

## This instructional aid was prepared by the Learning Commons at Tallahassee Community College.

## **Cell to Cell Communication Quiz**

- 1. Which of the following is the correct order of events in signal transduction?
  - a. Receptor -> Chemical Signal -> Target Proteins -> Intracellular Proteins -> Cell Response
  - b. Chemical Signal -> Target Proteins-> Receptor -> Intracellular Proteins -> Cell Response
  - c. Chemical Signal -> Receptor -> Intracellular Proteins -> Target Proteins -> Cell Response
  - d. Chemical Signal -> Receptor -> Target Proteins -> Intracellular Proteins -> Cell Response
- 2. Which of the following types of chemical signals is secreted in the blood and travels long distances to its target.
  - a. Neurotransmitters
  - b. Cytokines
  - c. Hormones
  - d. Target Proteins
- 3. Which of the following is a characteristic of a receptor?
  - a. Speed
  - b. Specificity
  - c. Saturation
  - d. Competition
  - e. All except a
- 4. This type of extracellular receptor causes a transporter to open or close to allow particles through once a chemical signal binds.
  - a. G couple Protein
  - b. JAK Kinase
  - c. Tyrosine Kinase
  - d. Ligand Gated Ion Channel
- 5. An intracellular portion of this receptor phosphorylates intracellular Proteins.
  - a. G coupled Protein Receptor
  - b. Tyrosine Kinase
  - c. Ligand Gated Ion Channel
  - d. All of the following

- 6. Once Adenylyl cyclase is activated it a. Opens Ca2+ doors on the Sarcoplasmic Reticulum b. Makes cAMP c. Phosphorylates intracellular proteins d. Causes a change in membrane potential 7. IP3 does which of the following? a. Opens Ca2+ doors on the Sarcoplasmic Reticulum b. Activates target proteins c. Both a and b d. None of the above 8. An insulin receptor is an example a \_\_\_\_\_ receptor. a. Tyrosine Kinase b. G couple Protein c. Ligand Gated Ion Channel d. JAK Kinase 9. Most cytokine receptors are an example a \_\_\_\_\_\_ receptor. a. Tyrosine Kinase b. G couple Protein c. Ligand Gated Ion Channel d. JAK Kinase 10. Beta adrenergic receptors on cardiac contractile cells are an example a \_\_\_\_ receptor. a. Tyrosine Kinase b. G couple Protein c. Ligand Gated Ion Channel d. JAK Kinase 11. Alpha adrenergic receptors on cardiac contractile cells are an example a \_ receptor. a. Tyrosine Kinase
  - b. G couple Protein
  - c. Ligand Gated Ion Channel
  - d. JAK Kinase
- 12. This type of receptor is involved in skeletal muscle contraction.
  - a. Tyrosine Kinase
  - b. G couple Protein
  - c. Ligand Gated Ion Channel
  - d. JAK Kinase

## **MC** Answers

- 1. c
- 2. c
- 3. e
- 4. d
- 5. b
- 6. b
- 7. a
- 8. a
- 9. d
- 10. b
- 11. b
- 12. c