

What two things control EVERYTHING in the body?

Nerves + Hormones

What forms from the peritoneum to help support and suspend the female tract?

Broad Ligament

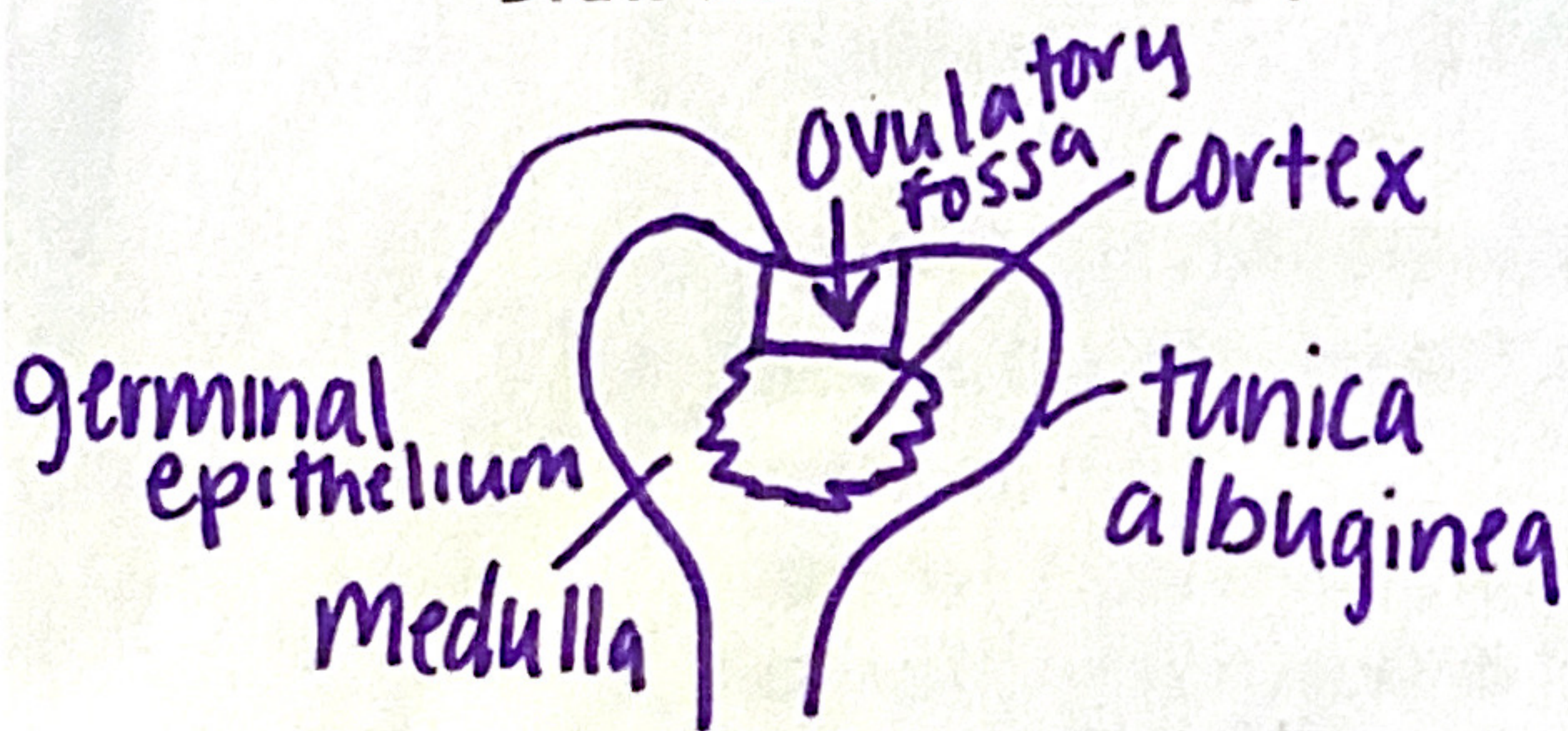
What are the 3 areas of the broad ligament?

