

Rat Dissection

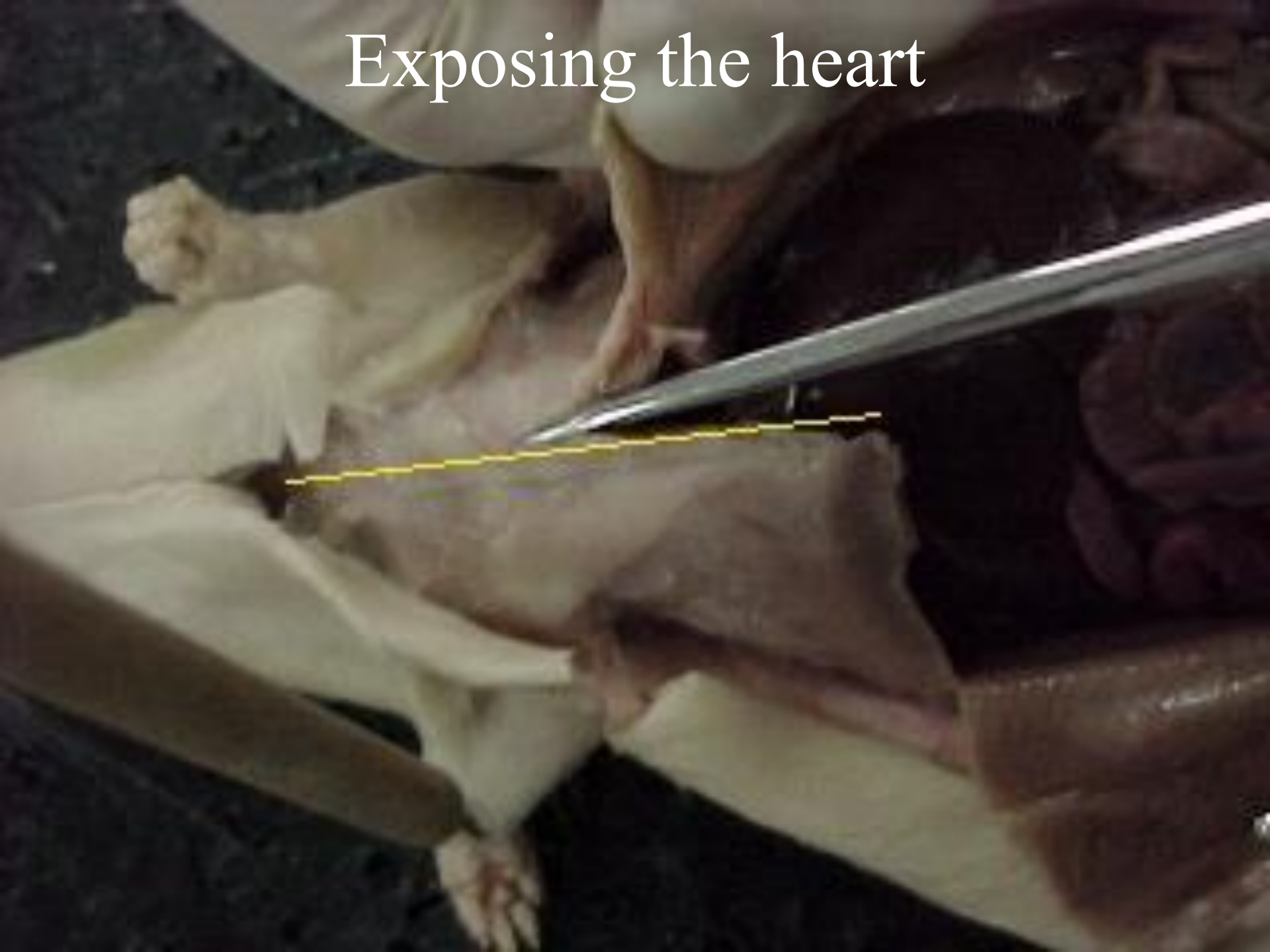
Abdominal Incision



Peel the skin back
Peel the skin back.



Exposing the heart



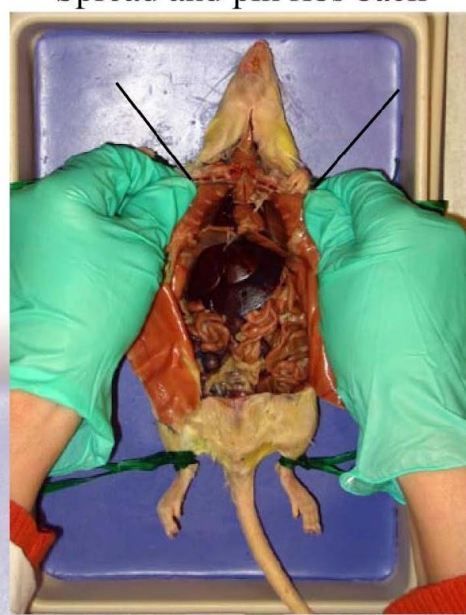
the legs back, looping
the cord under the tray



Open abdominal region

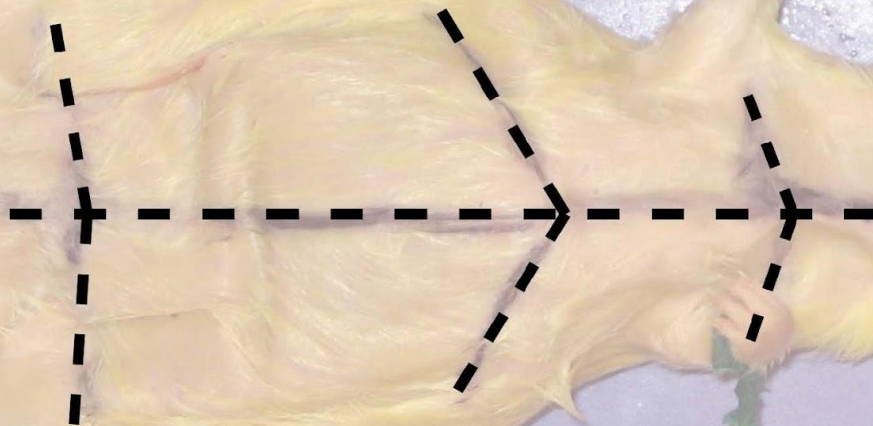


Open thoracic and abdominal cavities



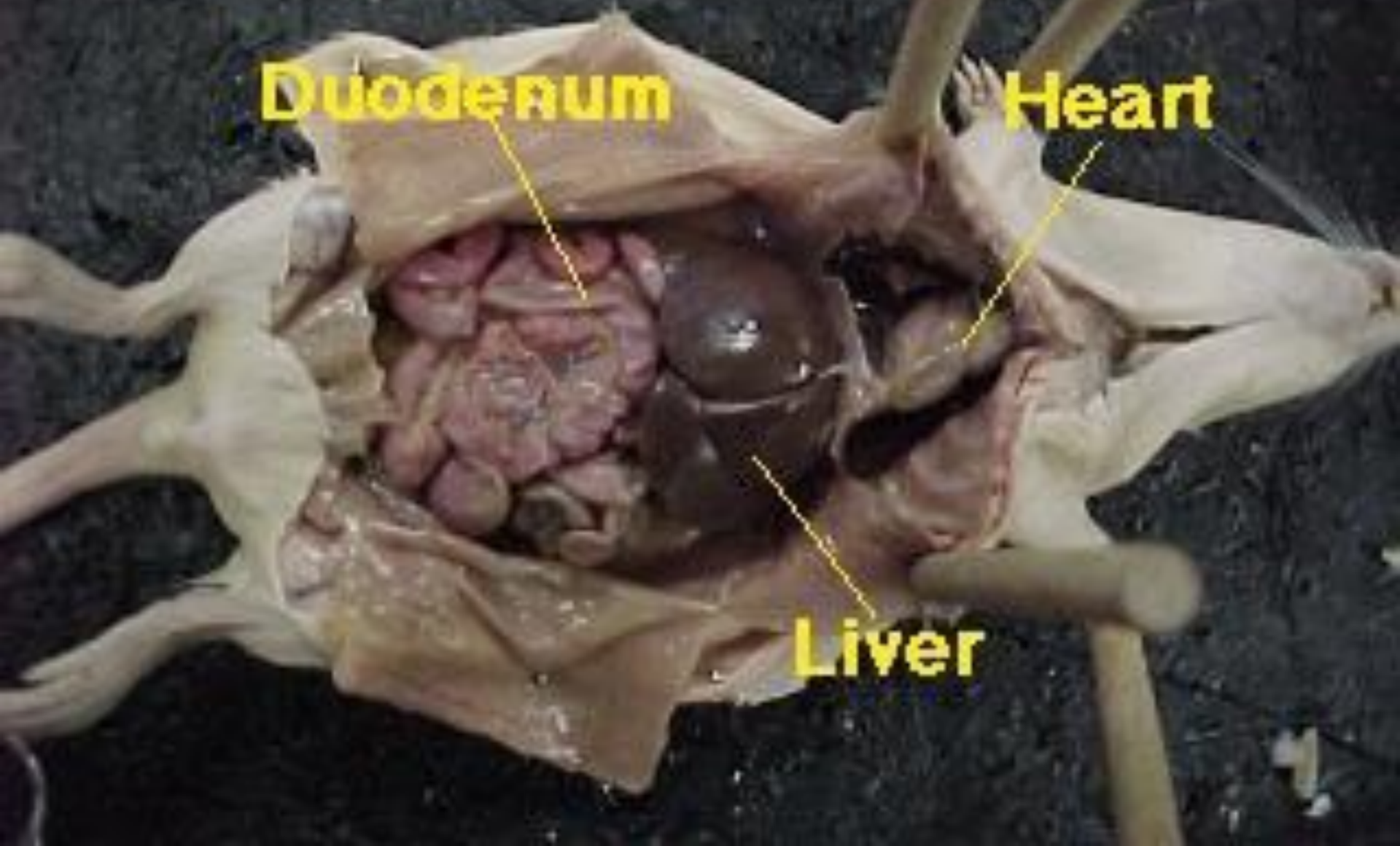
Incision Guide

Take the time to identify the following organs and structures;
diaphragm
heart
thymus
lungs
Next, carefully open the region superior to the thymus, exposing the trachea and esophagus. Use the picture on the following page as a guide.



