Objectives – Circulatory system

Chapter 11

Reading this chapter should help the student to:

1. Describe the two circuits that comprise the cardiovascular circulatory system and the elements that form if
2. Name the three tunics that make up the walls of all the circulatory system components, and know the tissue type in each tunic
3. Compare circulatory system components in terms of size and structure
4. Relate the wall structure of each circulatory system component to its major function
5. Compare and contrast the morphology of veins and arteries
6. Explain the function of the vasa vasorum
7. Describe the general structure of capillaries
8. Compare and contrast the three types of capillaries as to morphology, function, and typical location
9. Describe how the microcirculation is regulated
10. Describe the structure of the wall of the heart
11. Discuss the distinguishing features of lymph vessels
12. Recognize the types of vessels present in a micrograph and identify their structural components

Objectives – Blood and Hemopoiesis

Chapters 12 and 13

Reading these chapters should help the student to:

1. Know the name, structure, and function of each of the formed elements of blood
2. Identify the formed elements in a micrograph of a blood smear
3. Describe the structure of the bone marrow
4. List the various sites of blood cell formation at different stages of development
5. Trace the development, in general terms, of blood cells from a pluripotent stem cell

Objectives – Immune System and Lymphoid Organs

Chapter 14

Reading this chapter should help the student to:

1. Know the functions of the immune system
2. State key differences between cell-mediated and humoral immune responses
3. Describe the basic histological organization and the main functions of the following lymphoid organs and tissues: thymus, lymph nodes, spleen, and MALT (sub-mucosal lymphoid nodules)
4. Differentiate, as to function, between primary and secondary lymphoid organs
5. Identify the different lymphoid organs from micrographs