Mesovarium - portion supporting ovaries

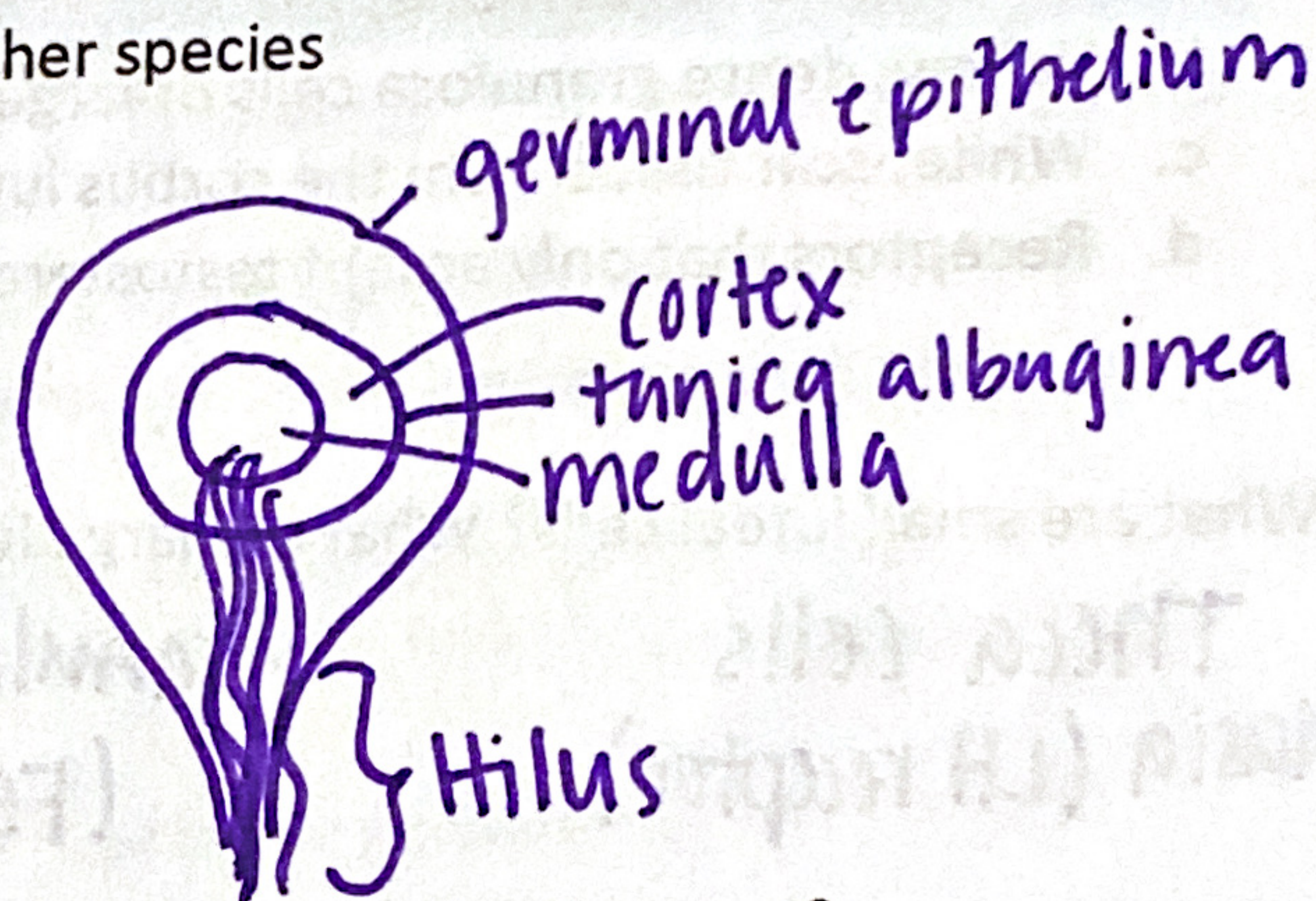
Mesosalpinx - portion supporting oviduct