Thoracic and Abdominal Cavities

Abdominal and Thoracic Cavities



Duodenum

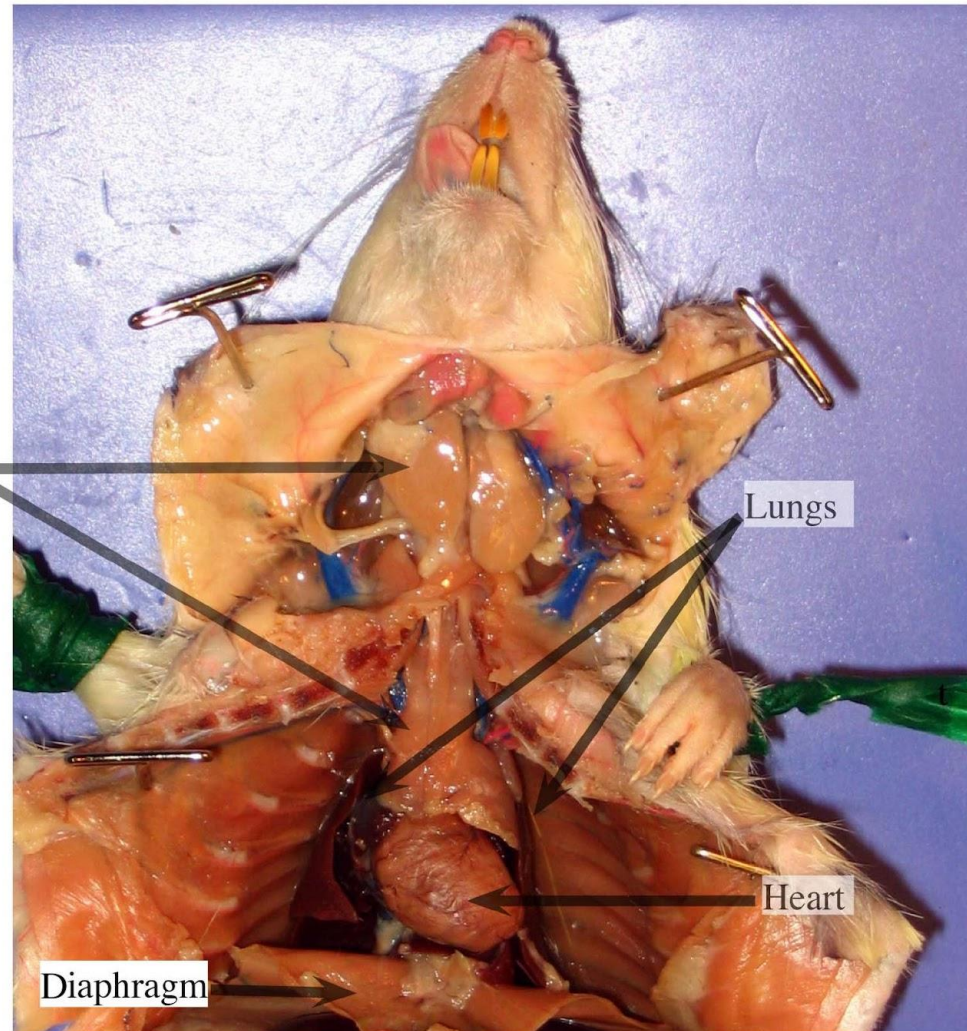
Heart

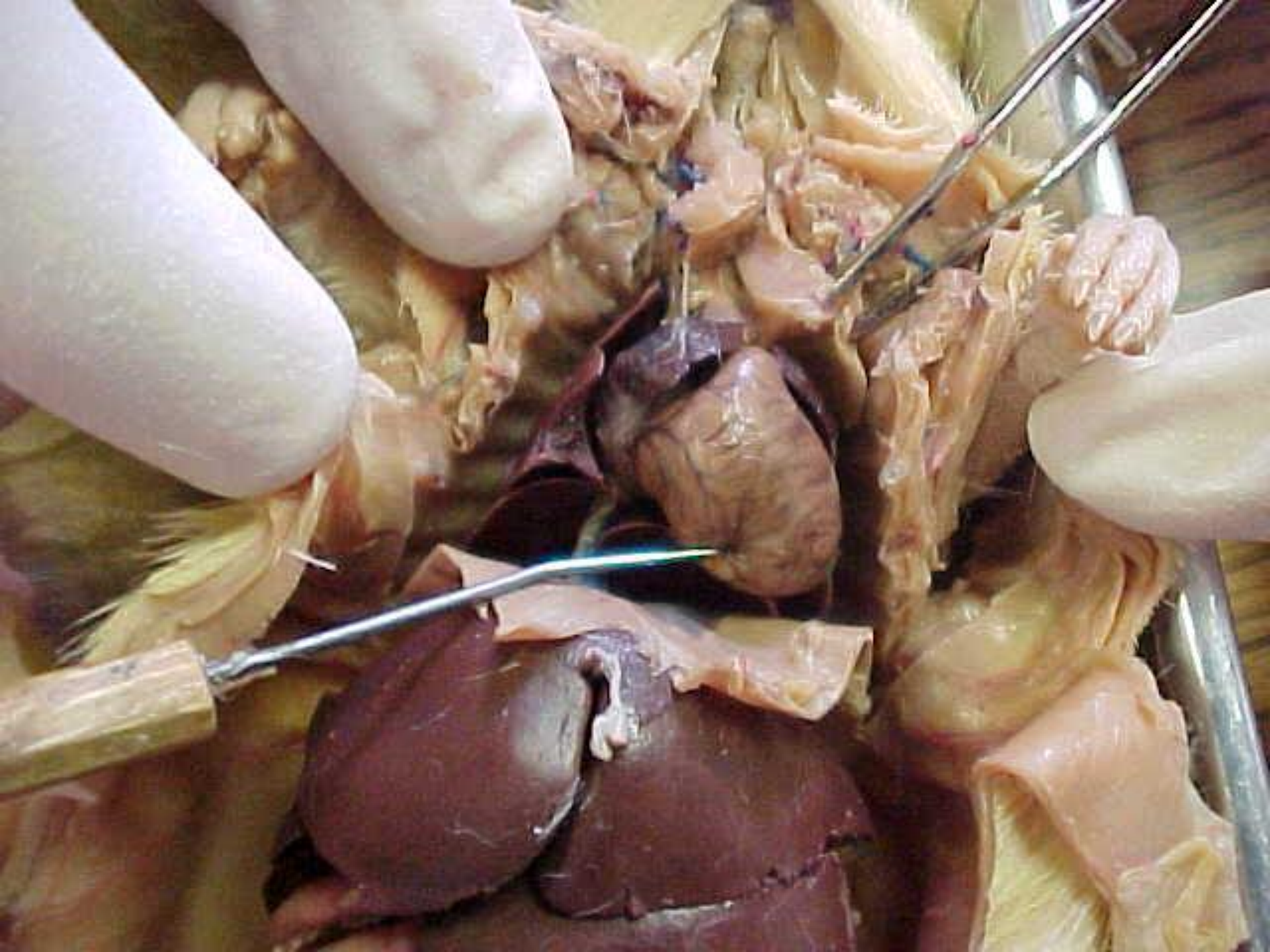
Liver



1 Make Sure your incisions are superficial. Only cut deep enough to remove the skin without damaging the organs beneath. Pin the skin back, exposing the cervical area.

2 Locate the thymus, then carefully remove the thymus to expose the ribbed trachea. After locating the trachea, clip it with a scissors, being sure not to sever the esophagus directly below. This will expose the esophagus.



