Jonathan Quang 12/11/14

Biology - Ms.Prabhu

Lab #9

1. The external anatomy of the heart was observed by its dorsal side and ventral side. The dorsal side contained a fair amount of fat. This fat could be scraped off and had the consistency of thin, wet clay. There were also these scratches that are found on the surface of the cell. Openings to the heart, such as the superior vena cava and the aorta, tended to be a slightly darker shade of beige than the rest of the heart. In addition, the left side of the heart contained more fat than the right side. On the ventral side, he aorta is also visible. There is a defined groove called the posterior interventricular groove. There are many more grooves on the ventral side than the dorsal side. The left side of the heart still has more fat than the right. There is also a groove leading up to the apex.

2. To the naked eye, there are a few differences in the appearance of blood vessels. Some blood vessels are deeper in the heart, darker, and thinner than others. Blood vessels appear to be grooves in the heart. Identifying the blood vessels was quite difficult because some grooves look exactly like others. Only by position was identifying the blood vessel clear.

3. To dissect the heart, a cut is made by a frontal inscision following the described path: halfway through an atrium, down the ventricle, down to the apex, up through the other ventricle, and halfway through the other atrium. The dissection in the video was much smoother. Cutting through the heart in the lab was tough and took multiple tries to cut through the ventricles. Cutting in the video was done almost flawlessly. In addition, in the dissection in the video, there was simply more in the heart than what could be identified in the lab.

4. The appearance of the chambers after cutting the heart varied with the chamber. The right atrium seems to be a fairly small, elliptical chamber. The right ventricle is connected the right atrium, and he right ventricle looks as if the side of a spoon was pressed into the heart. It is crescent shaped and is the thinnest out of the other chambers. The left atrium was barely identifiable, but it can be compared to a hallow sac. The left ventricle is the largest of the chambers.

5. The atrio-ventricular valves look like strong fibers that connect the atrium to the ventricle. These valves were broken during the dissection process. The semilunar valves could not be found because of two possible reasons. One reason is that the valves were completely destroyed during the dissection process, which as mentioned above, did not go smoothly. Another reason is that none of the pulmonary vessels were the valves are could be identified. If the location of these vessels are unknown, then whatever is in them is unkown.

6. The walls of the left ventricle are thicker and slightly more tougher than the walls of the right ventricle. This is advantageous to animals with a 4 chambered heart because the left ventricle must pump blood throughout the entire blood through the systemic circuit. The right ventricle only has to pump blood through the lungs.

7. Check drawings.