Mesometrium - portion supporting uterus

Draw and label an ovary of the mare and of most other species

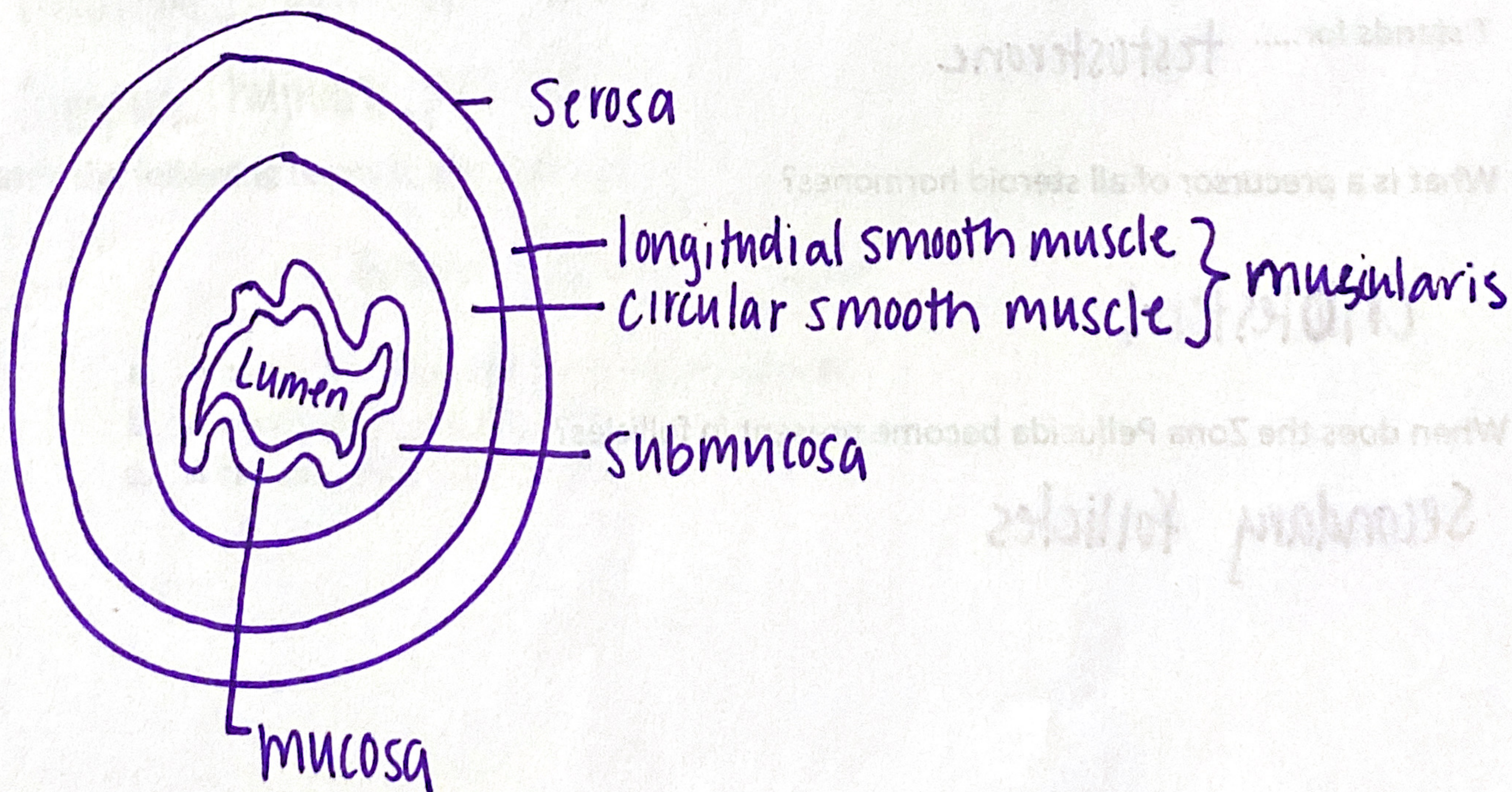


Mare:



What are the 4 layers of tissues are found within the female reproductive tract?

Serosa → muscularis → submucosa → mucosa



Immediately after ovulation, what does the remaining follicular cells transition into?
What happens ~ 5 days later? What happens once the CL is lysed?

Corpus hemorrhagicum (bloody body) → Corpus Luteum (yellow body) →
Corpus albicans (white body)

Match the term with the correct definition:

A Primordial follicle C Secondary follicle D Primary follicle B Antral Follicle

- a. Primary oocyte surrounded by a single layer of squamous cells, smallest follicle in cortex
- b. Antrum is present, consists of an oocyte, follicular fluid, granulosa cells, theca interna and externa
- c. 2/more layers surround the oocyte, zona pellucida is present but the antrum is not
- d. Primary oocyte surrounded by a single layer of cuboidal cells

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.