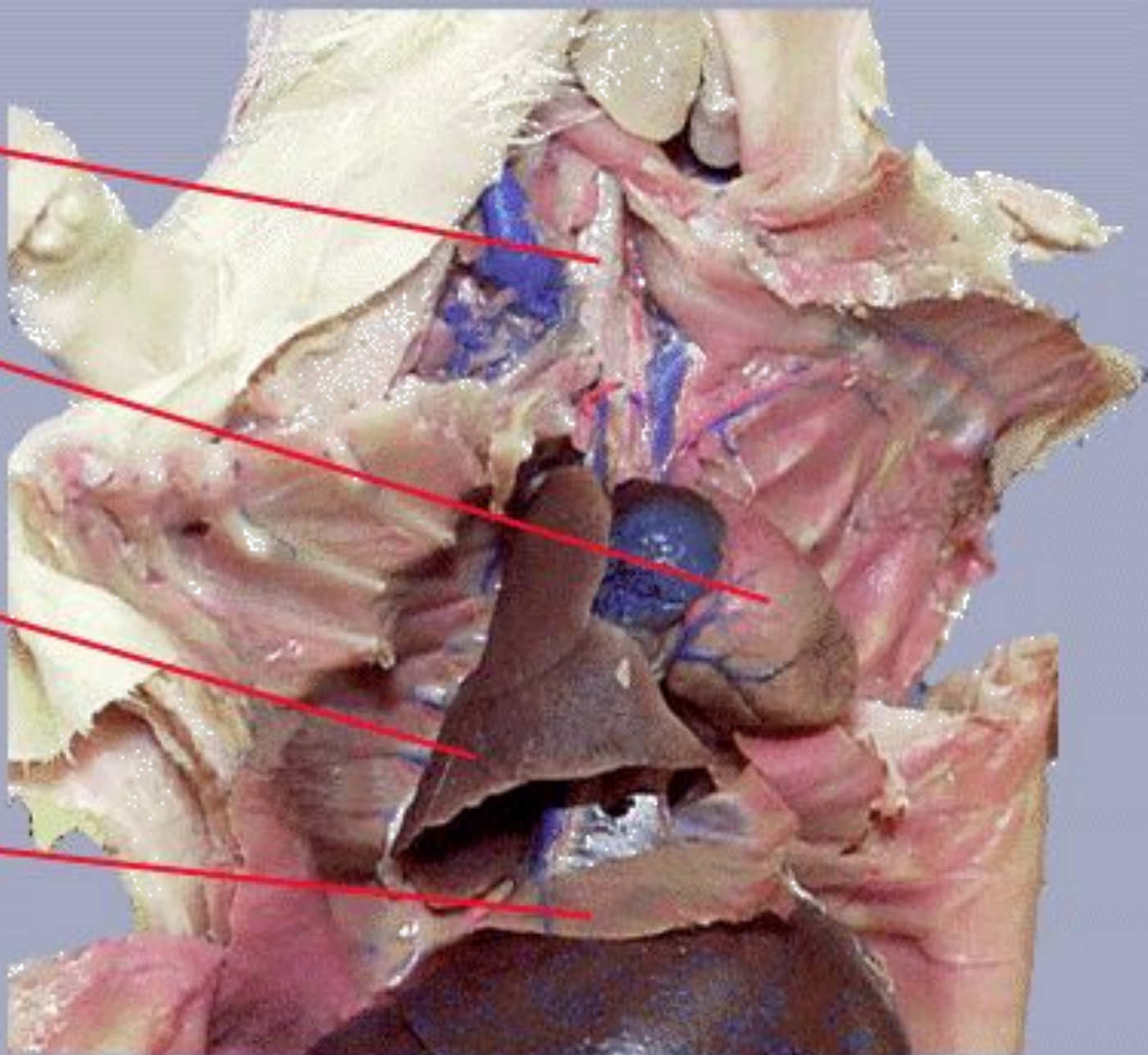


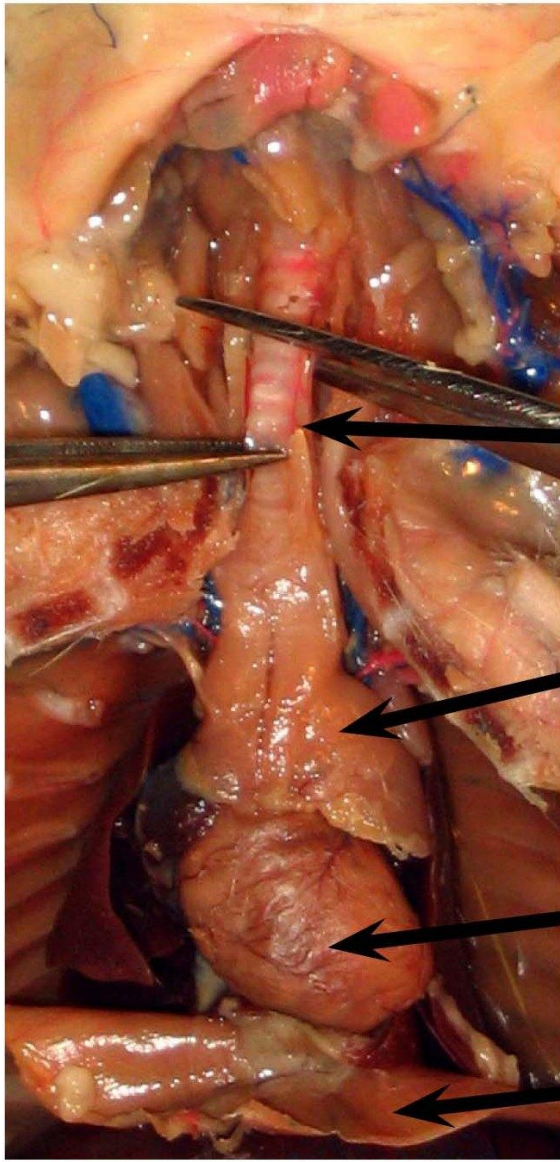
1. Trachea

2. Heart

3. Lung

4. Diaphragm





3

trachea

thymus

heart

diaphragm

4

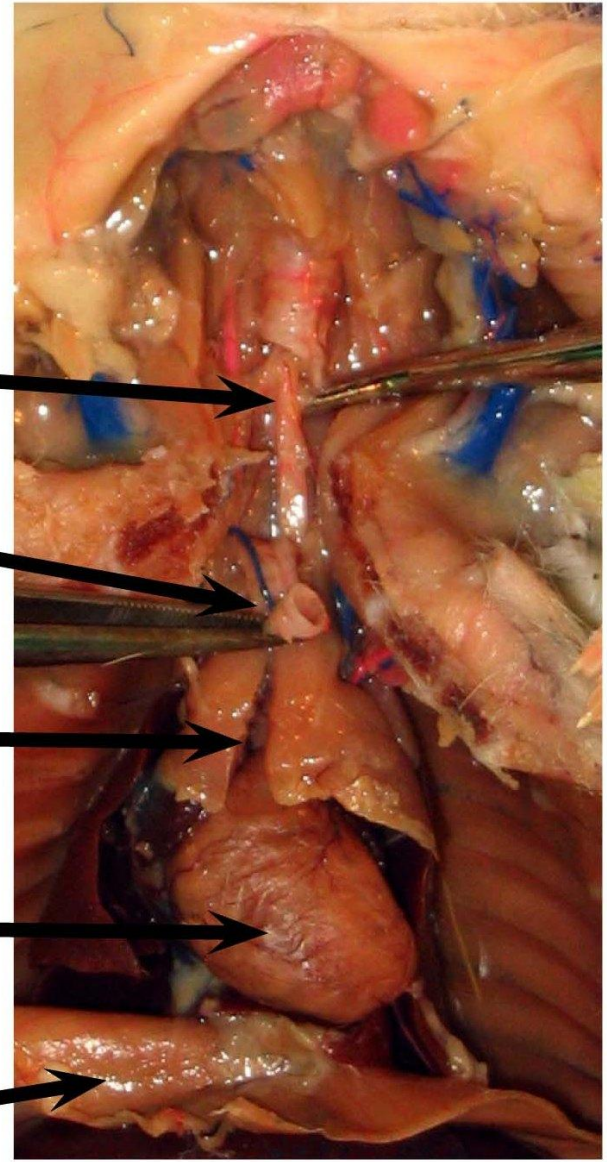
esophagus

trachea

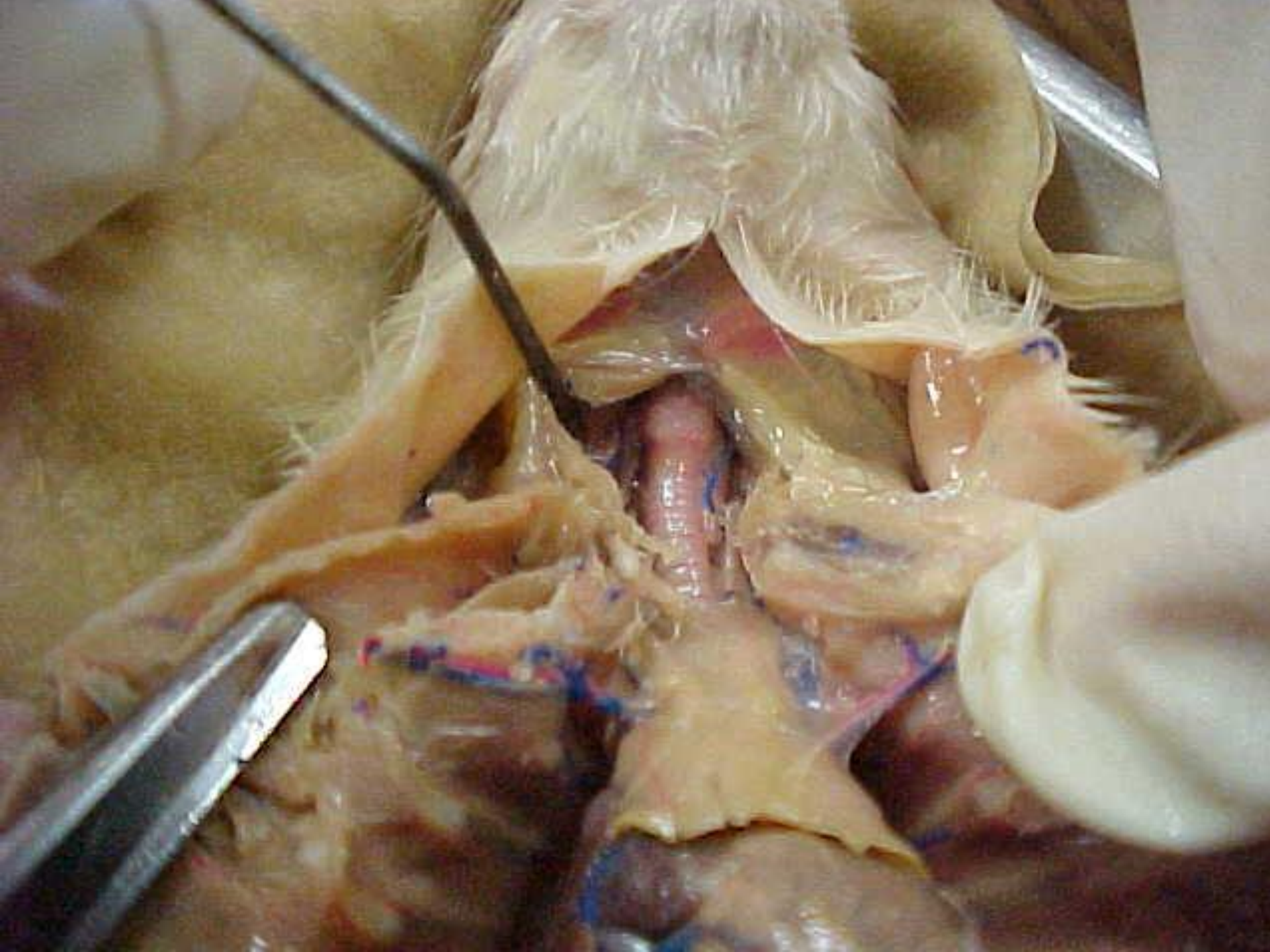
thymus

heart

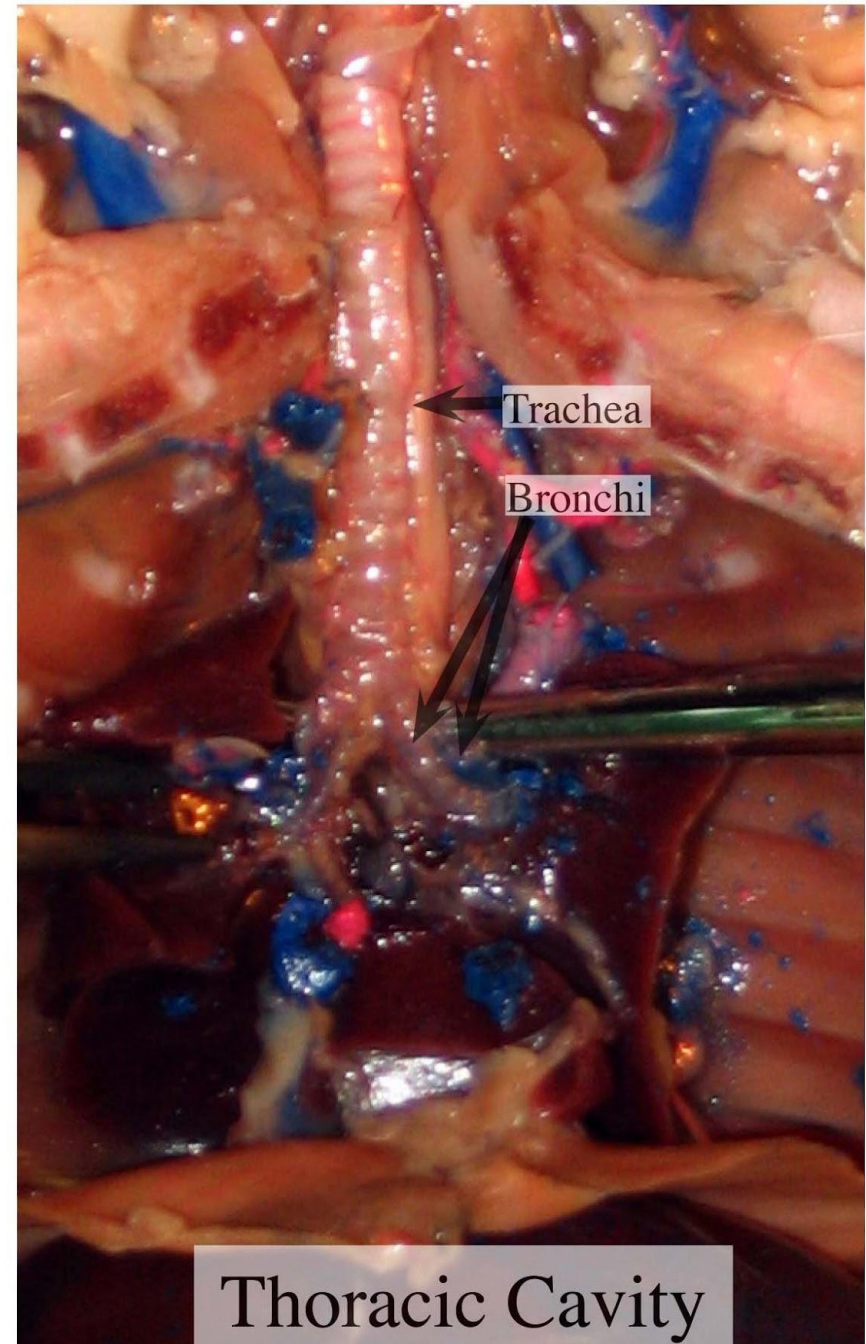
diaphragm



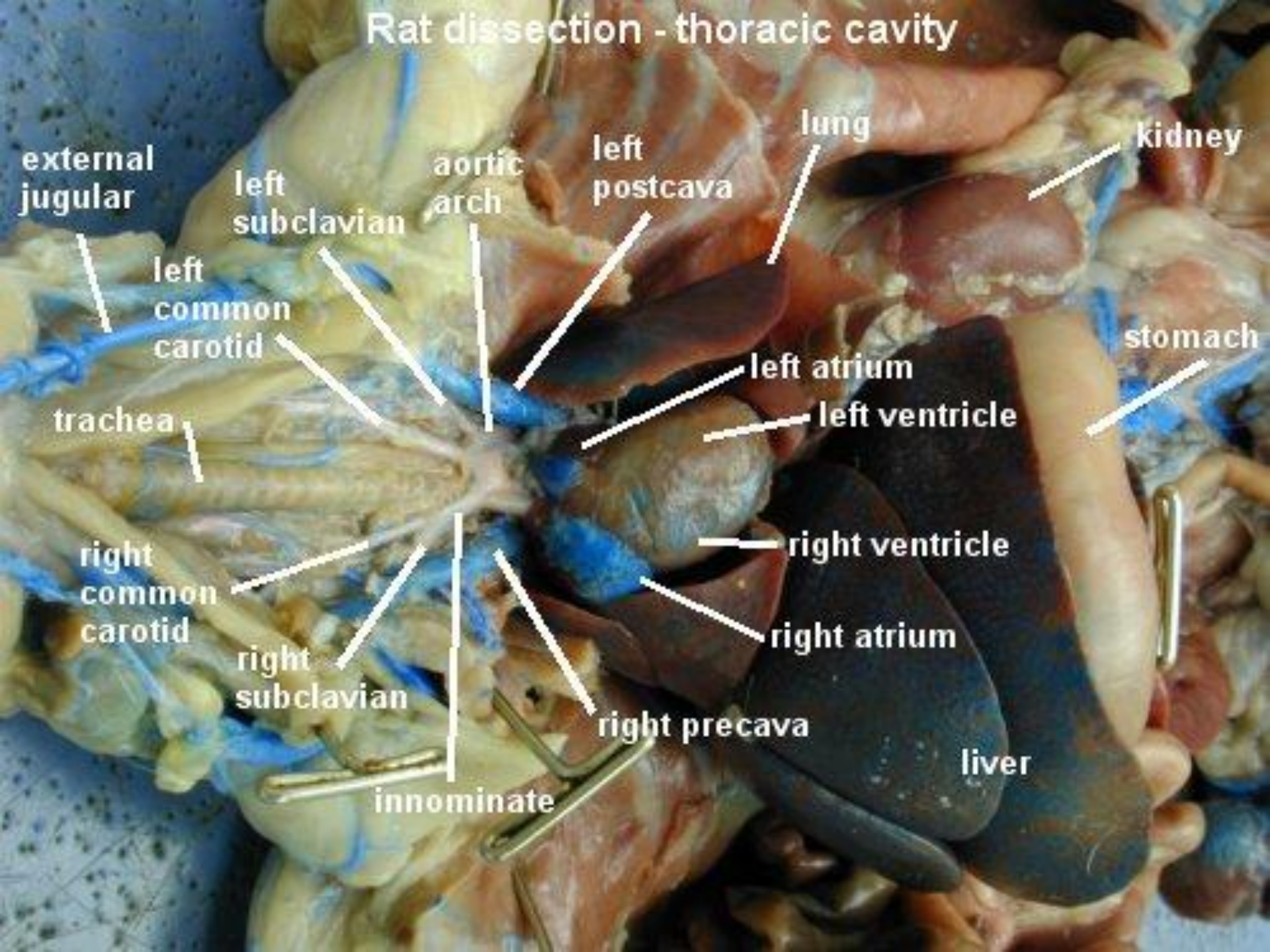




You can then locate the **superior vena cava** (blue) as you remove the heart, exposing the trachea as it splits to become the bronchi on the way into the lungs.



