Learner Feedback Questions #330

1. The early interest in stem cell research was based on the following benefits except to:
   a. understand how diseases occur
   b. explore how diseased cells could be replaced with healthy cells
   c. replace diseased cells with healthy cells in utero
   d. test new drugs for efficacy and safety

2. In the 1950s, stem cell research to regenerate specific tissues gained favor after which type of organ transplants?
   a. heart
   b. kidney
   c. corneal
   d. bone marrow

3. Totipotency refers to:
   a. undifferentiated cells in early growth and development
   b. differentiated cells in early growth and development
   c. master cells derived from blood-forming tissues only
   d. cells with limited ability to regenerate

4. Pluripotent refers to:
   a. a preimplantation embryo
   b. a blastocyst that can develop into all human cell types
   c. the ability of defective stem cells to be destroyed
   d. the ability of stem cells to live for 120 days

5. The human body is composed of approximately how many body cell types?
   a. 40
   b. 100
   c. 200
   d. 500

6. The following statements about stem cells are accurate EXCEPT:
   a. Stem cells are the master cells of the body.
   b. Human embryonic stem cells can be kept alive and grown in the lab.
   c. There are two types of stem cells: embryonic and adult.
   d. Stem cells generally stop developing in older adults.

7. Adult stem cells are:
   a. found in mature body tissue in all organs except bone marrow
   b. unlimited in the tissues and have the same ability to divide when removed from the body
   c. limited in quantity for what is needed for future therapies
   d. specialized just as embryonic stem cells are

8. The current legal status of stem cell research is:
   a. Federal funding is limited to adult stem cell research.
   b. There is no federal funding for embryonic stem cell research.
   c. Embryonic stem cell research has never been legal in the U.S.
   d. Embryonic stem cell research can get federal funds if embryos are from in vitro fertilization with an excess of embryos.

9. The current status of embryonic stem cell transplants in humans:
   a. has shown neuroregeneration in one clinical trial of patients with thoracic spinal cord injuries
   b. has been put on clinical hold by the FDA
   c. has been on clinical trial by the biotech company conducting the clinical trials.
   d. the hospital’s institutional review board must comply with specific policies and guidelines set down by the FDA

10. The main reason embryonic stem cell research in patients with spinal cord injury is a priority is because:
    a. the brain and spinal cord are resistant to regeneration
    b. funding from private and public donors has promoted the need to proceed
    c. spinal cord injuries are costly, lifetime injuries to families and third-party payers
    d. spinal cord injuries have had many public advocates for better treatment, like the late Christopher Reeve

Evaluation

1. I can identify the difference between adult and embryonic stem cells.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree

2. I can discuss the ethical issues and legislative history relating to stem cells.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree

3. I can identify the current state of embryonic stem cell research in the field of neuroregeneration specifically for spinal cord injury.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree

4. The objectives relate to the overall goal of the article.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree

5. The article is well-written and logically organized, and defines terms adequately.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree