

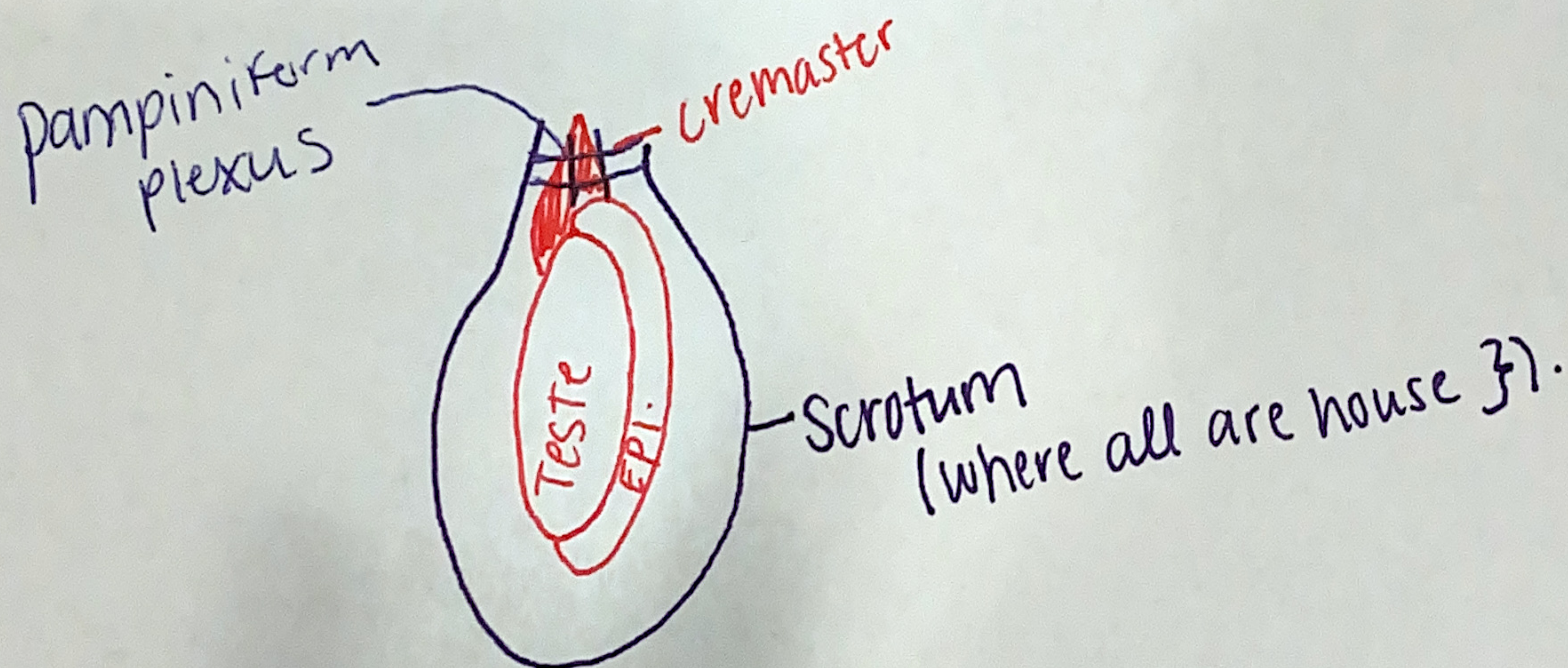
Thermoregulation:

• Scrotum:

- Sweat glands - evaporative cooling
- low insulation - thick skin, low subq fat, hair
- Thinnica dartos - smooth muscle $\uparrow$ or $\downarrow$
- Thermoreceptors - Nerves telling brain if hot/cold
- location of testes - outside / away from body

• Pampiniform Plexus: counter current exchange of blood ~~cooling~~ cooling blood or warming blood

• Cremaster Muscle: voluntary (skeletal muscle) "Fight or flight" response $\uparrow$ or $\downarrow$ movement



How is the CL formed?:

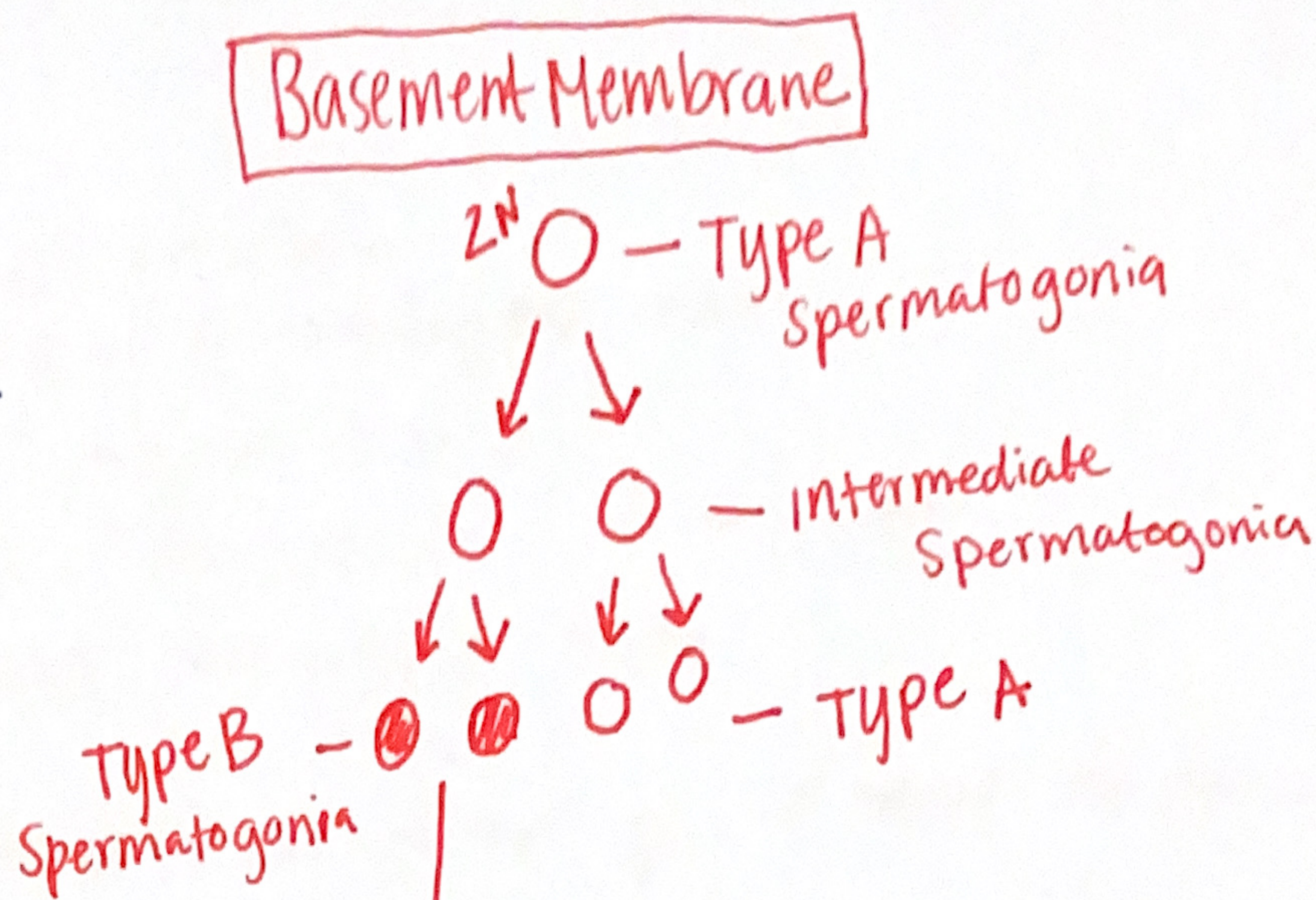
1st ovulation occurs releasing an oocyte which makes the follicle "implode" on itself and a hemorrhage occurs (causing the CH to be made up) causing the theca & granulosa cells to mix which then over $\sim$ 5 days the CL is formed by the lack of hemorrhage & theca & granulosa cells undergoing hyperplasia & hypertrophy making small / large luteal cells which then make / produce P_4 until luteolysis occurs.