Rat dissection - thoracic cavity

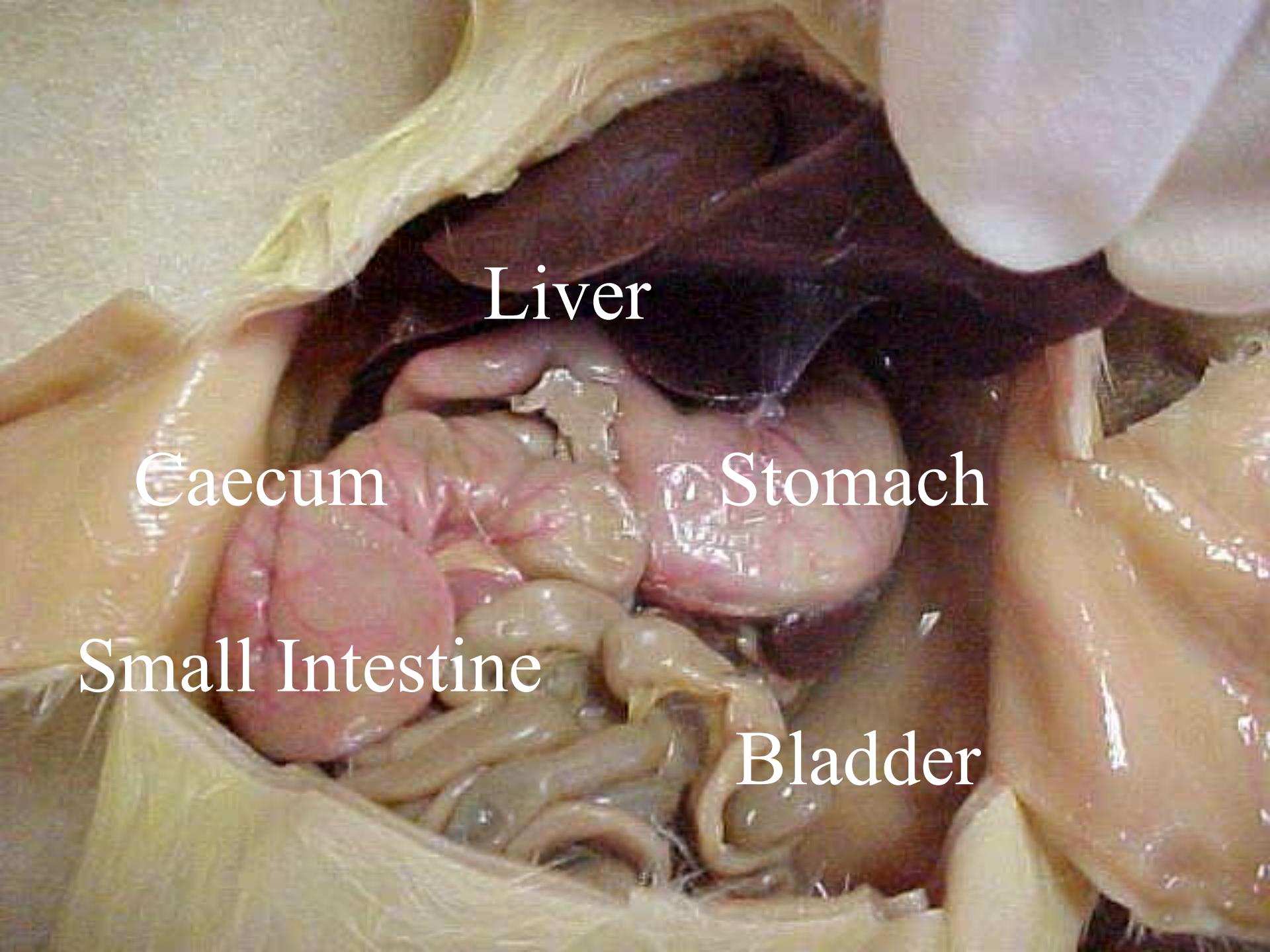


An anatomical dissection of a pig's abdominal cavity. The liver is a large, dark reddish-brown organ with a smooth, glistening surface, occupying the upper left and center of the frame. Below it, the small intestine is visible as a mass of tightly coiled, pinkish-tan loops. To the right of the small intestine is the caecum, a larger, sac-like structure with a distinct network of blood vessels on its surface. The surrounding abdominal wall is a pale, yellowish-tan color. The lighting is bright, creating highlights on the moist surfaces of the organs.

Liver

Small Intestine

Caecum



Liver

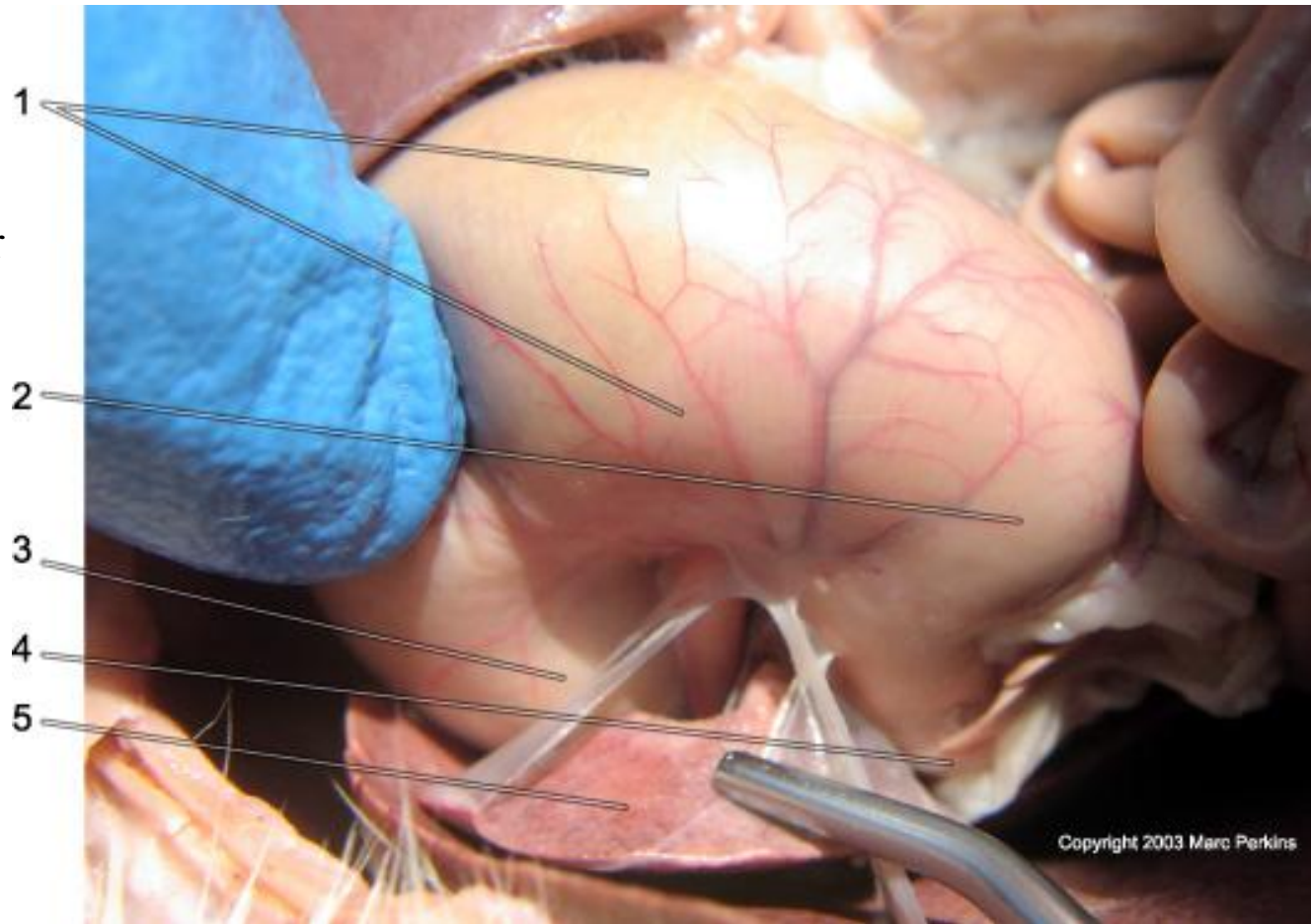
Caecum

Stomach

Small Intestine

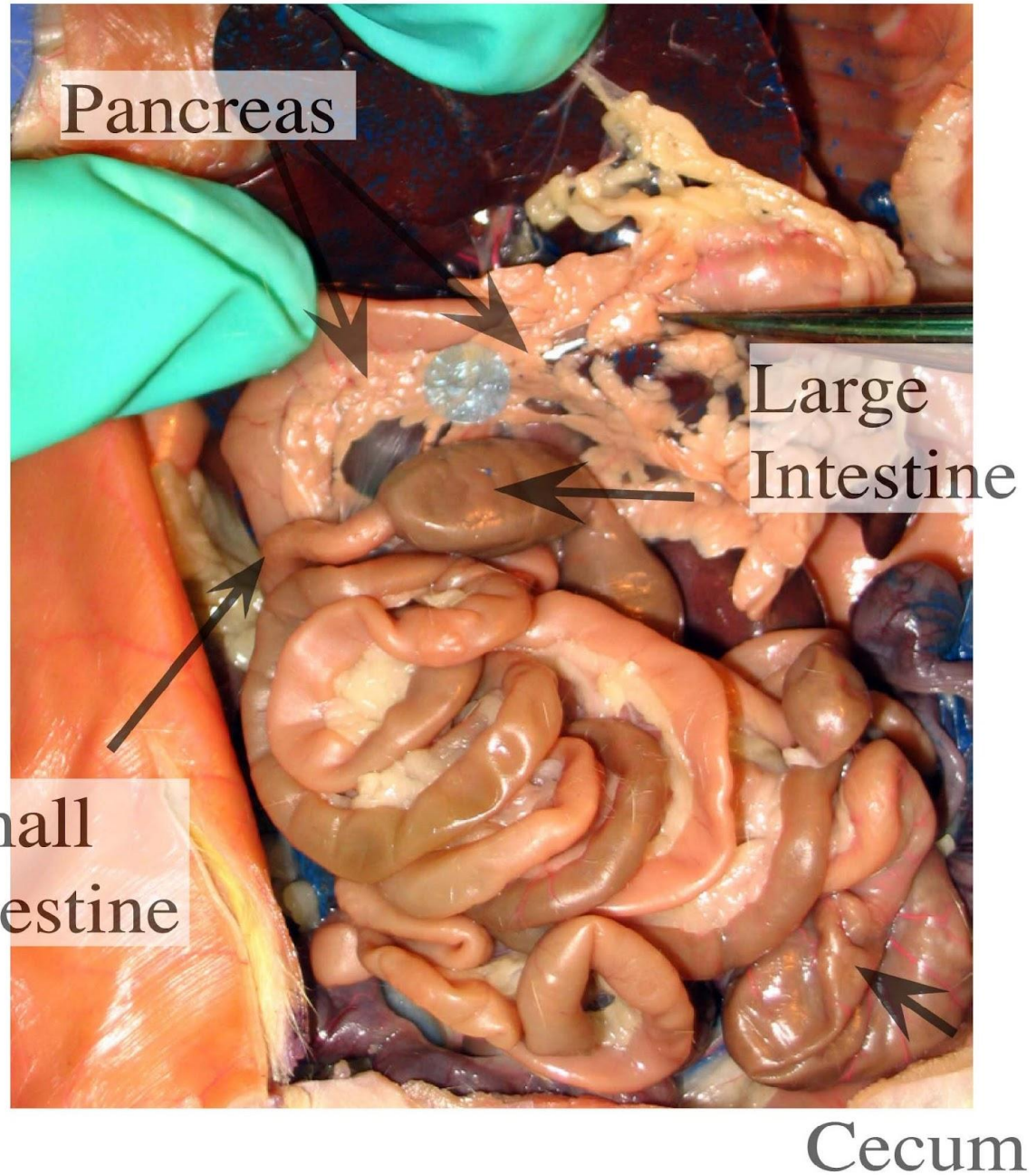
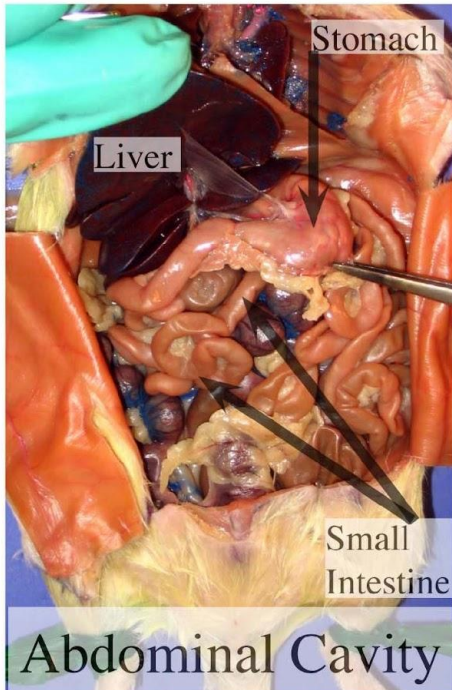
Bladder

