Lecture 14: Active Learning Questions

1. Which cell/tissue types are excitable? What is an action potential? What stimuli can induce an action potential? When an excitable cell is stimulated to threshold, what ion channels open first?

2. What are the 3 basic types of muscle? Where generally are they located and what are their basic functions? Which type is the most prevalent in the human body?

3. In skeletal muscle, what are thick filaments made of? ...thin filaments? What is the relationship among thick and thin filaments? What is a sarcomere? What makes up myofibrils?

4. What does an A (dark) band within a myofibril contain? What does an I (light) band contain? What is a cross-bridge cycle?

5. Draw a cartoon of a myosin molecule and sketch a nearby actin molecule. How do the molecules you’ve drawn differ from thick and thin filaments?