

Lab 1: The Heart - Anatomy

1. Chambers and Valves: Describe the four chambers of the heart. How do the atrioventricular and semilunar valves function differently in regulating blood flow within the heart?
2. Blood Flow Pathway: Trace the pathway of blood through the heart, starting from the vena cava and ending at the aorta. Include the roles of each chamber and valve in your description.
3. Cardiac Muscle Tissue: Compare and contrast the structure of cardiac muscle tissue with that of skeletal muscle. How does the unique structure of cardiac muscle support its function?
4. Coronary Circulation: Identify the major coronary arteries and veins on the dissected heart. Explain their significance in providing oxygen and nutrients to the heart muscle.
5. Electrical Conduction System: Locate and describe the components of the heart's electrical conduction system (sinoatrial node, atrioventricular node, bundle of His, and Purkinje fibers). How does this system coordinate the heartbeat?