**Stem Cells – A Revolution in Medicine**

“Basics of Stem Cells” Quiz

1. Stem cells have three unique characteristics. Which of the following is NOT a unique characteristic?
   1. Self-renewal
   2. Multi-potential
   3. Presence of genetic material
   4. Highly-proliferative
2. These types of stem cells cannot make entire organisms, but can turn into a cell of any of the three germ layers (endoderm, ectoderm, mesoderm):
   1. Totipotent stem cells
   2. Pluripotent stem cells
   3. Multipotent stem cells
   4. Unipotent stem cells
3. These stem cells can differentiate into bone, cartilage or fat:
   1. Mesenchymal stem cells
   2. Hematopoietic stem cells
   3. Neural stem cells
   4. Skin stem cells
4. These stem cells can differentiate into many different types of blood cells:
   1. Neural stem cells
   2. Mesenchymal stem cells
   3. Hematopoietic stem cells
   4. Skin stem cells
5. Embryonic stem cells are derived from a blastocyst a few days after fertilization. It is approximately \_\_\_\_\_\_ cells large.
   1. 150
   2. 400
   3. 900
   4. 1600
6. Adult stem cells are also known as \_\_\_\_\_\_\_\_\_\_\_\_
   1. Yamanaka factors
   2. Transducers
   3. hESCs
   4. Somatic stem cells
7. iPSCs, or induced pluripotent stem cells, have four different factors used to induce them into a pluripotent state. One of these factors is
   1. hESC
   2. MSC
   3. Sox2
   4. All of the above