Lab 19 Dissection Steps:

- Identify the **external iliac arteries** (right and left)
- Identify the **internal iliac arteries** (right and left)
- Identify the **median sacral artery** (not paired)
- On the LEFT side of the animal, trace the internal iliac artery and identify the **umbilical artery** and the **internal pudendal artery**
- Trace the internal pudendal a. and identify the **vaginal a./prostatic a.**
- From the vaginal/prostatic a., identify the following:
  - **uterine a./artery of ductus deferens**
  - Attempt to identify the **caudal vesical artery and the middle rectal artery**
- Reflect the skin and fat from the RIGHT ischiorectal fossa and look for the continuation of the internal pudendal a. on the caudolateral aspect of the rump. Attempt to identify the following:
  - **ventral perineal a.**
  - **caudal rectal a.**
  - **artery of the penis/clitoris**
- On MALE specimens, continue to trace the artery of the penis and attempt to identify the **artery of the bulb of the penis**, the **deep artery of the penis** and the **dorsal artery of the penis**.
- Re-identify the **urinary bladder** (previously identified in Lab 16) and the **median ligament of the bladder**; also identify the **lateral ligaments of the bladder**.
- Identify the **urethral m.** (urethralis m.)
- Make a midventral incision through the bladder wall and the urethra (in male dogs this will include the prostate gland)
- Open the bladder. Observe the entrance of the ureters and identify the **trigone of the bladder**
- Re-identify the **rectum** (previously identified in Lab 16)
- Identify the **anal canal**. Attempt to identify the following parts of the anal canal:
  - **columnar zone (with anal columns)**
  - **anocutaneous line (intermediate zone)**
  - **cutaneous zone**
    - **anal sac (paranal sinus)- opening**
  - **anus**
  - **external anal sphincter m.** (striated m.)
  - **internal anal sphincter m.** (smooth m.; not easily seen)
Identify the rectococcygeus m.

In MALE specimens, identify the following:

- prostate gland
- urethra (note there is a slight difference for dog vs. cat)
  - pelvic part
    - preprostatic part (cat)
    - prostatic part (dog & cat)
      - Attempt to identify the urethral crest and colliculus seminalis (not easily seen) in the prostatic part
    - Identify the post-prostatic part (covered by urethralis m.) (dog & cat)
  - penile part (dog & cat)
- prepuce
  - preputial orifice
  - fornx of prepuce
- Open the prepuce with a midventral incision and expose the penis
- Identify the penis and its parts: root, body & free part
- Identify the retractor penis muscle
  - Examine the root of the penis and identify the crus (right and left; plural is crura; the left crus was cut and reflected off of the pelvis when abducting the left hind limb to open the pelvis to reveal the pelvic plexus in Lab 18). Examine the cut left crus and do the following:
    - Identify the ischiocavernosus muscle covering the crus
    - Identify the corpus cavernosum penis (paired)
    - Identify the tunica albuginea
  - Identify the bulbospongiosus muscle in between the ischiocavernosus muscles, running distally on the body of the penis. Bulbospongiosus m. covers the bulb of the penis
    - Make a transverse section through the root of the penis to identify its parts. Identify corpus spongiosum penis on the cut surface
  - Make several incomplete sections through the body of the penis to study the above mentioned structures
Make a longitudinal incision on the dorsal aspect of the penis to identify the following:

- glans
  - bulbus glandis
  - pars longa glandis

In your canine bone box, identify the os penis bone and note its urethral groove.

In male CATS identify the bulbourethral glands.

In FEMALE specimens, identify the following:

- cervix of uterus
  - cervical canal
    - internal uterine ostium (uterine body opening)
    - external uterine ostium (vaginal opening)

- vagina
  - fornix

- vestibule
  - Open the vestibule and vagina with a dorsal midline incision. Identify the following:
    - urethral tubercle
    - urethral opening
    - vestibular bulbs (not easily seen)
    - fossa clitoridis
      - clitoris (not easily seen)

- vulva
  - labia
  - dorsal & ventral commissures