

Lab 10 Dissection Steps:

- ❑ On the RIGHT side of your animal, transect the pectoral muscles along the sternum and reflect them toward the forelimb (away from the body wall).
- ❑ Identify the **axilla** and find the **axillary lymph node**
- ❑ Attempt to identify (by blunt dissection) the **lateral thoracic artery, vein and nerve** (don't worry if you cannot locate these now, we will be identifying them again in Lab 13)
- ❑ Identify/locate the borders of the external abdominal oblique m. on the RIGHT side
 - ❑ Transect the external abdominal oblique m. along the lumbar and costal origins and reflect it ventrally to the rectus abdominis m. (similar to left side); as you reflect the muscle ventrally, you will transect it along the edge of the remaining skin on the hindquarters.
- ❑ Free/transect the aponeurotic origin of the rectus abdominis m. on left and right sides and reflect them caudally.
 - ❑ As you reflect the rectus abdominis m. caudally, identify the vessel entering the deep face of the muscle as you near the caudal end of the sternum; this is the **cranial epigastric artery**.
 - ❑ Identify the **cranial superficial epigastric artery** as a branch from the cranial epigastric artery; this branch runs caudally on the external surface of the rectus abdominis m.
- ❑ Using the snips provided in lab (or large scissors will work in the cat), make a sagittal incision at least 1cm away from the sternum on either side. Begin caudally, along the xiphoid of the sternum, and extend the cut cranially through the first rib/thoracic inlet on BOTH sides of the sternum. (Be sure you are far enough lateral/away from the sternum that you avoid cutting the cranial epigastric artery.)
 - ❑ Identify the **transversus thoracis m.** and then cut through it (if you did not already cut through it when making your cuts alongside the sternum)
 - ❑ Connect the caudal ends of the two cuts to free the sternum if needed, but leave the mediastinum attached.
- ❑ Pull open the left side of the rib cage, and using the snips provided in lab, begin **INSIDE** the ribcage and snip each individual rib about 1cm from its vertebral articulation. Cut only the ribs, from within the thorax, starting caudally and moving cranially to the first rib. Identify the diaphragm connecting to the ribcage inside the thorax and carefully incise the abdominal and intercostal muscles CRANIAL to that point so you do not enter the abdominal cavity. Repeat this procedure on the right side of the thorax. Each side of the ribcage should remain attached, but hinge open like a door.

- ❑ Identify the **intercostal nerves** and **dorsal and ventral intercostal arteries** along the caudal aspect of each rib.
- ❑ Identify the **pleurae** within the thoracic cavity.
 - ❑ Identify the **pulmonary (visceral) pleura**
 - ❑ Identify the **parietal pleura** consisting of **costal, diaphragmatic** and **mediastinal pleurae**.
 - ❑ Identify two parts of the mediastinal pleura: ***pericardial mediastinal pleura*** and the ***plica venae cavae***
- ❑ Identify the **pulmonary ligament** near the caudal aspect of the root of the lungs
- ❑ Identify the **mediastinum** and know its contents
 - ❑ Identify the **thymus** within the mediastinum (if possible)
- ❑ Identify the **internal thoracic artery** along the sternum (inside the chest cavity)
 - ❑ Note: the cranial epigastric artery is a continuation of the internal thoracic artery after it pierces through the body wall.