

# MODULE 5 L04

# Pulmonary Circuit Blood Vessels

Dr. Lisa Brinn

[lbrinn@fiu.edu](mailto:lbrinn@fiu.edu)



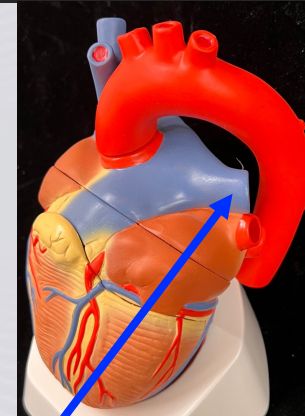
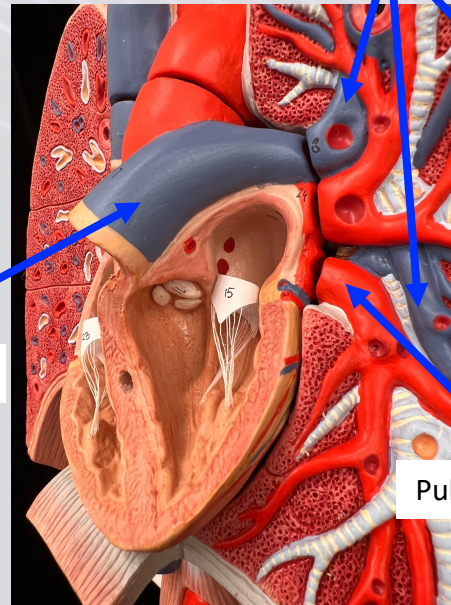
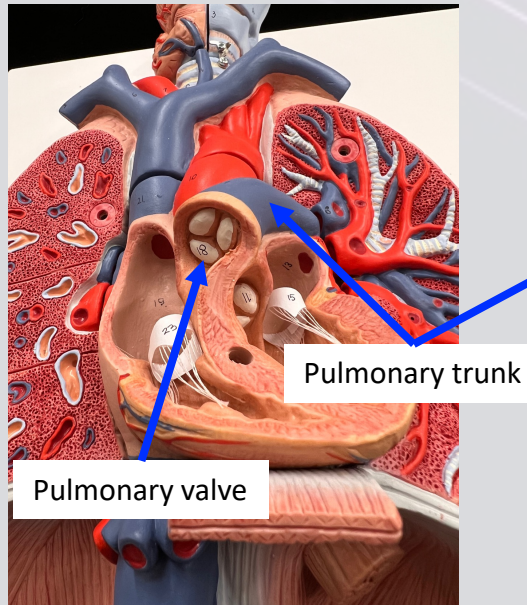
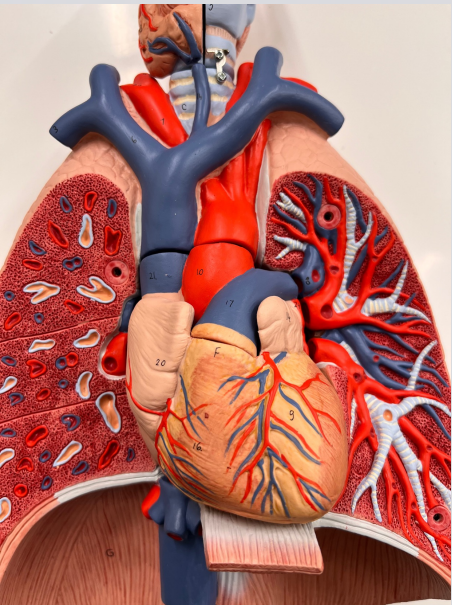
# Blood Vessel Distribution

- Pulmonary circuit
  - ❖ Transports blood between heart and lungs
  - ❖ Short distance
  - ❖ Relative low blood pressure
  - ❖ Walls of pulmonary arteries are thinner
- Systemic circuit
  - ❖ Transports blood between heart and all other tissues
  - ❖ Much longer distance
  - ❖ Higher blood pressure
  - ❖ Walls of systemic arteries are thicker
- Important functional patterns:
  - ❖ Peripheral distribution of arteries and veins on left and right sides is usually identical, except near the heart
  - ❖ A single vessel may have several different names as it crosses specific anatomical boundaries

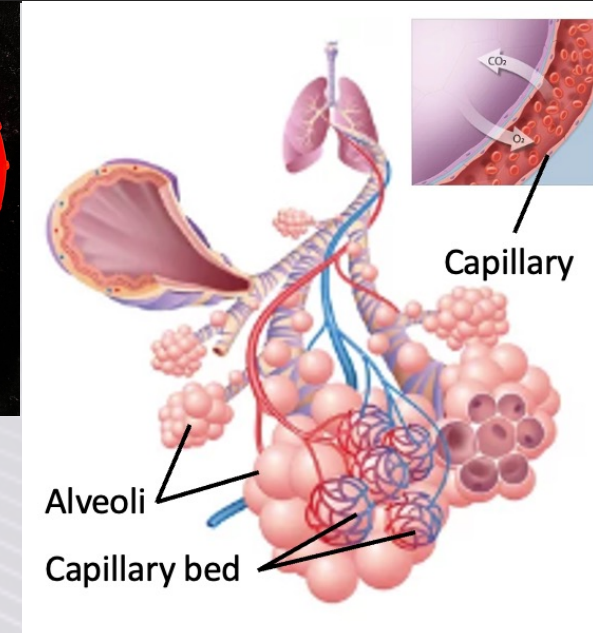


# Pulmonary Circuit Blood Vessels

- Begins: pulmonary valve
- Ends: entrance to left atrium
- Total blood volume = 9%
  1. Pulmonary arteries
    - ❖ Transport  $\text{CO}_2$  rich blood
    - ❖ Towards lungs
  2. Pulmonary veins
    - ❖ Transport  $\text{O}_2$  rich blood
    - ❖ Towards the heart (left atrium)

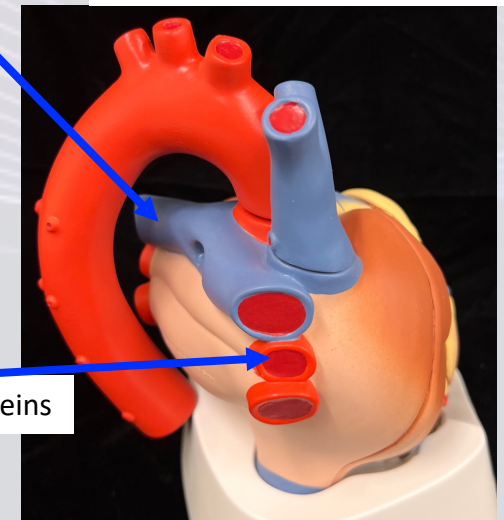


Pulmonary arteries



Alveoli

Capillary bed



Pulmonary veins