2</sub>) ] granulosa cells

LH

- from pituitary gland
- LH binding stimulates enzymes to conduct C → T

LH Receptor

Cholesterol → T

(Theca cells)

B.M

B.

T

↓ aromatase

E<sub>2</sub>

(granulosa cells)

FSH receptor

- From pituitary gland
- Production of aromatase