

# The Pelvis and Perineum

# The Pelvis

- Comprised of three fused bones: The **ilium**, **ischium**, and **pubis**
- **Ilium:** Superior region; important structures are: iliac crest, anterior/posterior superior iliac spines, anterior/posterior inferior iliac spines.
- **Ischium:** Posteroinferior region; ischial spine, ischial tuberosity; lesser sciatic notch.
- **Pubis:** Superior/inferior rami, pubic symphysis, pubic arch; forms obturator foramen(isch./pubis)

# The Pelvis

- ***False pelvis***- Portion of pelvis superior to pelvic brim.
- ***True pelvis***-Portion of pelvis inferior to pelvic brim; forms deep bowl containing the pelvic organs.

# Muscles of the Pelvic Floor

- *Levator ani: pubococcygeus, iliococcygeus*
- *Sphincter urethrae*
- *Ischiocavernosus*
- *Bulbospongiosus*

# Arteries of the Pelvis

- *Right/Left Common Iliacs*
- *Internal Iliac*-urinary bladder, int.,ext. walls of pelvis, genitalia
- *External iliac*

# Sacral Plexus

## L4-S4

Nerves:

- Pudendal
- Levator ani/coccygeus
- Pelvic splanchnic

# Urinary Bladder

- Urachus
- Lateral umbilical ligaments
- Rugae
- Ureteric openings, internal urethral opening (trigone)
- Histology-mucosal, submucosa, muscularis(inner/outer longitudinal)(middle circular)

# Urethra

- Thin walled muscular tube
- Mostly stratified columnar
- Female-3 to 5cm long; external urethral meatus
- Male-18 to 20cm long; prostatic, membranous, penile
- UG diaphragm

# Male Reproductive System

- The scrotum
- The testes
- Seminiferous tubules, epididymis, ductus deferens
- Leydig cells
- Angiology-testicular arteries, pampiniform plexus

# Male Reproductive System

## *The penis & accessory glands*

- Glans, prepuce
- Corpus spongiosum,cavernosum
- Seminal vesicles-60% semen volume(alkaline fluid, fructose)
- Prostate-1/3 of semen vol.(citrate, acid phosphatase,hyaluronidase).

# Male Reproductive System

## *Reproductive Tract*

- Epididymis-head, body, tail
- Functions in gauging composition of tubular fluid, recycling & functional maturation of spermatozoa
- Urethra

# Spermatogenesis

- Spermatogonia>Primary spermatocyte>Secondary spermatocyte>Spermatids>Spermatozoa
- Spermiogenesis
- Spermatozoa-head(acrosome),middle piece, flagellum

# Female Reproductive System

- Ovaries
- Uterine tubes
- Uterus
- Vagina

# Female Reproductive System

## *Ovaries*

- Angiology-ovarian arteries, veins
- Ovarian follicles (primary,secondary,Graafian)
- Oogenesis-oogonium, primary oocyte,secondary oocyte, ovum

# Female Reproductive System

## *The Uterus & Vagina*

- Body,cervix
- Uterine tube
- Uterine cavity,endometrium(10%),  
myometrium(90%)
- Vaginal canal

# Female Reproductive System

## *External Genitalia*

- Labia majora,minora
- Clitoris
- Bartholin's glands