1. Stomach Body
2. Pylorus
3. Fundus
4. Pyloric Sphincter
5. Liver

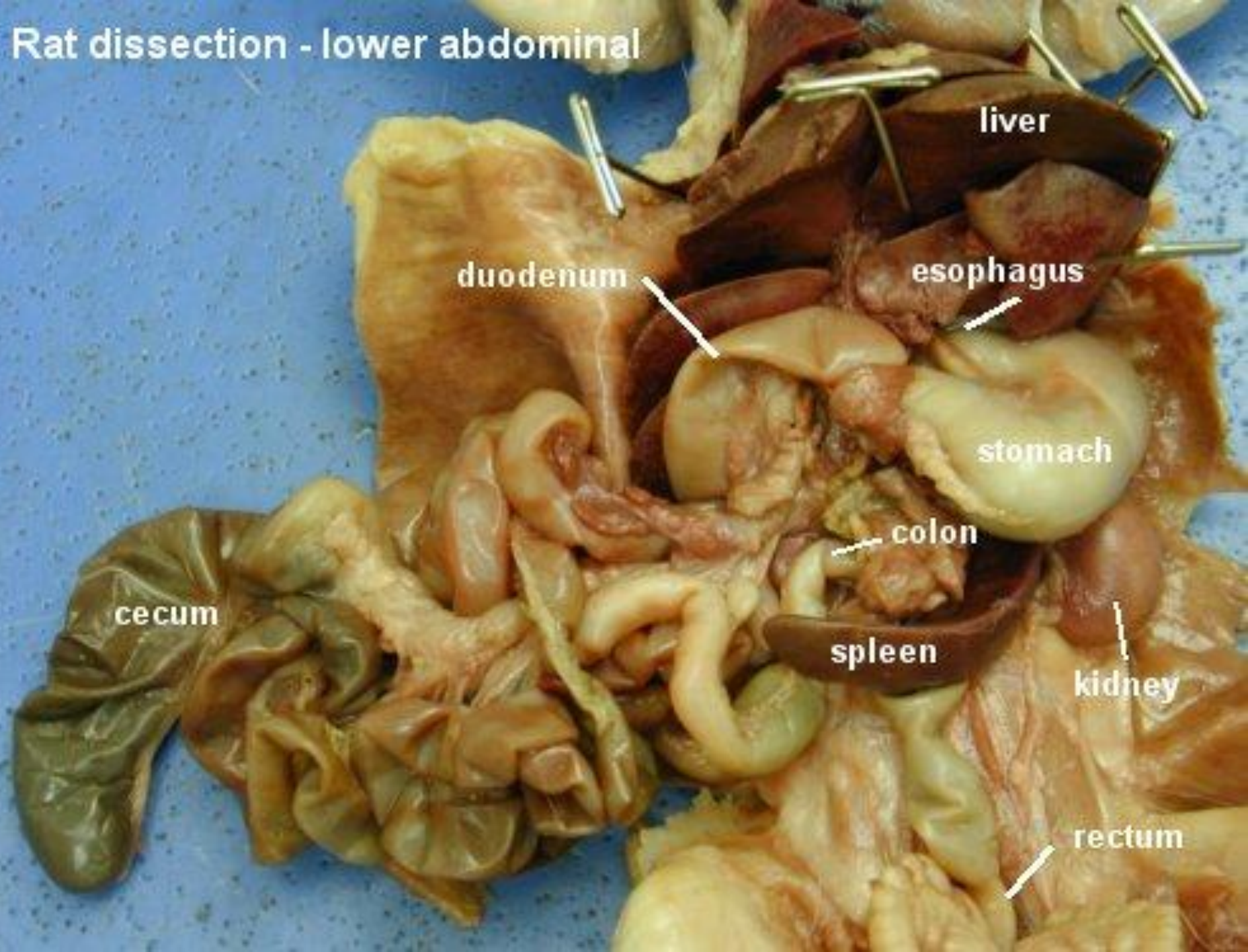


Follow the digestive tract.

- oral cavity
- esophagus
- stomach
- small intestine (pull to reveal the mesentery)
- cecum
- large intestine
- rectum
- anus



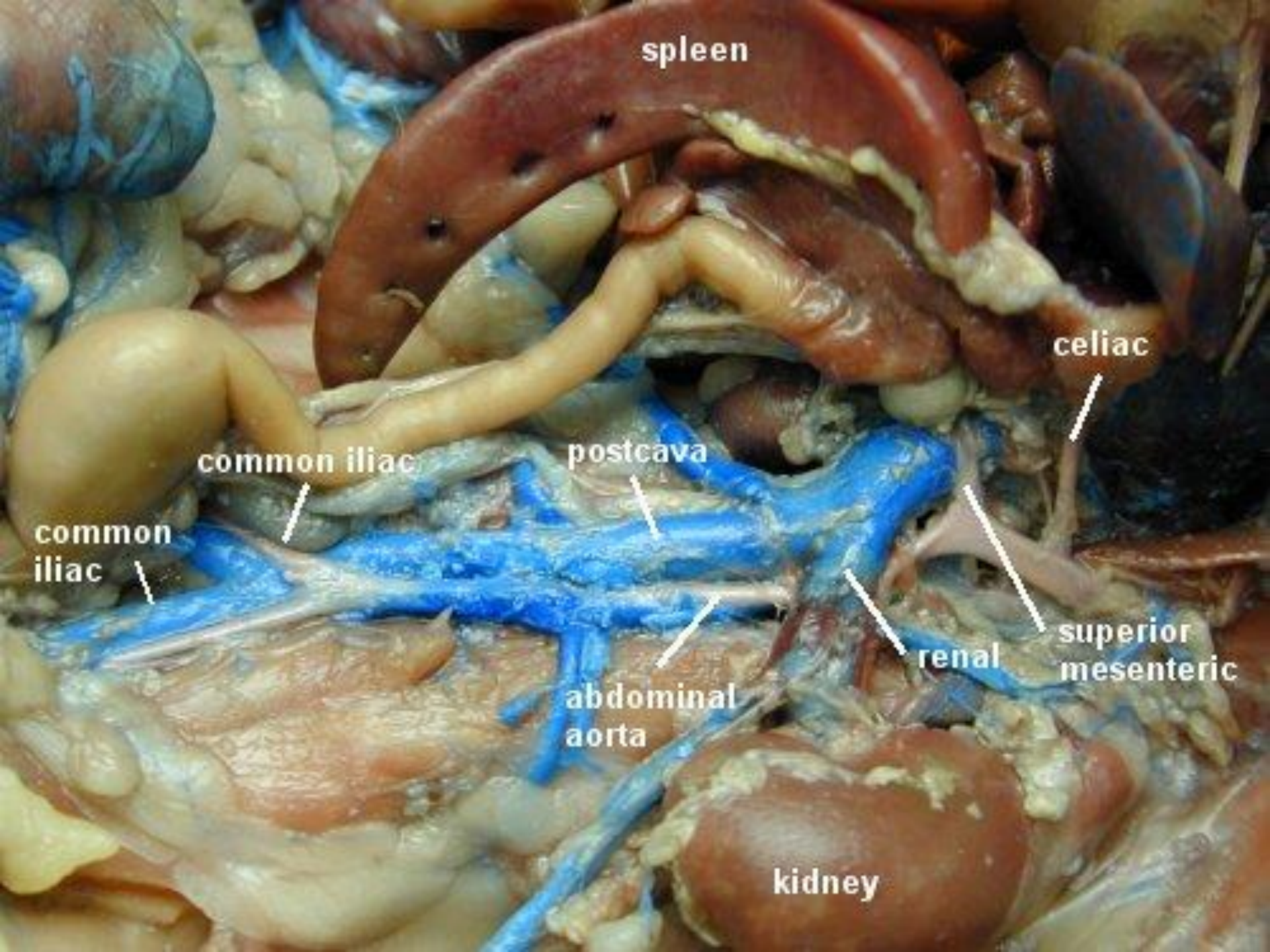
Rat dissection - lower abdominal







Kidney



spleen

celiac

common iliac

postcava

common
iliac

superior
mesenteric

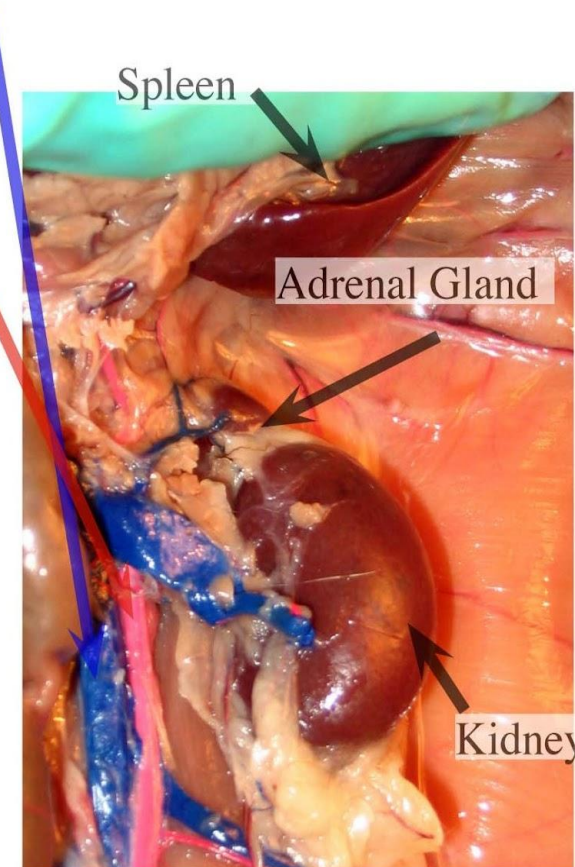
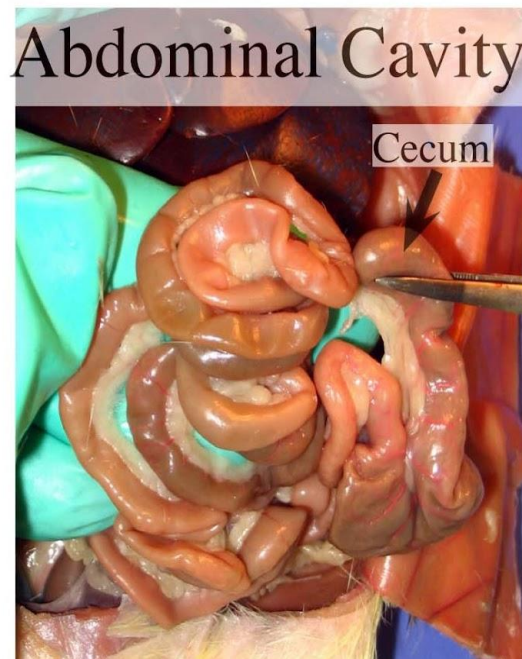
renal

abdominal
aorta

kidney



- Then locate the
- pancreas
 - spleen
 - kidney and ureter
 - adrenal gland
 - inferior vena cava
 - descending aorta



