Session 6
09/22

1. Give the definition of a tertiary structure.
- Interactions between R groups on the SAME polypeptide.

2. What bonds are present in a tertiary structure?
- Covalent, ionic, van der walls, hydrogen + all other types of interactions/bonding.
Reminder: salt bridge = ionic bond

3. What is the difference between cysteine and cystine?
- Cysteine = the amino acid
- Cystine = Disulfide bridge

4. Give the definition of a quaternary structure.
- When two or more polypeptides (subunits) interact. All groups are allowed to interact here.

5. What bonds are present in a quaternary structure?
- All 5 interaction/bonds are able to be present. However, covalent bonds are rare.

6. Which structure requires specific ions to function?
- Quaternary structure

7. Define the following:

- Dimer
  -Two subunits/two polypeptides

- Homodimer
  -Two of the same subunits

- Heterodimer
  -Two different subunits

- Heterotetramer
  -Four different subunits

8. What are used to distinguish subunits?
-Greek letters

9. What is the most general function of a protein?
-All proteins bind to some sort of molecule.
We know that proteins bind and have binding site. The proteins shape is dependent on the R groups! They create the specificity for the binding protein.