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

Theca cells hyperplasia (LH receptor)
granulosa cells hypertrophy (FSH receptor)

P4 stands for..... Progesterone

E2 stands for..... Estrogen

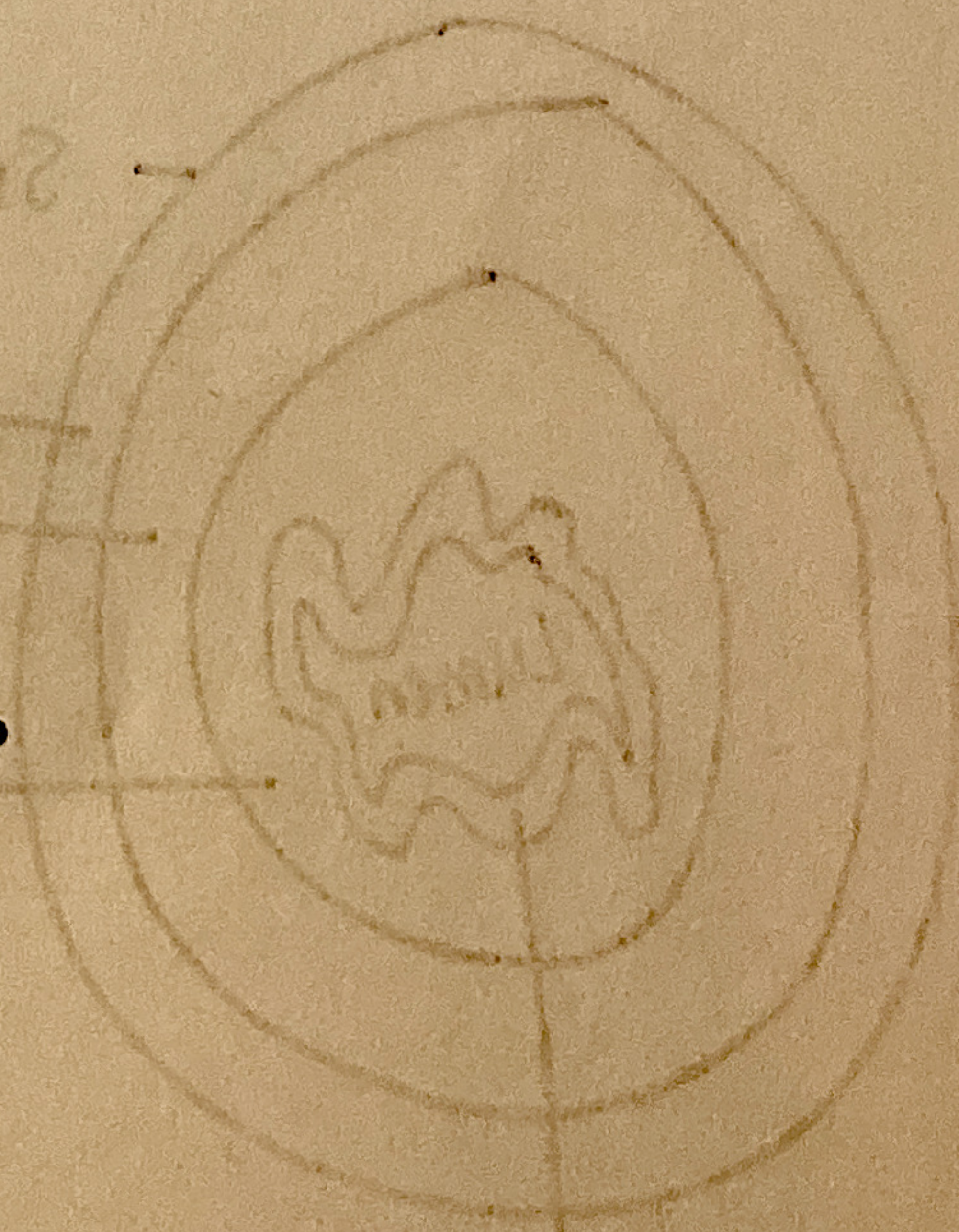
T stands for..... testosterone

What is a precursor of all steroid hormones?

Cholesterol

When does the Zona Pellucida become present in follicles?

Secondary follicles



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

- a. Aromatase
- b. Collagenase
- c. Progesterin
- d. Estradiol

What are the components of the oviduct?

Infundibulum, ampulla, ampullary-isthmic junction, isthmus, uterotubal junction

True or False: The site of fertilization is located in the ~~utero-tubal junction~~.

False: ampullary isthmic junction

Match the following terms with the definition:

C Infundibulum A Fimbria B Ampulla D Isthmus E Utero-tubal junction

- ☒ A. Lines the infundibulum, contains ciliated cells to move the ovum.
- ☒ B. First half of the oviduct, large diameter, contains many folds, ciliated epithelium, not very muscular
- ☒ C. Opening to oviduct, funnel shape that covers the ovary to capture the ovum
- ☒ D. Second half of the oviduct, small diameter, contains fewer folds, ciliated epithelium, very muscular
- ☒ E. Where uterine horn meets oviduct, functions to prevent polyspermy

What are the 2 types of uteruses?

