

Day 5 Urogenital System Dissection Guide

1. Remove the digestive organs to study the excretory and reproductive organs that make up the **urogenital system**.
2. Locate the large, bean-shaped **kidneys** lying against the dorsal body wall. Notice that they are covered by the **peritoneum**. Kidneys filter wastes from blood.
3. Find the **ureters** (pronounced yur-ee-ters), tubes which extend from the kidneys to the bag-like **urinary bladder**. The urinary bladder lies between the **umbilical arteries** and temporarily stores liquid wastes filtered from the blood.
4. Lift the urinary bladder to find the **urethra** (pronounced yur-ee-th-ruh), the tube which carries urine out of the body. Follow the urethra to the urogenital opening on the outside of the pig's body.
5. Make sure that an incision extends all the way to the anus but be careful to not cut too deep and damage the internal organs.
6. Follow the directions below for locating the excretory and reproductive organs in either a male or female pig. When you finish observing the organs in a pig of one sex, exchange specimens with another classmate to view the organs in a pig of the opposite sex.

Male System

8. In the male pig, locate the two **scrotal sacs** at the posterior end of the pig. If the pig is in the later stages of development, you will find a **testis** in each sac. If the pig is in an early stage of development, the oval-shaped testes will be in the abdominal cavity. These testes have not yet descended into the scrotal sacs.
9. On each testis, find the coiled **epididymis** (pronounced ep-ih-did-ih-mus). Sperm cells produced in the testis pass through the epididymis and into a tube called the **vas deferens** (pronounced vas-def-er-ins). This tube crosses over a ureter and enters the urethra.
10. Follow the urethra to the **penis**, a muscular tube lying just below the skin posterior to the umbilical cord. In mammals, the penis is the organ that transfers sperm.
11. Label the diagram of the male urogenital system on your day 5 hand-in.

Female System

12. In the female pig, find the two bean-shaped **ovaries** at the posterior end of the abdominal cavity. Observe the coiled **Fallopian tube** (pronounced fah-lope-ee-ann) attached to each ovary, which carries eggs from the ovary.
13. Follow the Fallopian tube to the **uterus**. The uterus is dorsal to the urinary bladder and the urethra.
14. Trace the uterus to a muscular tube called the **vagina**. The vagina will appear as a continuation of the uterus. Sperm from the male are deposited into this organ during mating. The vagina and the urethra open into a common area called the **urogenital sinus**. This cavity opens to the outside at the urogenital opening.
15. Label the diagram of the female urogenital system on your day 5 hand-in.

When you have completed your study of the urogenital system of both sexes, then clean up your materials and work area. Wrap the pig in damp paper towels and put it in a zip-lock plastic bag. Return your lab equipment and pig and then thoroughly wash your hands with soap.