Stem Cells: Biology and Therapeutic Potential

1. Define each of the following:

Cellular Differentiation-

Totipotent-

Pluripotent-

Regenerative medicine-

1. What natural function do stem cells serve inside of a living organism?
2. Compare and contrast adult stem cells with embryonic stem cells.
3. What 3 medical challenges are faced by the individuals featured in the BBC documentary: “Embryonic Stem Cells Miracle Cure”? How likely is each individual to face a stem-cell mediated cure in the near future?

5. In the BBC documentary, Bruce Dobkin gave his assessment of stem cell treatment claims made by clinics overseas. What did he mean when he stated that financial benefits undermined the credibility of the claims made by these clinics?