Spermatogenesis:

Proliferation Phase:

Mitotic divisions

- Type A: Renew sperm cells, dormant
- Type B: Migration to adluminal compartment

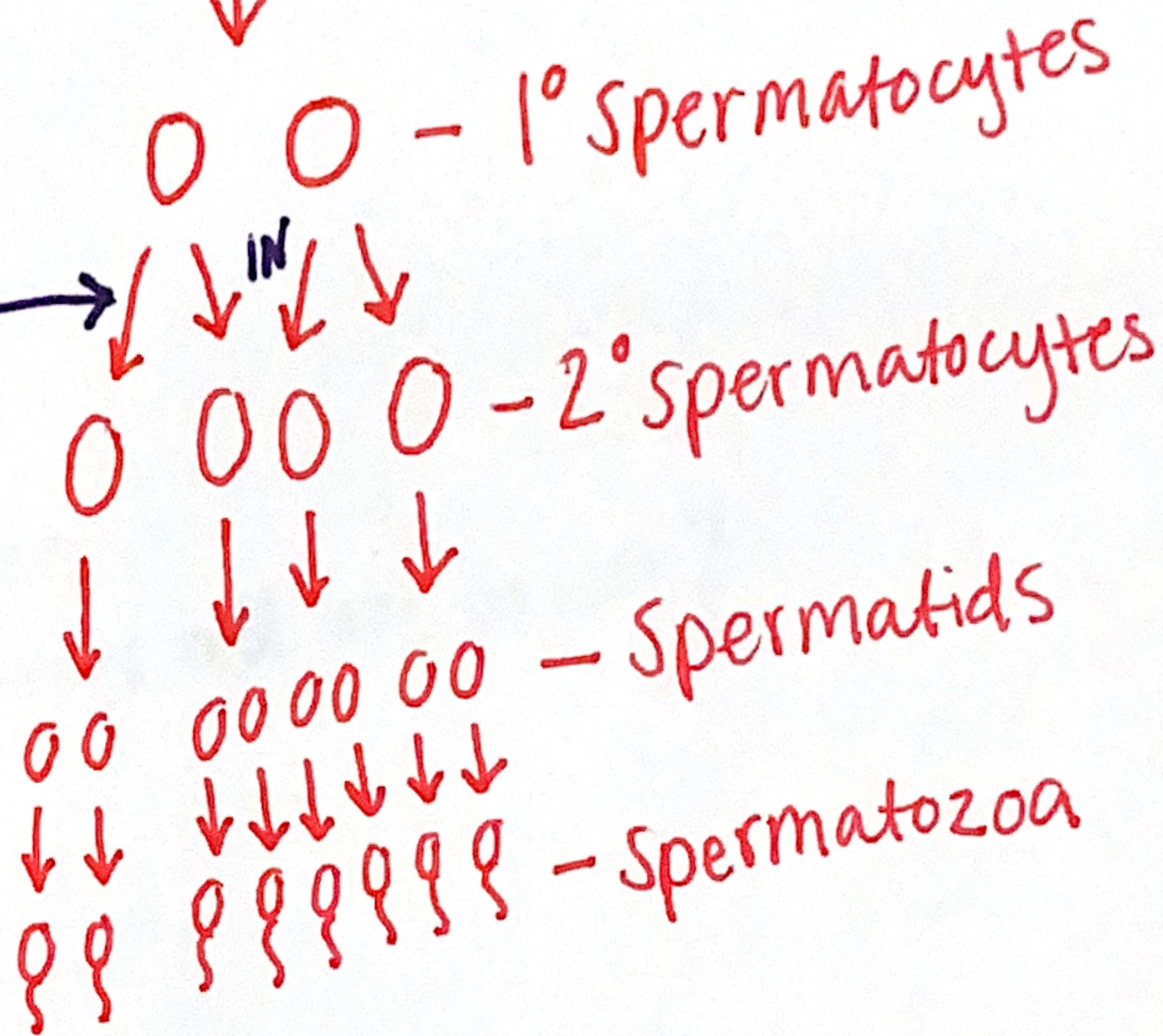


Meiosis Phase:

Meiosis I:
genetic diversity
via DNA replication
crossing over

growth / differentiation

Meiosis II:
Produces IN
Spermatids.



LUMEN

Differentiation Phase:

- NO cell division — Morphological changes

• Spermination: released by Sertoli cells into seminiferous tubules

• Golgi Phase: Making acrosome. Golgi Apparatus receives proteins / lipids from ER. It modifies, sorts, concentrates, & packs them into sealed tubules.

• Cap Phase: granules flatten to form "cap" over nucleus & primitive tail forms

• Acrosomal Phase: acrosome spreads over 2/3 of nucleus, nucleus elongates, sperm head takes shape. extension of flagellum, mitochondria migrates towards the neck.

• Maturation phase: results in spermatids w/ motile potential, DNA compacts, & sperm is inert