

Stem cells. tobe or not to be essay

Literature, Russian Literature



It is one of the most evocative phrases in the lexicon of science: stem cells research, the creation of cells that can be used to make people healthier, stronger and even can treat cancer – the greatest killer of our time. Stem cells have been touted as one of the most significant discoveries in medical history! The ongoing research in this field hold high hopes that in a few years stem cells used in genetic therapy may be able to cure or alleviate the suffering of people with heart disease, liver disease, diabetes and even to grow genetically matched human tissues replacement.

Nevertheless, there are other areas of stem research that can be defined as a ‘ designer baby’, which faced a strong public reluctance in society to accept these fields of medical study for the reason of using stem cells in this case towards creating a race of superior human beings with the resistance to all diseases and without biological weaknesses. The ‘ stem cells research’ theme is argued not only between scientists – it is the hottest topic in the whole society! So what should be our position as a Christians in this debate!?

So what are the stem cells? It is not a rhetorical question, but in order to understand this phenomenon we must understand the nature of cells and how they work. The distinction between stem cells and others is that these cells are capable of renovating themselves after a period of inactivity, also they can be stimulated to become organ-specific cells with special functions. Nowadays scientists subdivide such cells into four types: 1) totipotent cells – the most versatile of the stem cell types that can give the potential to give rise to any and all human cells (e. g. brain, liver, blood etc.); 2) pluripotent, which have the same characteristics as a totipotent cells, but they cannot get to grow the entire organism.

3) Multipotent stem cells – more plastic and more differentiated than other types, but their disadvantage is that they can cause to grow only a limited range of cells within a tissue type. And the last type is the adult stem cells used to replace cells that have died or lost its functions, it is undifferentiated cells present in differentiated tissue. For the reason that types and function of stem cells are discovered, scientists are working towards creating new methods of stem cells usage in medicine, spending billions of dollars in the attempts.

Therefore we can outline a few predictions about using stem cells in today's medical science: genetic engineering and gene therapy. First of them is the way of using genes (stem cells) in order to make people stronger, healthier and even more mentally alert. And the second one is the mode of treating fatal illnesses using replacement diseased cells by healthy genes. But even endeavors to realize these methods were met with the resentment. You can say: ' Why? Why being on the verge of one of the greatest science discoveries brings people into the frustration? '. Now we have not a clear answer, but we can describe one of the most uttered hypothesis, which argues that taking stem cells from aborted fetuses, human embryos created ' in vitro' or from adult bone marrow is the deadly sin against God – the only one who has the right to decide who must live and who must die. Another widespread belief is that science borders on cloning people, what could become the nightmare for the mankind.

Meanwhile strenuous efforts are under way to stimulate development of this field. But will the society accept such way of treating as stem cells? Probably not in the foreseeable future.