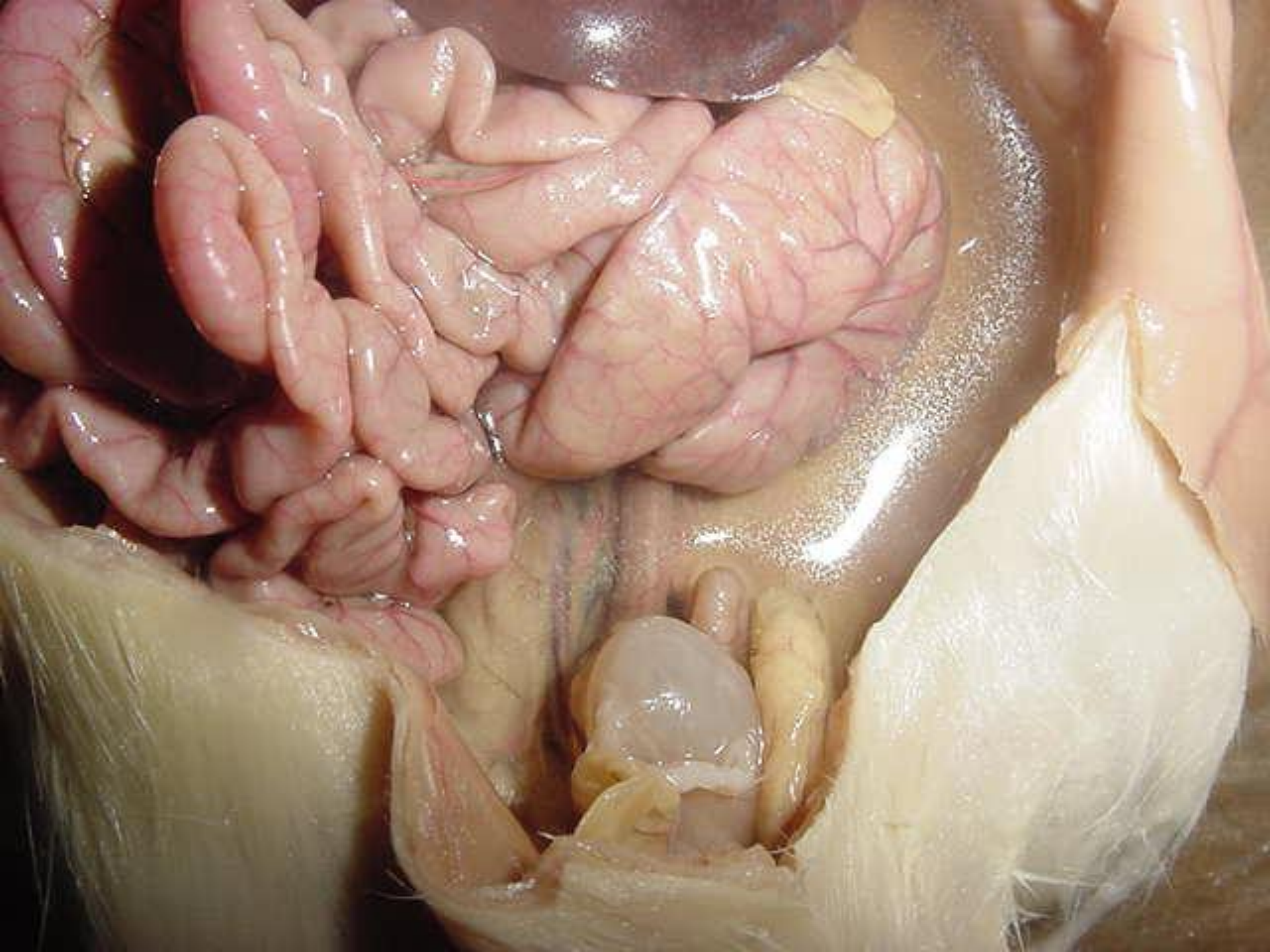


This image shows a detailed anatomical dissection of the female reproductive system and associated organs. The uterus is centrally located, with fallopian tubes extending from its upper corners. The bladder is situated anteriorly and inferiorly to the uterus. Two kidneys are visible on either side of the uterus, connected by the renal pelvis and ureters. The surrounding structures include the broad ligament, mesometrium, and various blood vessels and nerves. The dissection is performed on a cadaver, with the abdominal wall removed to reveal the internal organs.

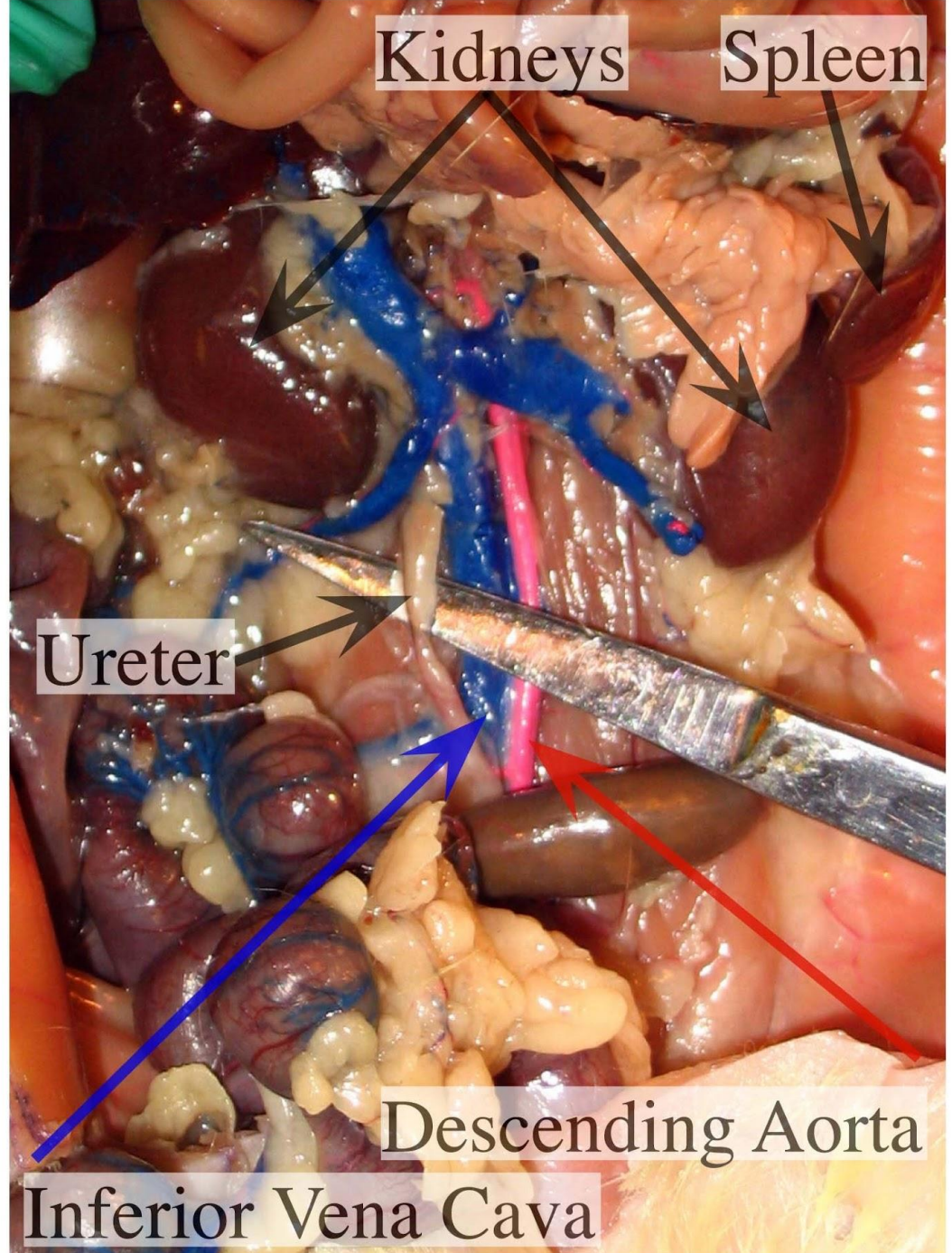
Kidney

Uterus

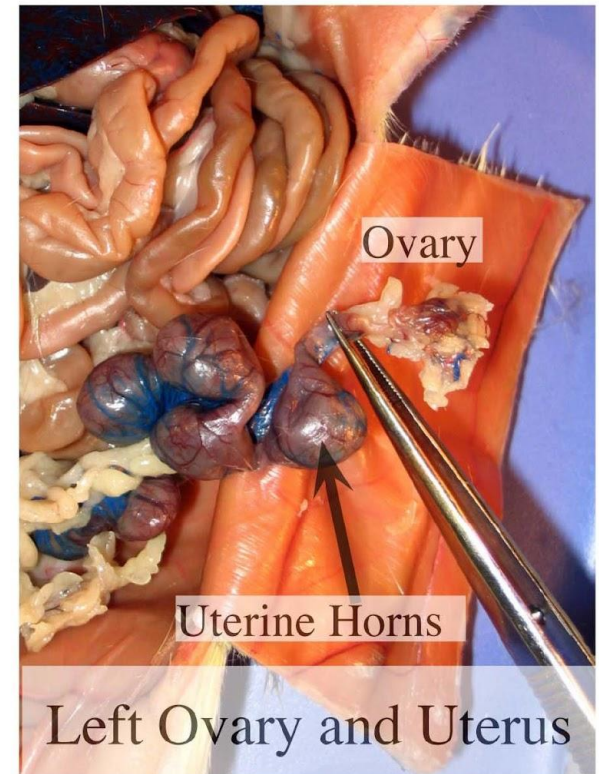
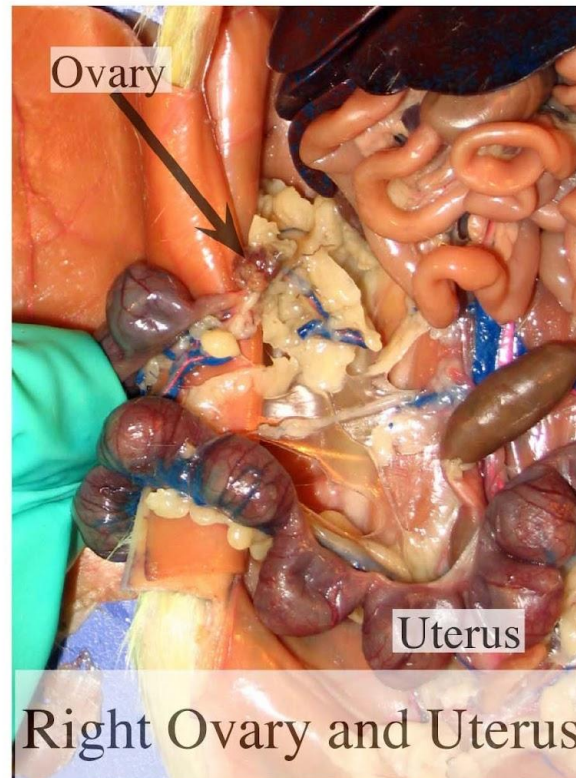
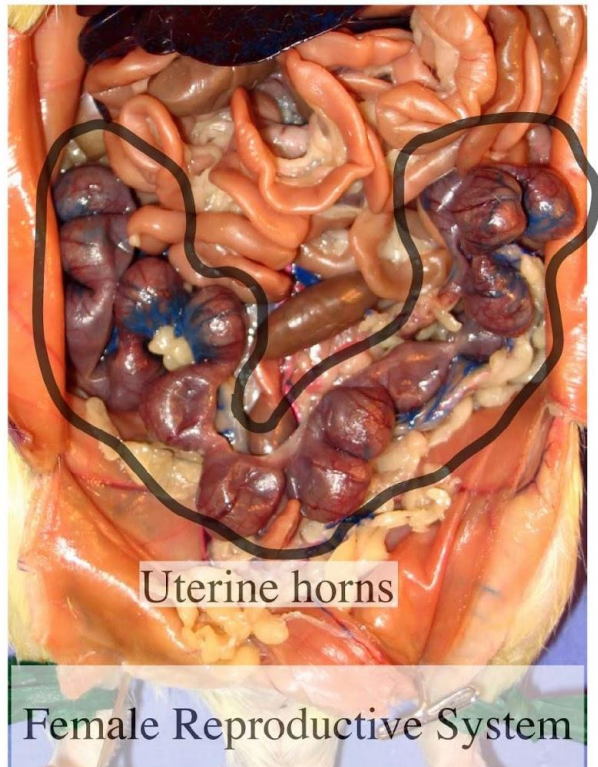
Bladder



Find the remaining
organs;
-urinary bladder
-ureter



Female Rat- If you have a female rat, the reproductive organs are already exposed. Find the uterine horns and ovaries. It is not uncommon for rats (like the one used in this atlas) to be pregnant and your rat may have a litter of fetuses in the uterine horns.

