

**“THE REASON WHY I WORK WITH EMBRYONIC STEM CELLS”**

*Obama will revoke the prohibitions of Bush. The Vatican protests. A prominent scientist speaks out, explaining why she will pursue her studies that she considers adhere to the values of the Christian faith.*

Interestingly the new President of the United States Barack Obama opens his legislative age as his predecessor did: speaking about stem cells and stating the intention to remove the ban imposed by G.W. Bush for public funding of research on human embryonic stem cells. This ban widely caused smiles because of its hypocrisy. Research on embryonic stem cells was not banned at all, it was only been allowed with private funding. Happily for American colleagues, these grants are as plentiful in America as the donations, funds and institutions that are their source.

So during the years of “prohibition” there happened what normally happens in the US research: nothing stood still. Studies and research continued, and results published, including those “forbidden from public funding” but achieved (e.g. in institutions like Harvard) with private funds and with worldwide beneficial effects. All this has consolidated the lead role of the USA and Japan in the most recent and extraordinary findings.

Therefore, what is the moral force of this ban? And what is its consistency? A country really “against” this research would have simply banned it from its territory. Difficult to imagine the US taking the risk to exclude itself from research considered of scientific value and potential. In Italy it is worse: a law forbids deriving embryonic stem cells from the blastocyst, also from those destined to destructive freezing (which is already a contradiction: in this case “not to do” is not a neutral approach). Yet in our country it is not forbidden to work (albeit in the face of unnecessarily created difficulties) on cells that foreign colleagues have derived with the blessing of their governments and citizens. These cells are present in our labs, imported via scientific collaborations. They are studied and will maybe one day bring cures for some diseases.

Those who declaim against this research should clearly answer these logical consequences:

- 1) All should renounce every future treatment or cure dependent upon the studies of these cells?
- 2) All researchers should follow a behavioural codex forbidding them to study articles, to participate in congresses or international networks, in order to avoid their research somehow endowed of “higher moral standards” being contaminated with “morally unpure” research?

And implicit is traceability to every past, present and future research step in the world, in order to identify if our own national research is “contaminated”.

Is this not absurd, impossible to put into practice, and therefore hypocrisy? Yet truly new these days is the reaction of the Vatican to the proposal of Barack Obama. Instead of using ethical or religious arguments, claiming their groundedness and asking consistent behaviour from those agreeing with those sentiments, a short cut is taken by defining research on embryonic stem cells as “useless” and proposing the old “contrast” between adult and embryonic stem cells, which is like comparing pears with vans.

One cannot avoid serious questioning of such absurd declarations, that are not verified and cannot be verified. In fact to use such false scientific argument, taking advantage of the stance of “moral guide” (thereby unquestionable) to bias the discussion, means to unilaterally raid into a territory with no competence. In a secular state this should not be acceptable even to Catholics. Moreover, to claim a priori ability to preview the results of experiments and ideas that have not yet been performed is like claiming ability to read the future in a crystal ball.

As a consequence, one cannot avoid raising several very simple and logical doubts. If these studies are so worthless then why do so many researchers work on them? Do they have time to waste? Or are they all seen as mercenaries of the pharmaceutical industry (as demagogues like to say) and interested only in “easy profits”? The perplexities in such a logic can only increase when thinking of a pharmaceutical industry investing in something worthless. As a scientist working on embryonic stem cells, my position is different.

On the purely scientific level, embryonic stem cells are, because of their features and pluripotency, very interesting to study for an understanding of how the committed and specific cells of our body are formed and how they degenerate as various diseases take their course.

There are already studies that demonstrate how transplanted embryonic cells bring benefits to a mouse with a condition that mimics degenerative disease. This is not proof of a cure for humans, but it is a first step there. What it is disappointing is to see how the whole discussion is trapped in a communication style that invents a reality that does not exist and tries to maintain arguments that are not open to participation by those who have a scientific perspective. Probably because of this, division is also internal to the Church and among the believers.

I have presented my opinions many times before, and today I choose to be even more direct: I am a Christian and I work on embryonic stem cells, in the same way as I work on adult stem cells and in other fields that do not involve the use of embryonic stem cells. I believe I am right to work on cells that are not “embryo” and obtained from a blastocyst “that is not yet a person”. These cells can help us understand and hopefully contribute to diminish the suffering of many. I also have the hope that there is a God bigger than any earthbound imagination, that has no need to be asserted through dogmas. A God who allows women and men to think freely, to hope, to love, to enjoy and hold their own beliefs having diverse rhythms and forms. A God who lets humanity, individually vested with consciences and ethical tensions, continue to grow (for those that are believers) the gift it has received. A God that perhaps nurtures some love for Science. Because a God who wants to keep us in the dark and in suffering probably does not exist.