

Taking A Look At The Controversy Behind Stem Cell Research

Several studies have indicated that the human body may have regenerative properties if given the right circumstances. For example, a child under ten years old may be able to regrow a lost fingertip if the wounds aren't stitched up to prevent the regrowth.

If the membrane surrounding one's rib is left intact, a damaged rib can regenerate. Scientists also speculate that livers and kidneys have some regenerative abilities as well. To further study this realm of science, we must rely on stem cell research. However, there is much stem cell controversy blocking the path to enlightenment. In an embryo that is just three days old, stem cells are found that will later transform into the heart, lungs, skin, tissues, bone marrow, muscle and brain. Advocates of stem cell research believe that there may be a way to generate replacement cells for parts of the body lost through injury, disease or aging. What makes stem cells different than blood, muscle or nerve cells is their innate ability to replicate for months in a laboratory setting. Scientists are hopeful about the potential for long term rejuvenation using these self-renewing human stem cells.

In addition to embryonic stem cell research, there is also adult stem cell research being done. Undifferentiated adult stem cells are found amid similar cells and they exist to repair damaged tissue. Scientists are examining where adult stem cells are naturally found in the body, as well as which factors control the differentiation and proliferation of these stem cells. Stem cells can be harvested easily from the adult human body and this branch of research does not involve the destruction of a human embryo, so there is much less stem cell controversy surrounding adult cells. While stem cell research has been full of controversy in America, other nations, notably Iran, have nothing against stem cell research at all. "Policies that may be classified as liberal in the American political system seem to be common sense to Iranian politicians," explains Hassan Ashktorab of the Howard University Cancer Center in Washington, DC. While George W. Bush banned research on fetal stem cells, Iran's Ayatollah Khamenei embraced the modern science. While human cloning is still condemned in Iranian culture, they believe it is their duty to do their best to prevent illness and protect human life.