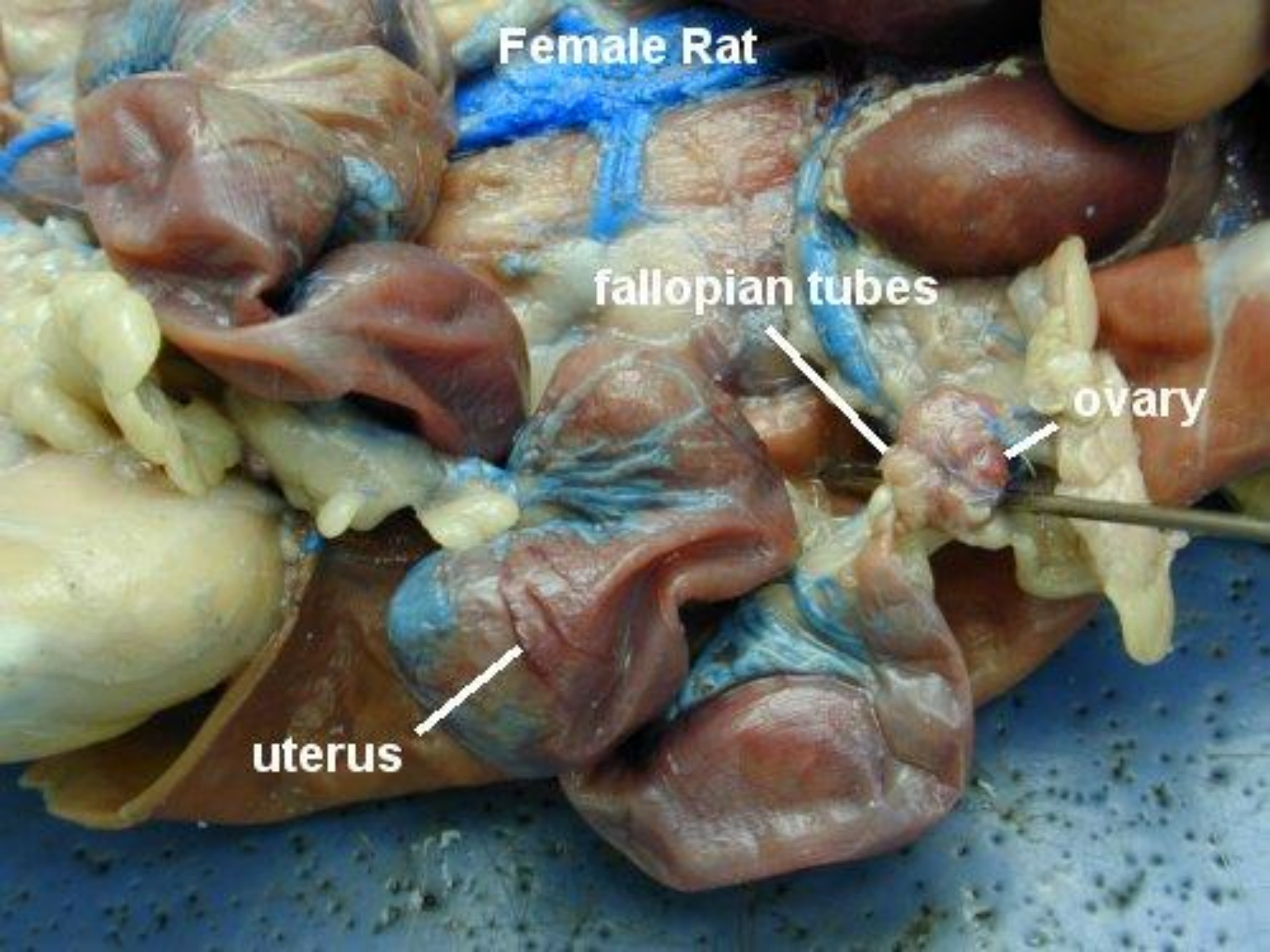


Female Rat

fallopian tubes

ovary

uterus



uterus

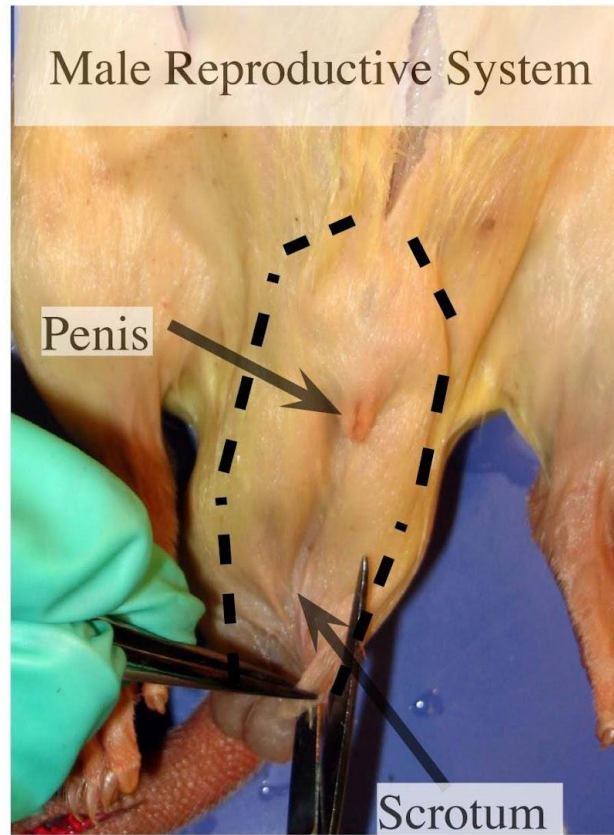
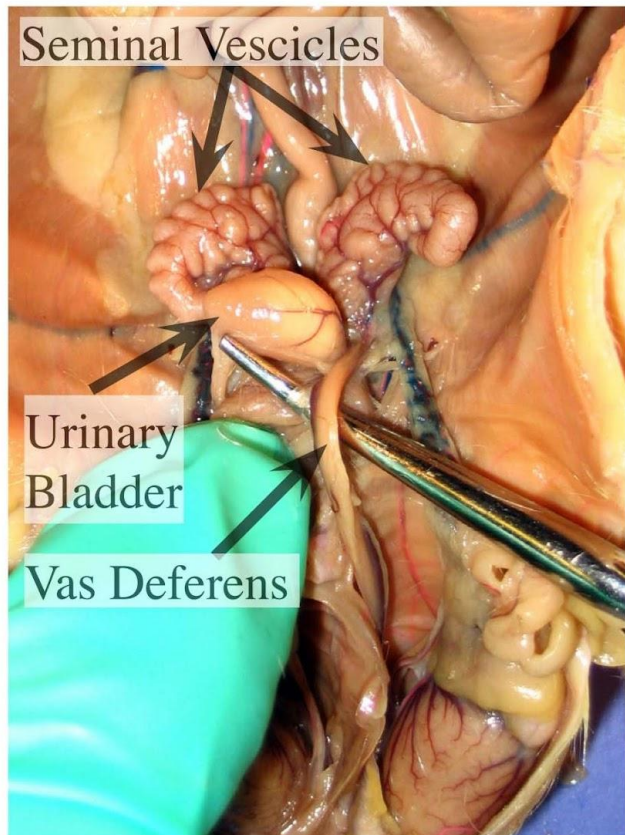
This image shows a detailed anatomical dissection of the female reproductive system. The uterus is the large, pear-shaped organ at the top. Below it, the urinary bladder is visible, and the vagina is shown as a canal. The surrounding structures include the broad ligament, uterine tubes, and various blood vessels. The dissection is performed on a cadaver, and the organs are stained to highlight different tissues and structures.

urinary
bladder

vagina

Male Rat- You will have to make two incisions as seen in the illustration on the right. Join these incisions to the incisions made in the abdominal region. This will expose the testes. Find the following;

