**BIOL 112 Lab Questions – 12 – Animal Circulatory Systems**

1. Dissect out the circulatory system of your rat. Start by clearing the tissues around the heart. Be especially careful at the anterior end of the heart – this is where the major blood vessels emerge. Trace the aorta, the vena cava, and as many additional vessels as possible – use your manual for direction and to name the vessels. Separate the systemic circuit from the pulmonary circuit.
2. Once you have cleared all the vessels you can trace, remove the heart and major vessels. Feel the difference in texture between the atria and the ventricles. Describe the structure-function relationships.
3. Take cross sections of the heart, the aorta and the vena cava to examine under the dissecting microscope – describe the structure-function relationships.
4. Try to get a thin enough section that you can examine these tissues under the compound microscope. Sketch and describe your findings.
5. Did this dissection help you to understand circulation patterns in a closed circulatory system with a 4 chambered heart? Do you feel you have a better understanding of the resource delivery and waste removal functions of the circulatory system?