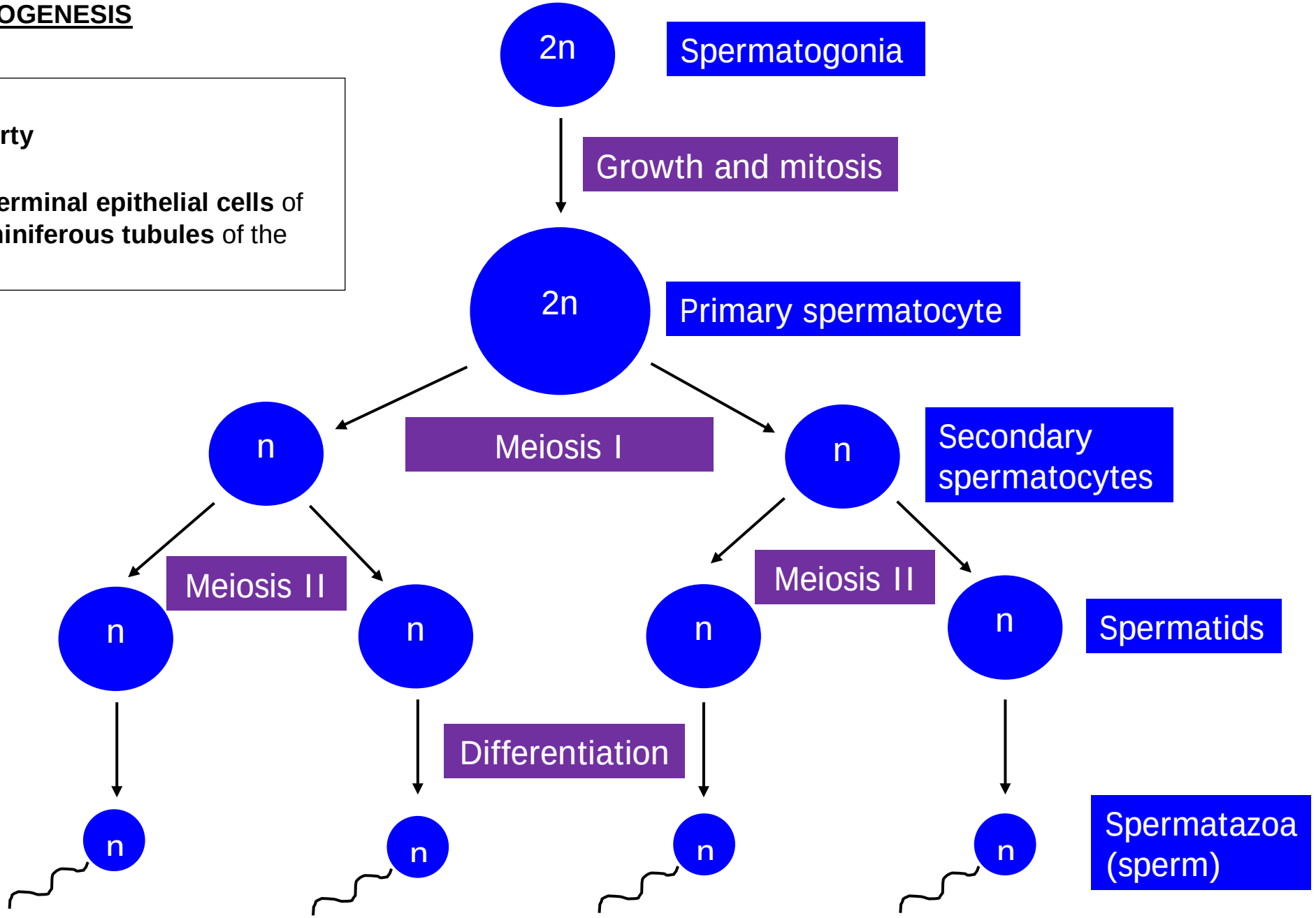
A. SPERMATOGENESIS

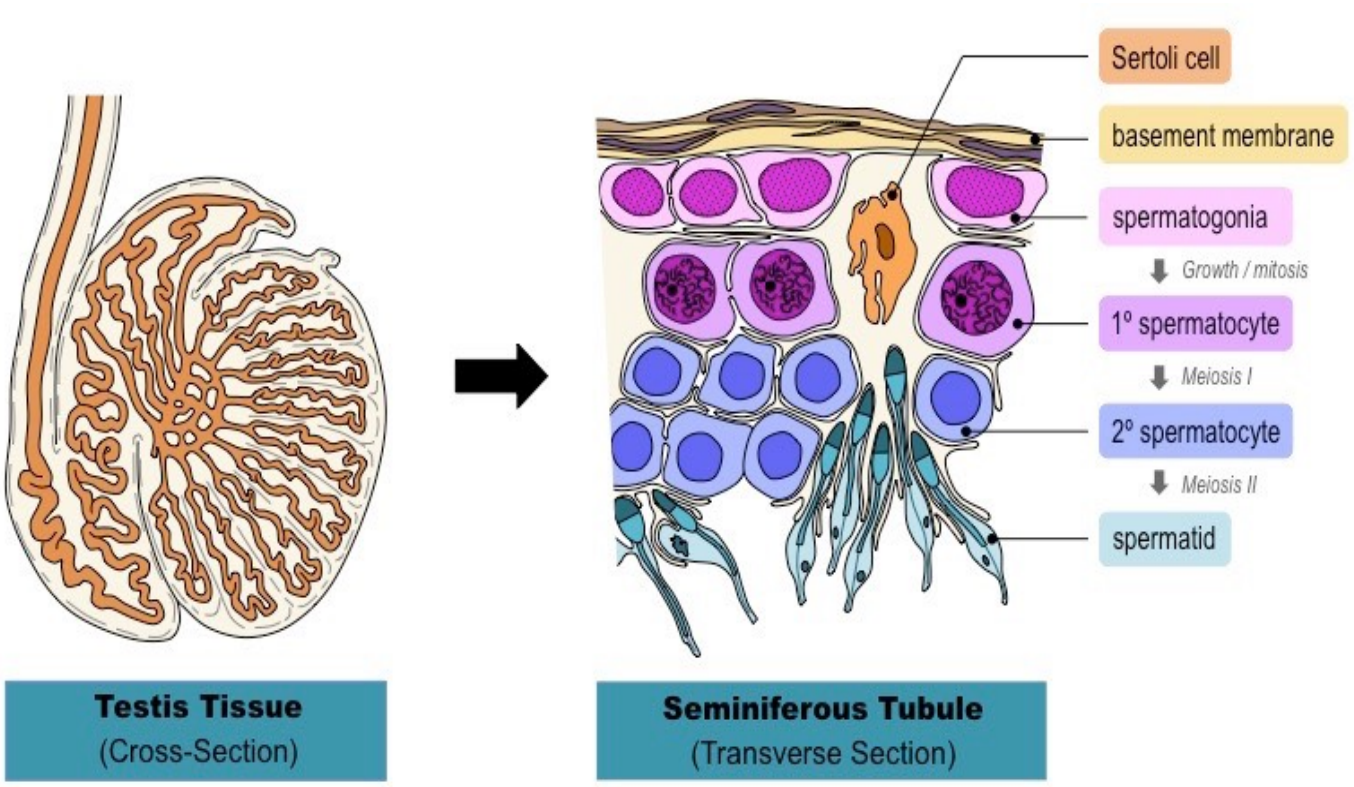
Starts:

- at **puberty**
- in the **germinal epithelial cells** of the **seminiferous tubules** of the **testes**



SERTOLI (NURSE) CELLS **nourish** the **spermatids** as they **differentiate** into **spermatazoa**