- seminal vesicles
- scrotum
- vas deferens
- penis
- prostate
- testes



Rat - Male urogenital system

epididymis

testes

vas deferens

prostate gland

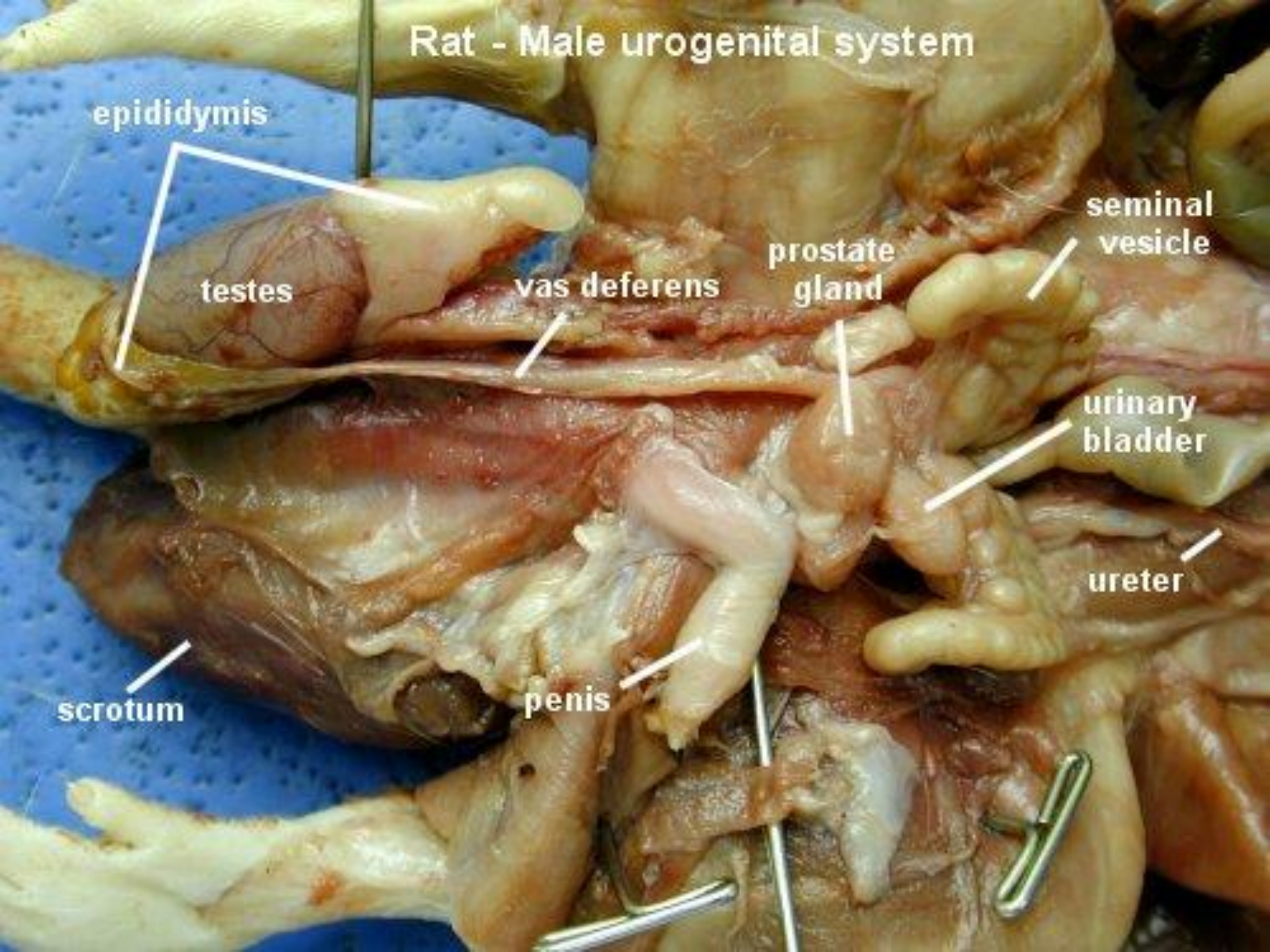
seminal vesicle

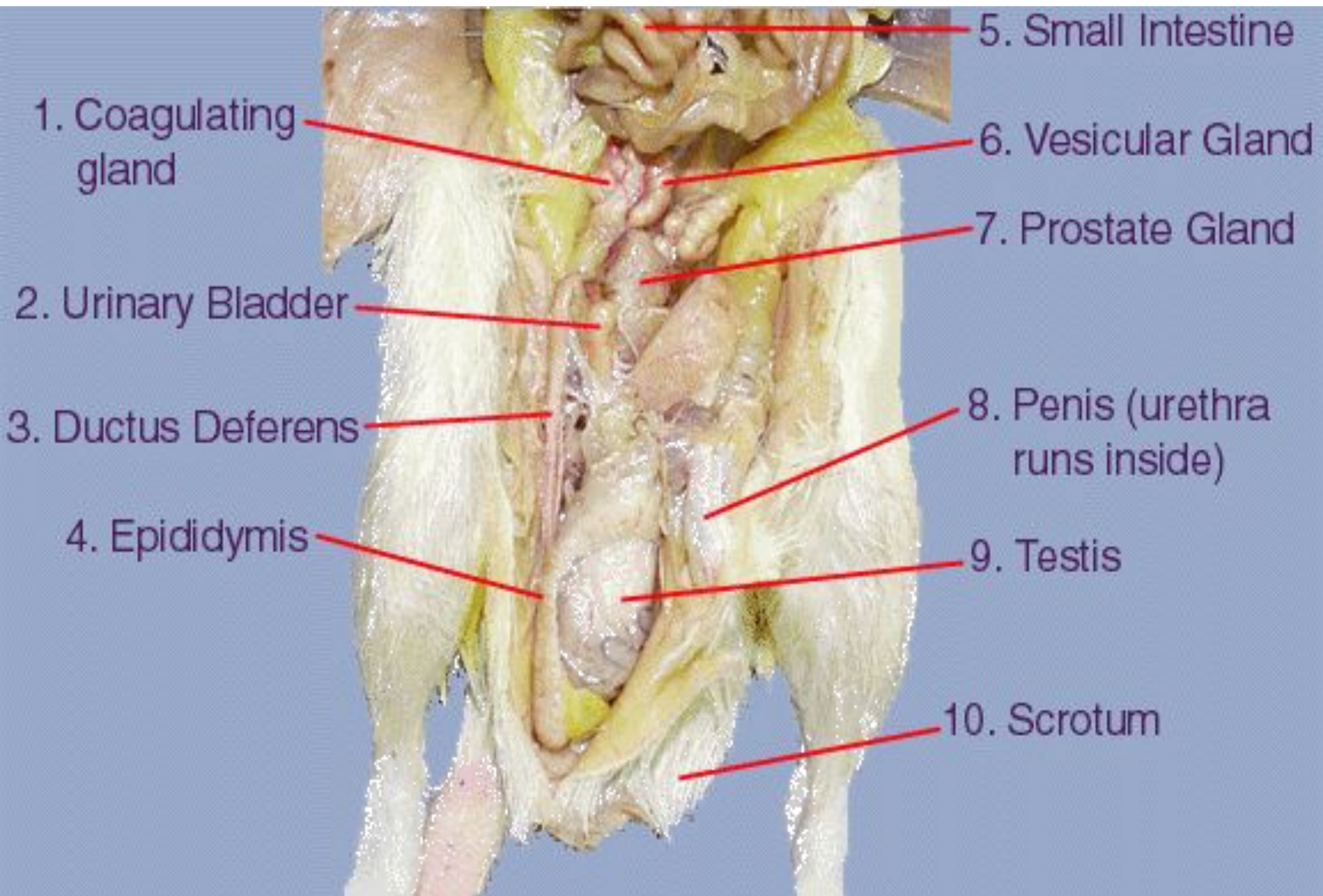
urinary bladder

ureter

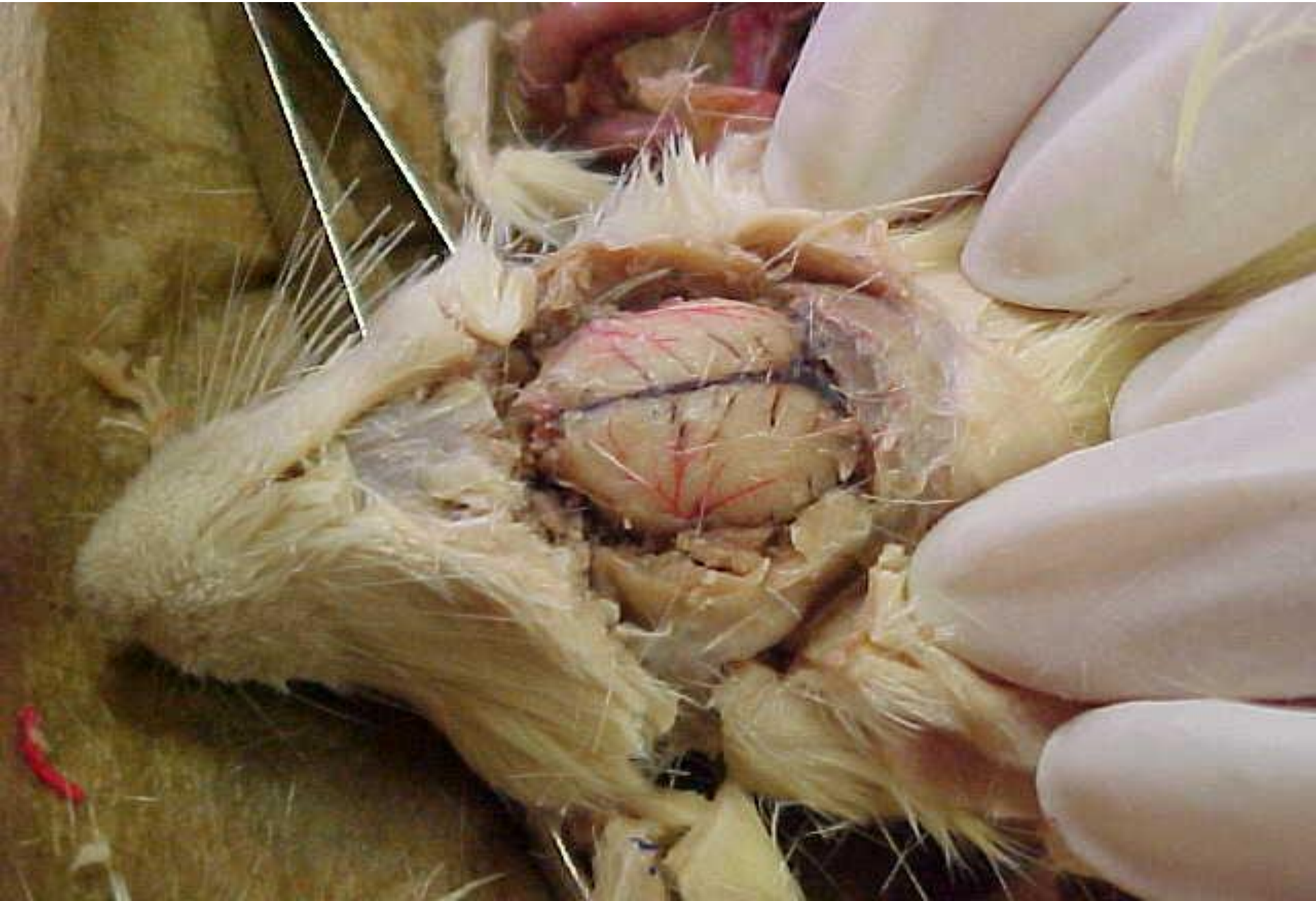
scrotum

penis

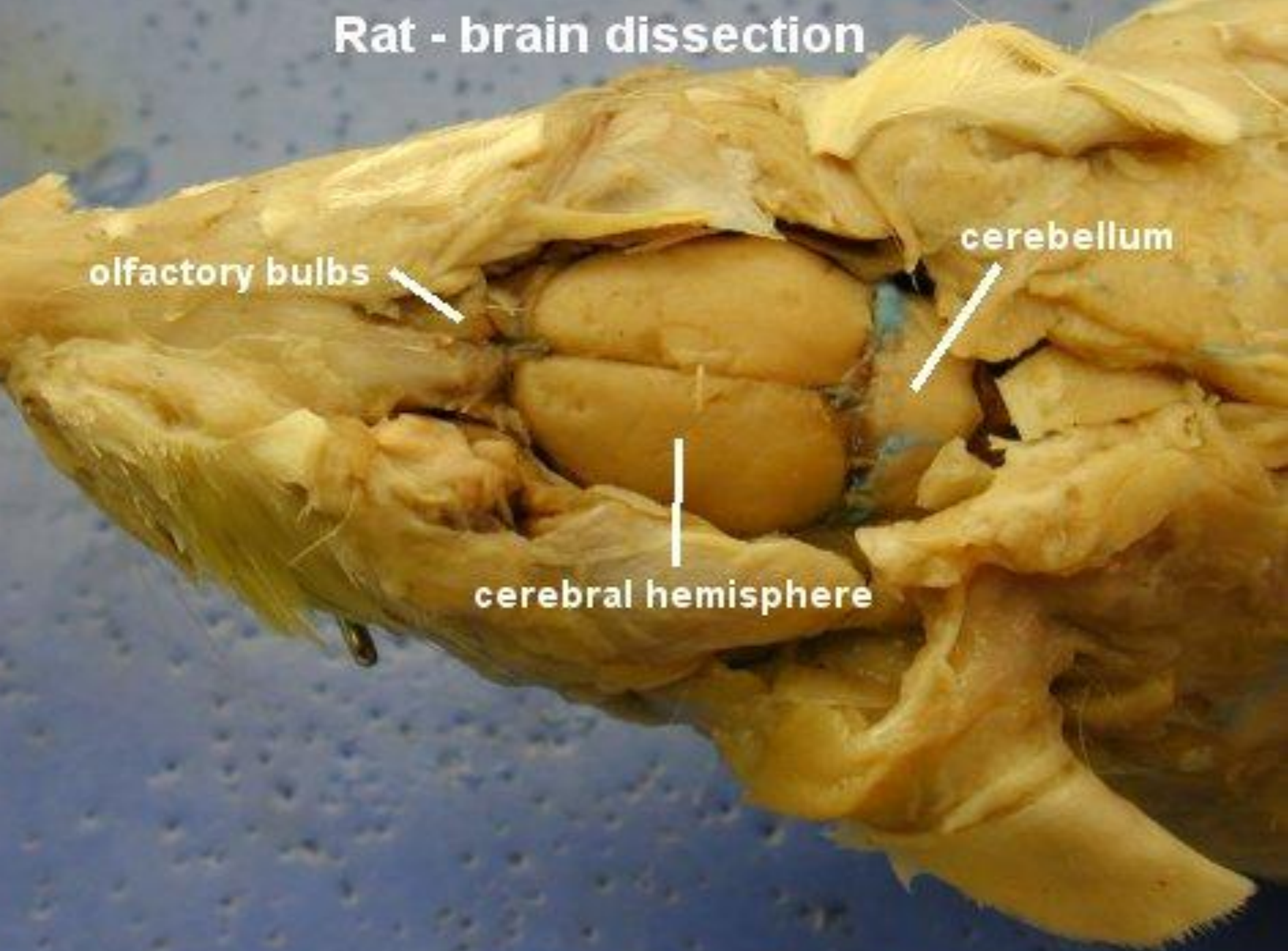




Brain



Rat - brain dissection



olfactory bulbs

cerebellum

cerebral hemisphere