

Lab 6: Blood
Blood and Lymphatics

1. Blood Characteristics

Volume –

Functions –

Composition -

2. Leukocytes (WBCs)

a. WBC count – normal

b. Differential count - % of each type

Granulocytes:

Neutrophils

Eosinophils

Basophils

Agranulocytes:

Monocytes

Lymphocytes

3. Erythrocytes (RBCs)

a. RBC count – normal value =

b. Hematocrit

normal range:

abnormal values: anemia

polycythemia

c. Hemoglobin

normal range:

abnormal values: anemia

polycythemia

4. Blood Typing

a. Simulated blood typing kit

antigen (agglutininogen) -

antibody (agglutinin) -

agglutination -

Unknown Blood sample	Reacted w/ Anti-A (Y/N)	Reacted w/ Anti-B (Y/N)	Reacted w/ Anti-Rh (Y/N)	Surface Anitgens present
Smith				
Jones				
Green				
Brown				

Lab 7: HEART and VEINS

Human heart - locate **all** of the structures listed below on human heart models and chart
Sheep Heart - locate the * structures on sheep heart specimens

*Left Atrium

*Right Atrium

*Right Ventricle

*Left Ventricle

*Interventricular Sulcus or Groove (contains coronary vessels)

*Pulmonary Trunk

*Aorta

*Brachiocephalic Artery

Superior Vena Cava

Pulmonary Veins

*Tricuspid (Right Atrioventricular) Valve

*Bicuspid or Mitral (Left Atrioventricular) Valve

Pulmonary Semilunar Valve

Aortic Semilunar Valve

*Papillary Muscles

*Chordae Tendineae

Coronary Sinus

Interatrial Septum

*Interventricular Septum

*Endocardium, *Myocardium, and *Epicardium

VEINS

Superior (anterior) vena cava
Inferior (posterior) vena cava
Brachiocephalic (right & left)
External jugular
Internal jugular
Anterior facial
Posterior facial
Transverse jugular
Subclavian
Axillary
Brachial
Internal mammary (thoracic)
Azygos
Intercostal
Adrenolumbar
Renal
Genital or Gonadal (right & left)
 [Spermatic/Ovarian]
Iliolumbar
Common Iliac
Internal Iliac
External Iliac
Femoral
Deep Femoral
Great Saphenous

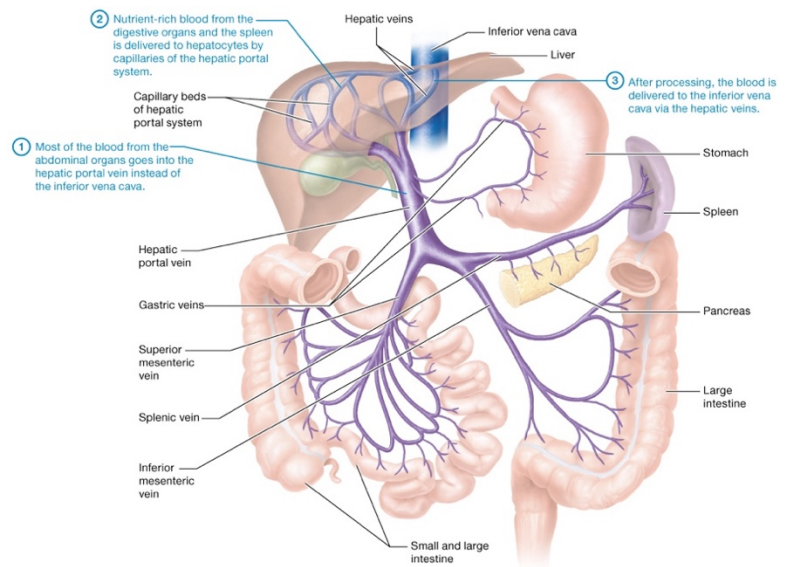
Hepatic Veins

Hepatic portal circulation:

Hepatic Portal Vein

Gastrosplenic V.

Superior Mesenteric V.