B. INSIDE THE SEMINIFEROUS TUBULES

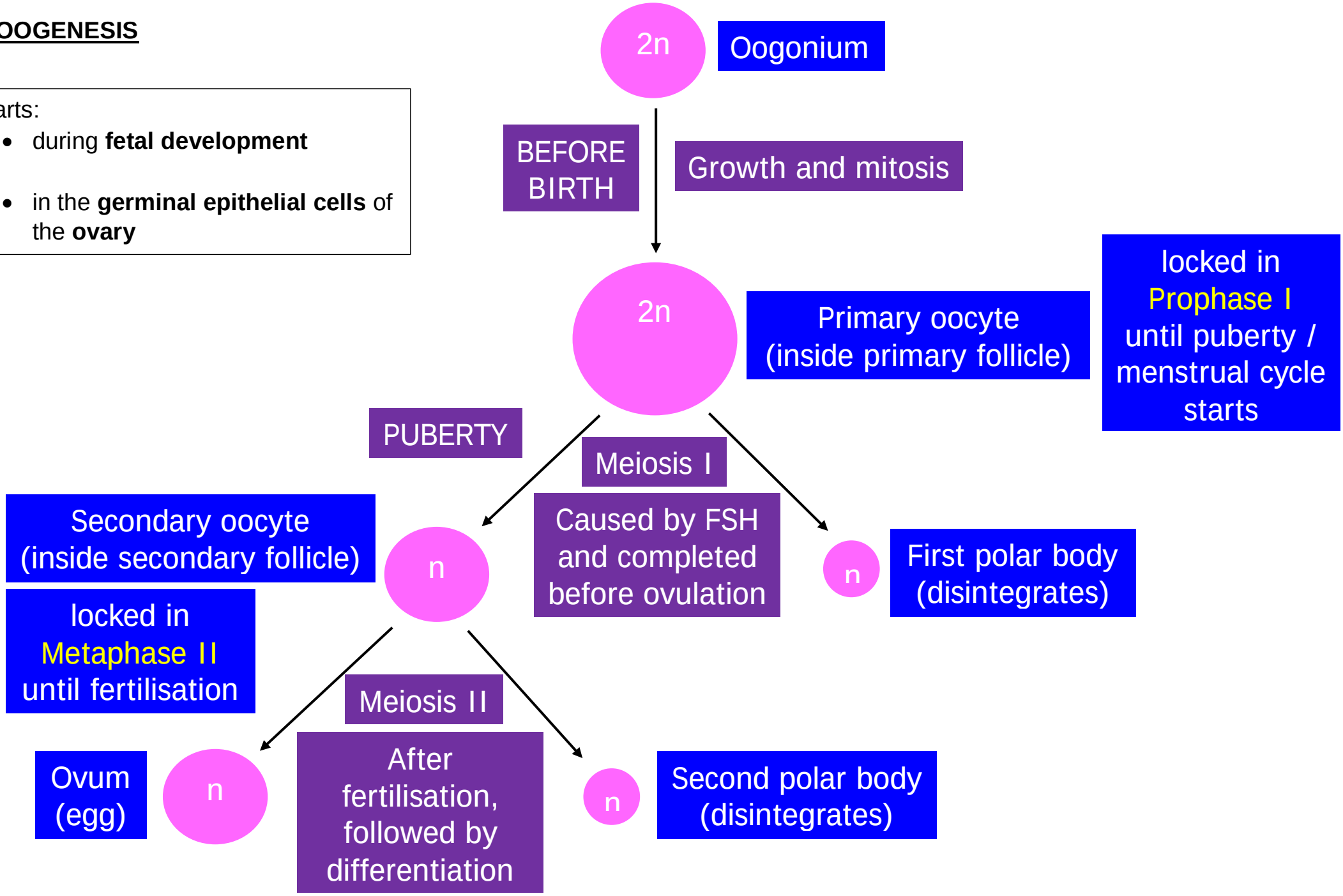


- The further you **go in** from the **outer layer**, the **further on spermatogenesis** is.
- For example, the **first** cells, **spermatogonia**, are made **nearest** to the **surface membrane**.

