Blood Flow Through Heart

- Blood flows into the **Right Atrium** from:
  - Top half of the body via the **Superior Vena Cava**
  - Bottom half of the body via the **Inferior Vena Cava**.
  - From the heart via the **Opening to the Coronary Sinus**.
- **Coronary Sinus** is the gathering point for deoxygenated blood gathered by the cardiac veins.

Right Atrium

- In the right atrium you will see ridges of **pectinate muscle**.
- Also there is a blind pocket called the **right auricle**, which is visible on from the anterior surface of the heart.
- When looking at the **interatrial septum**, (the wall between the left and right atraia), you will see the circular **fossa ovalis**. The fossa ovalis is the remi nent of the foramen ovalis, a hole that allowed for blood flow between the left and right atri during development in the womb.

Right Atrium to Right Ventricle

- Blood passes from the right atrium to right ventricle through a valve called the **tricuspid valve**.
- The **chordae tendinae** attach the tricuspid valve to **papillary muscles** which causes the tricuspid valve to close to prevent backflow.

Right Ventricle

- The right ventricle's myocardium is not as thick as the left ventricles.
- You will normally see a **moderator band** which serves as internal brace.
- You should also see interlacing bundles of muscle called **trabeculae carneae**, which most likely prevent suction from occurring between the smooth walls lined with **endocardium**.
- Remember the myocardium that forms a wall between the left and right ventricles is called the **interventricular septum**.

Right Ventricle to Lungs

- When the right ventricle contracts, blood is sent up through the **pulmonary trunk**, which splits into the **right and left pulmonary arteries**, the only arteries with deoxygenated blood in them.
- Backflow is prevented by the **pulmonary semilunar valve**.

Lungs to Left Side of the Heart

- Oxygenated blood returns to the left atrium via the **left and right pulmonary veins**.
- The valve between the left atrium and left ventricles is called **bicuspid valve**.
- When the thick myocardium of the left ventricle contracts it pushes blood up through the ascending aorta.
Outflow

• Blood is prevented from backflow via aortic semilunar valve.
• The first exits out the aorta are the openings to the coronary arteries, which supply blood to the heart.
• The ascending aorta curves around to become the aortic arch, which has three major arteries branching off before it becomes the descending aorta.
  – The branches are the brachiocephalic artery, left common carotid artery, and left subclavian artery.