Lab 8: ARTERIES

Aortic Arch

(Branches off Aorta in CAT)

1. Brachiocephalic
2. Left Subclavian

(Branches off Aorta in HUMAN)

1. Brachiocephalic
2. Left Common Carotid
3. Left Subclavian

Right Subclavian

Right Common Carotid

Left Common Carotid

Axillary

Brachial

Internal Mammary

Vertebral

Descending (Thoracic) Aorta

Intercostals

Abdominal Aorta:

Celiac Trunk:

Hepatic

Left Gastric

Splenic

Superior Mesenteric

Adrenolumbar

Renal

Genital or Gonadal (right & left) [Spermatic/Ovarian]

Inferior Mesenteric

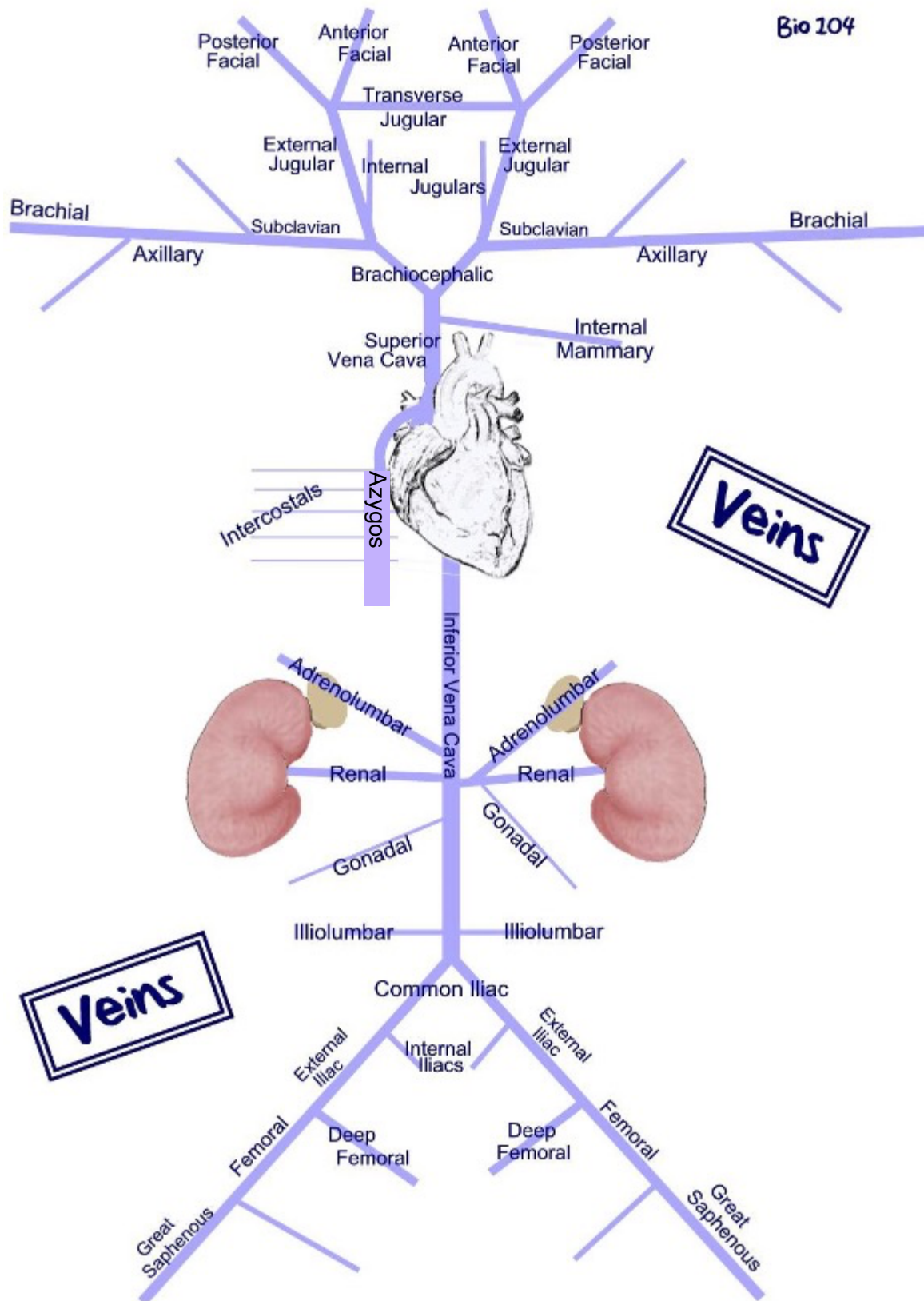
Iliolumbar

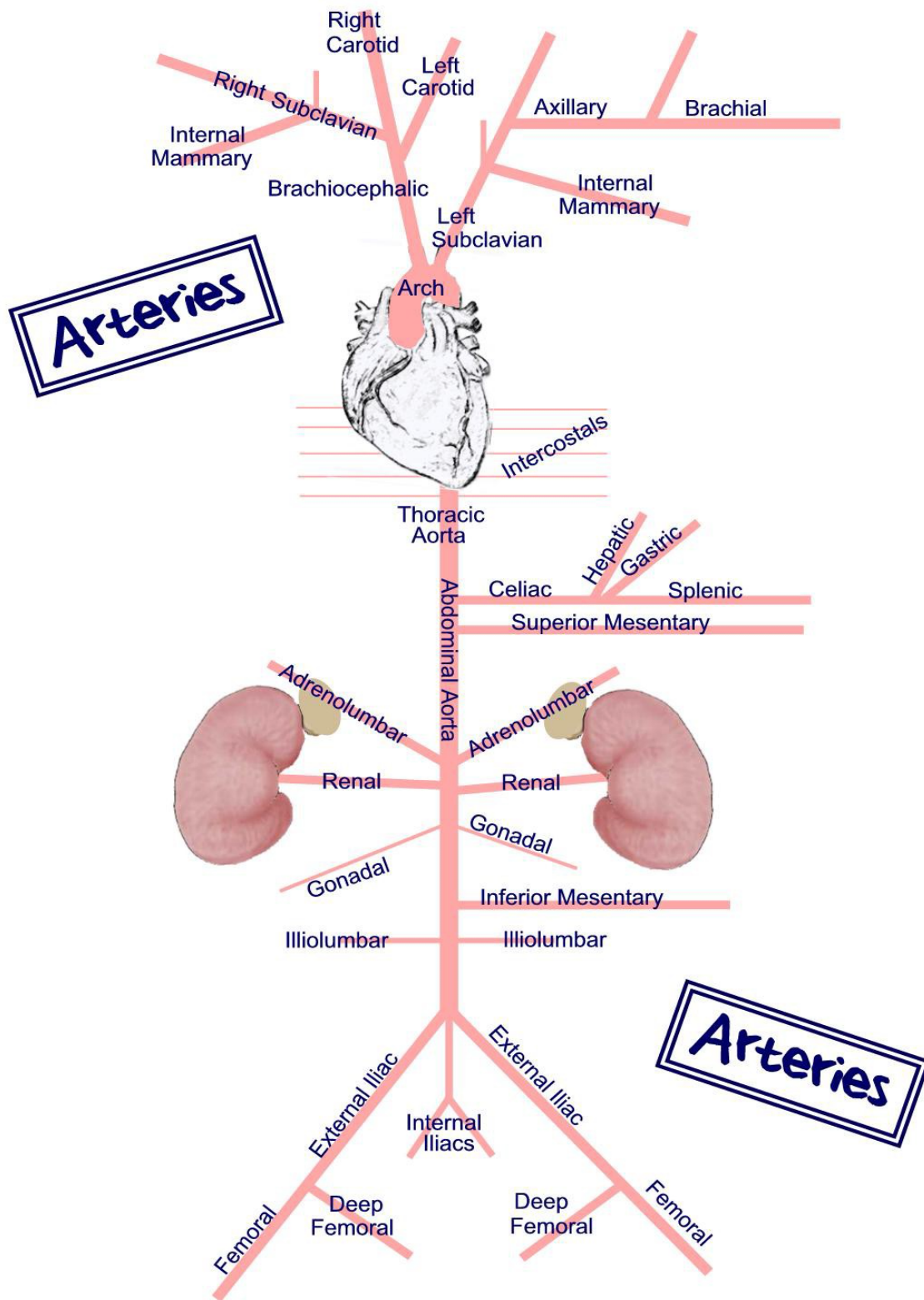
Internal Iliac

External Iliac

Deep Femoral

Femoral





Cardiovascular System

1. Identify the difference in the origin of the Left and Right Carotid Arteries.
2. Which vein is larger (in diameter) in the human, external or internal jugular?
3. What area of the body does the internal jugular vein drain?
4. The vertebral arteries supply blood to what structure?
5. What are the three branches off of the aortic arch in humans?
6. Blood in the Common Iliac Vein would flow into which vessel?
7. Blood in the External Iliac Vein would flow into which vessel?

Blood flow through the heart

8. The deoxygenated blood from the body is returned to the heart via which two vessels?
9. The right ventricle pumps (oxygenated/deoxygenated) blood toward the_____.
10. The left atrium receives (oxygenated/deoxygenated) blood from the_____.
11. Trace the blood flow from the ascending aorta to the femoral artery:

Ascending Aorta → _____(aorta) → _____(aorta) →
_____(aorta) → _____ → _____ → Femoral Artery.