

Fetal Pig Reproductive Systems Dissection

Male Protocol:

1. Locate the **scrotum**, the sac of tissue lying outside the abdominal cavity between the legs.
2. Within the abdominal cavity, locate the gonadal arteries. Trace these arteries to the point where they go through the abdominal wall. The opening where the gonadal arteries go through the abdominal wall is the beginning of the **inguinal canal**. Note also that another tube is coming out of the inguinal canal at the same point where the gonadal artery is going in. This other tube is the **vas deferens**.
3. Make a small incision along one inguinal canal so that you can expose the testis.
4. Note the membranous tube that covers all of the structures. This is the rest of the **inguinal canal**. Peel off this membrane so that you can see the structures within.
5. The **testis** is the small, dark, bean-shaped structure at the end of the inguinal canal.
6. The **epididymis** is the tightly coiled tube on one side of the testis. Trace the epididymis around to the other side of the testis. Note the tube becomes uncoiled and extends up through the inguinal canal to the bladder. This is the **vas deferens**.
7. Note the white, globular mass posterior to the testis. Peel some of this tissue back away from the testis. You should find a small, hard structure within this tissue. This is the **gubernaculum**. The white blob of tissue itself is the **processus vaginalis**.
8. To see the rest of the male reproductive system, make a medial incision through the pubis bone. You can feel the cavity where the reproductive structures lie by placing your blunt probe into the opening at the base of the bladder. You need to cut through the bone down to your probe in order to see the remaining structures.
9. Find the urethra coming off the base of the bladder. Note also the rectum lying underneath the urethra.
10. Trace the urethra down until you see a small white bulge of tissue on each side of it. These bulges of tissue are the **bulbourethral (Cowper's) gland**.
11. Continue to trace the urethra down through the rest of the body. Note that at the base, the urethra bends and continues on up toward the umbilical cord. Beyond this bend, the urethra is now the **penis**.
12. Locate the **preputial orifice**, the external opening of the penis located just below the umbilical cord.

13. Once you have completed this dissection find a female specimen and identify the components of that system.

Female Protocol:

1. Locate the left and right **ovaries**, the small, pea-shaped structures at the base of the abdominal cavity.
2. Note the very small, convoluted tubules next to each ovary. These are the **fallopian tubes**.
3. The fallopian tubes connect to the much larger tubes that extend to the base of the bladder. These larger tubes are the **uterine horns**.
4. Attached to each uterine horn is a large, membranous sheet of tissue. This is the **broad ligament**.
5. The uterine horns come together at the top of the **uterus**.
6. To see the rest of the uterus and the rest of the female reproductive system, make a medial incision through the pubis bone. You can feel the cavity where the reproductive structures lie by placing your blunt probe into the opening at the base of the bladder. You need to cut through the bone down to your probe in order to see the remaining structures
7. Observe the body of the **uterus** after you have made your incision. Note also the urethra coming from the base of the bladder.
8. The **vagina** attaches to the base of the uterus. Note also the rectum lying underneath the vagina.
9. Trace the vagina down to the point at which it merges with the urethra. This last section, which provides a common opening to the outside for both the vagina and urethra, is called the **urogenital sinus**.
10. The **labia** are the two folds of skin that cover the external opening of the urogenital sinus. The **genital papilla** is the point of tissue that covers the labia.
11. Once you have completed this dissection find a male specimen and identify the components of that system.