Bicornate: cows, does, sows, bitches

Simplex: humans, primates

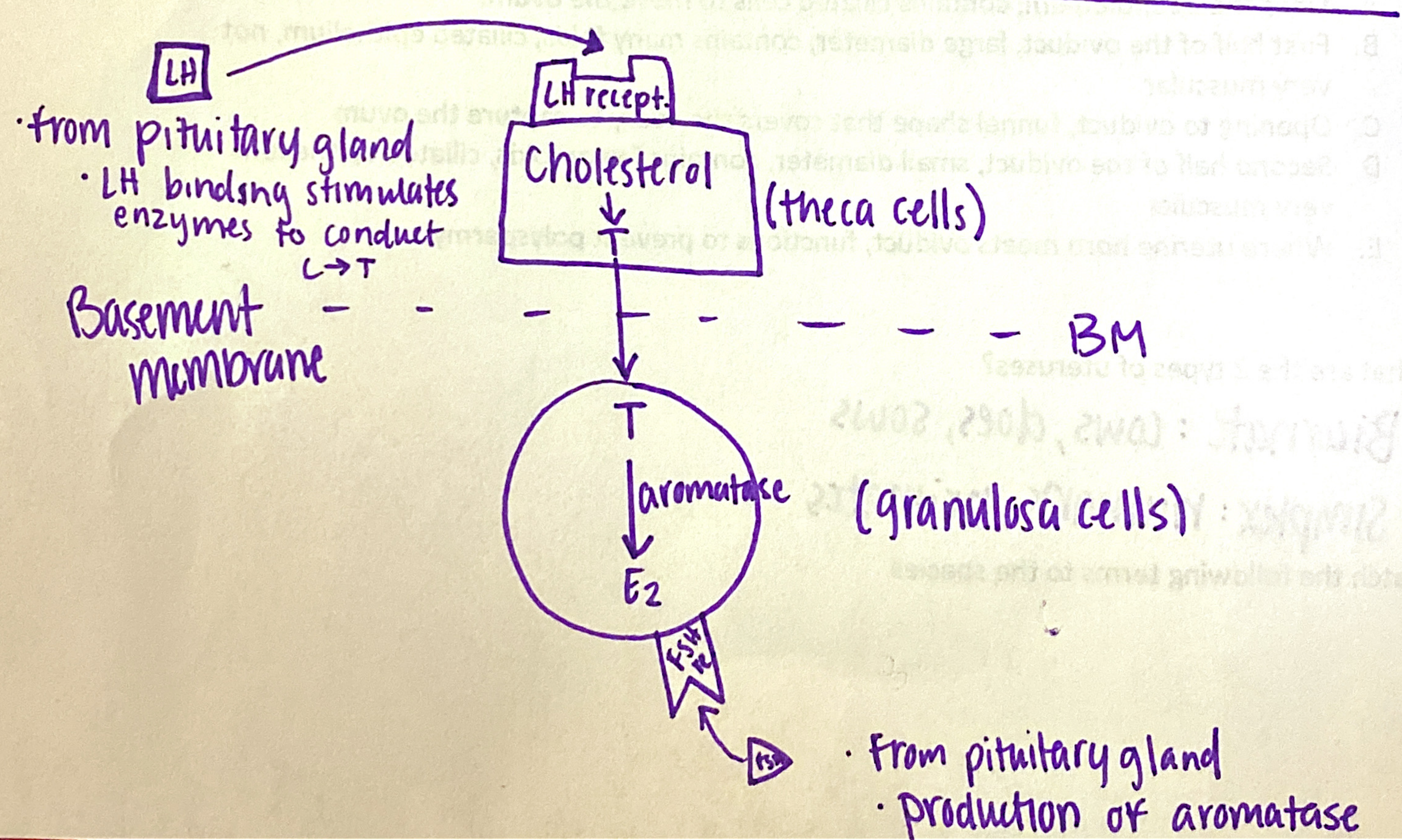
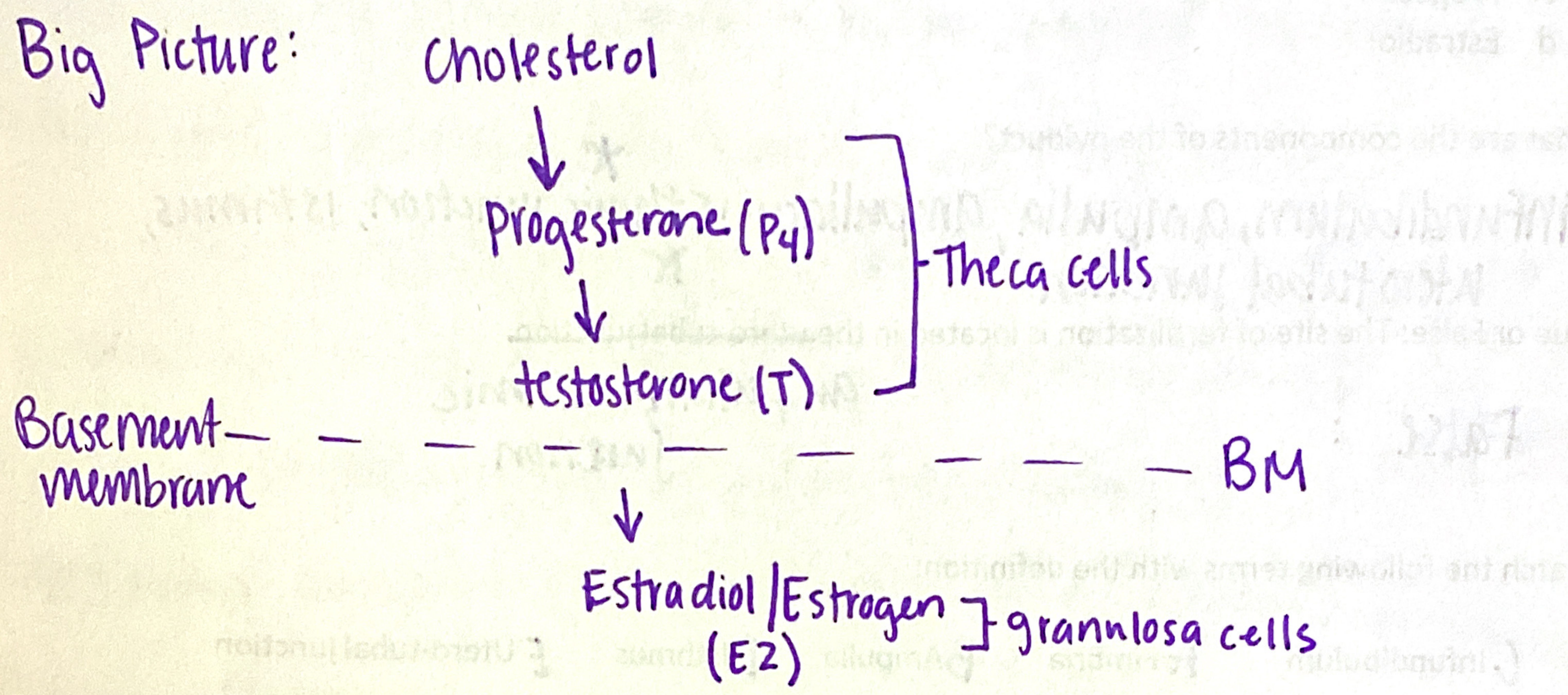
Match the following terms to the species

B Mare C Cattle A Sow

- a. A cervix that contains interdigitating pads
- b. A cervix with cervical folds
- c. A cervix with annular rings

The cervix is most like a gates keeper / "bouncer" because it..... is a barrier to sperm

Draw and explain the 2-cell/2-gonadotrophin theory:



-Cortex: contains germ cells + ovulation occurs here.
↳ CH, CL, CA is also here.

* can you palpate for follicles on many species?

Yes b/c cortex is external, mares are internal so
You cannot palpate for follicles.

- Medulla: contains connective tissue, houses lymphatic vessels + Nerves + blood
- germinal epithelium: covers tunica albuginea breaks at ovulation
- Tunica albuginea: dense connective tissue, provides structure to ovary
- Hilus: where vessels, nerves, + blood/ducts enter an organ
- Serosa: thin layer enclosing body cavities, prevents adhesions
- longitudinal: contraction = peristalsis (propelling waves)
- Circular: contraction = lumen constriction (closing off) > muscularis
- Submucosa: connective tissue containing blood, lymph, + nerves
- Mucosa: secretory layer on inside of tubular portion