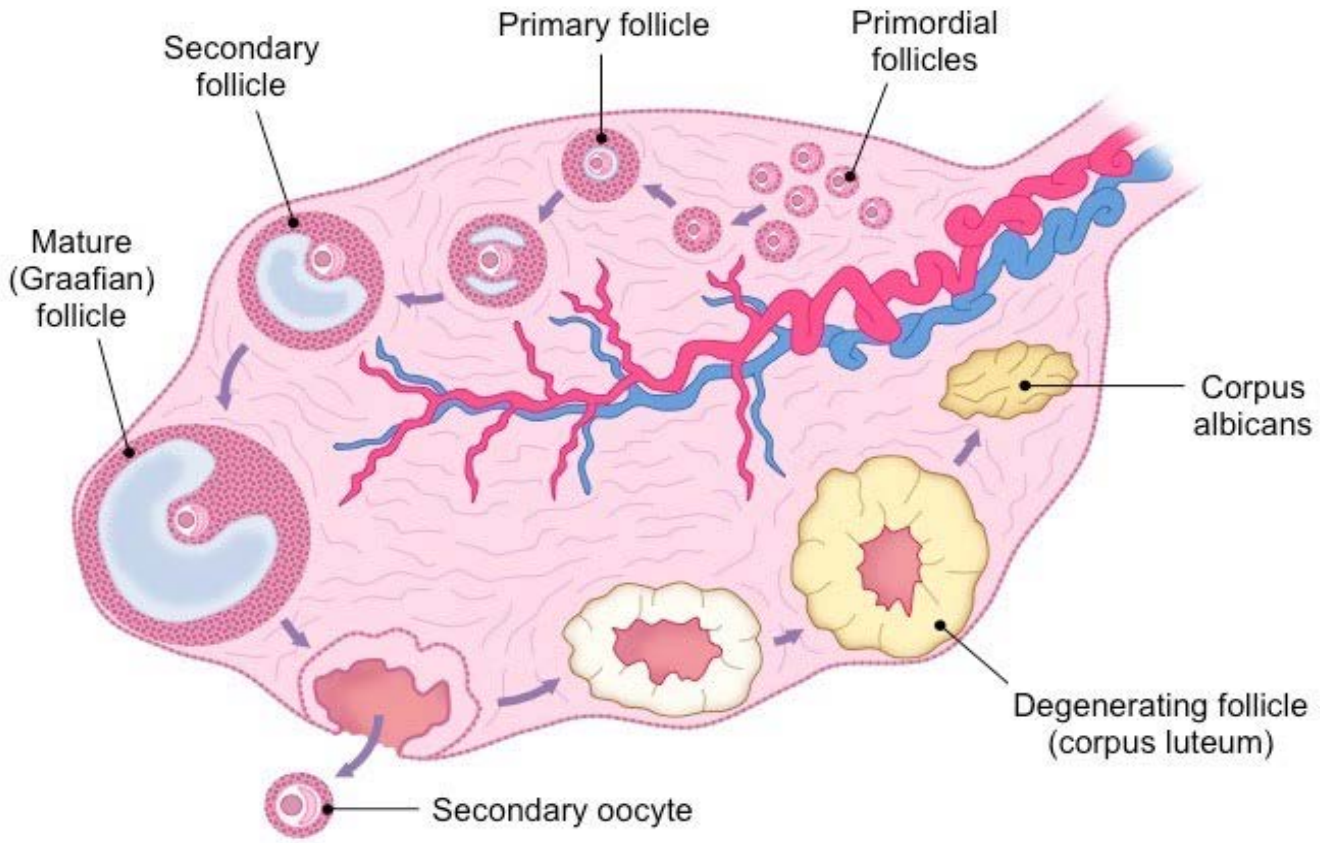
C. OOGENESIS

Starts:

- during **fetal development**
- in the **germinal epithelial cells** of the **ovary**



D. INSIDE THE OVARY



- The further you **go anticlockwise** from the **outer layer**, the **further on oogenesis** is.
- **Oogonia** form primordial follicles, which are at the very **start**.

E. COMPARING AND CONTRASTING SPERMATOGENESIS WITH OOGENESIS

Spermatogenesis	Oogenesis
Both start with **germ cells/germinal epithelium** (of gonads)	
Both involve **cell growth before mitosis**	
Both start **with mitosis** to **produce many gametes**	
Both involve **meiosis/reduction division/creating haploid (n) cells**	
Happens in **testes**	Happens in **ovaries**
Millions/large numbers produced **daily**	**One/few** produced **per month**
Released during **ejaculation**	**Released** during **ovulation**
Begins during **puberty**	**Begins** before **birth**
Continues throughout life	**Stops** at **menopause**
Four sperm made **per meiosis**	**One egg** produced **per meiosis**
Polar bodies **not produced** / **equal division** of **cytoplasm**	**Polar** bodies **produced** / **unequal division** of **cytoplasm**
Cytoplasm is **reduced** in **sperm**	**Cytoplasm** is **increased** in **eggs**
Sperm are **motile/mobile**	Eggs are **not motile/mobile**