

# Biology 47 – Human Anatomy

West Valley College - Norris

## Lecture Outline – Reproductive System

### I. Definitions

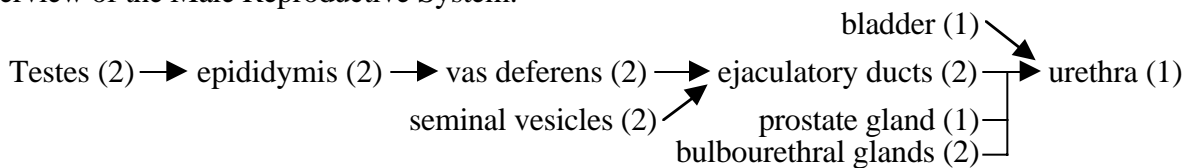
- A. Growth
- B. Reproduction
- C. Primary Reproductive Structures (The Gonads)
- D. Secondary Reproductive Structures

### II. Function (= physiology)

- A. Production of Sex Cells
- B. Production of Sex Hormones

### III. Male

Overview of the Male Reproductive System:

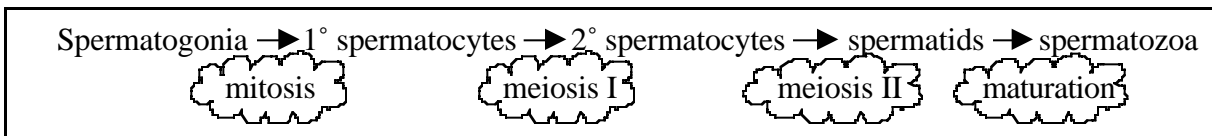


#### A. Primary Reproductive Structures

##### 1. Testis

- a. Seminiferous Tubules
  - i. Sertoli Cells (sustentacular cells)
  - ii. Leydig Cells (interstitial cells)
  - iii. Sperm

2. Sperm are produced within the testis continuously from spermatogonial cells through a process called spermatogenesis. Spermatogenesis begins at puberty and continues throughout the life of the male.



#### B. Secondary Reproductive Structures

##### 1. External Genitalia

- a. Penis
  - i. Glans Penis
  - ii. Shaft and Prepuce (foreskin)
  - c. Erectile Tissue
    - Corpus Spongiosum
    - Corpora Cavernosa

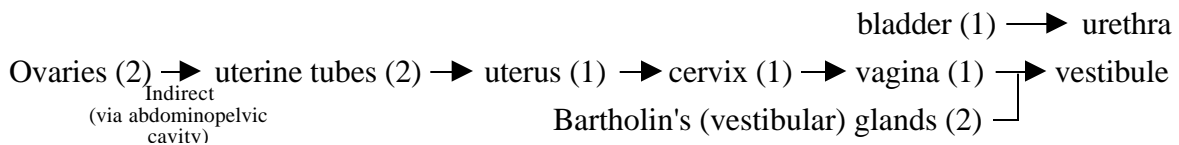
##### b. Scrotum

##### 2. Epididymis

3. Vas Deferens (ductus deferens, spermatic duct)
  - a. Spermatic Cord
  - b. Inguinal Canal
  - c. Ampulla
  - d. Seminal Vesicles
4. Ejaculatory Ducts
5. Prostate Gland
6. Urethra
  - a. Prostatic Urethra
  - b. Membranous Urethra
    - i. Bulbourethral Glands (Cowper's glands)
  - c. Penile Urethra

#### IV. Female

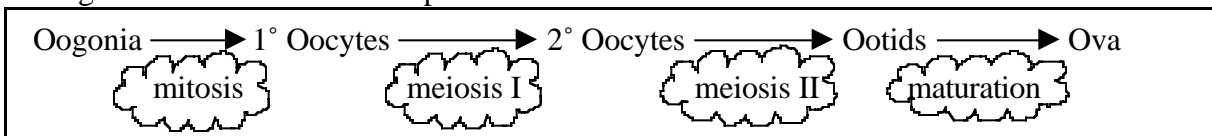
Overview of the Female Reproductive System:



#### A. Primary Reproductive Structures

##### 1. Ovaries

##### 2. Oogenesis and Follicle Development



##### 3. Oocyte Development

- a. Oogonia
- b. Primary Oocyte
- c. Secondary Oocyte

##### 4. Follicle Development

- a. Primordial Follicle
- b. Primary Follicle
- c. Secondary Follicle

d. Graafian Follicle (mature)

e. Corpus Luteum

## B. Secondary Reproductive Structures

1. External Genitalia - collectively called the vulva or pudendum

- a. Labia Majora
- b. Labia Minora

c. Clitoris

2. Urethra

3. Vagina

4. Uterus

a. Cervix

b. Layers of the Uterus

- i. Endometrium
- ii. Myometrium
- iii. Perimetrium

5. Uterine Tubes (fallopian tubes)

- a. Isthmus
- b. Ampulla
- c. Infundibulum

6. Supporting Structures

- a. Broad Ligament
- b. Suspensory Ligament
- c. Round Ligament
- d. Ovarian Ligament (utero-ovarian ligament)
- e. Uterosacral Ligament

7. Breast

- a. Areola
- b. Mammary Glands

## V. Additional Key Terms

fertilization    gamete    gametogenesis    gonad    implantation    ovulation    zygote