



Horizon 2020: Keep Dogma Out of Stem Cell Research

Report of the public hearing

*Thursday 15 November, 15:00-18:00
European Parliament, Brussels*

Welcoming words

By Marc Tarabella, MEP

Marc Tarabella who supported the organisation of this public hearing first welcomed the audience and introduced the topic of the European funding for human embryonic stem cells (hESC) research in Horizon 2020 which opposes two ethical views: a humanist one and a religious and dogmatic one.

He acknowledged the participants with the running religious lobbying directed at Members of the European Parliament to urge them to vote in favour of “the respect of life” and therefore against the funding of this kind of research. Since the new Framework Programme Horizon 2020 will be voted in the European Parliament by the beginning of 2013, he said it was important to mobilize in the coming weeks to support this research which could help cure several degenerative diseases such as Parkinson or Alzheimer affecting patient’s dignity. He finally proposed to think about several specific actions for the humanist movement:

- How can humanist and secularist organisations coordinate their action to defend this research in Europe?
- How can they get support from MEPs and European politicians not necessarily connected with the humanist movement?
- How can they impose their humanist views into the public and political debate?

- How can they become major partners for European institutions in the research field?

Introduction

By Pierre Galand, President of the European Humanist Federation

Since the European Union has increasingly dealt with matters implying different ethical views and values, he underlined the importance for humanists to invest those debates in a constructive way.

Research is one of these debates. Several religious organisations (European Dignity Watch, the European Institute of Bioethics, the COMECE), backed by several MEPs, have been trying to undermine scientific progresses on the basis of an unconditional respect for the living and an abusive use of the precautionary principle. They have been using all kind of arguments, from the traditional ethical ones to the scientific and legal ones. More precisely, they have instrumentalised the 2012 Nobel Prize of Medicine on adult stem cells and the 2011 ruling “Brüstle vs Greenpeace” of the European court of Justice.

On hESC research, Pierre Galand recalled that the EHF had launched a lobbying campaign to maintain the European funding for 2014-2020 with a call signed by scientists and proposals of amendments for Horizon 2020. These proposals have reached several MEPS who also supported the improvement of the status quo, unsatisfactory for many. After a strong lobbying of Catholic countries all over the past decade, the EU indeed refused the fund the creation and the destruction of human embryos for scientific purposes, even for countries which allow these activities such as the UK, Belgium and Sweden. Backed by several scientists and lawyers specialized in this research area, our organisation asked the European Commission to fund activities of “therapeutic cloning” and the creation of new human embryonic stem cells lines for the countries which allow such scientific actions.

“The ethical, political, and economic implications of the European funding for human embryonic stem cell research”

By Philippe Busquin, former European Commissioner for Research, innovation and science

Philippe Busquin reminded the participants about the negotiations of the 6th Framework Programme in 2006 and the intense polemic on the particular issue of stem cells research. As Commissioner for Research, he had to propose a balanced position to get an agreement from European countries in favour of research on human embryos and those strongly against it. He said that Germany, Austria and Italy were at the forefront of the opposition in the Council of Ministers, for different reasons (historical or ethical ones).

Mr Busquin also mentioned the important role of the European Group of Ethics on this issue at that time. Created by the European Commission in 1991 to advise it on ethical questions relating to sciences and new technologies on ethical implications, the EGE’s opinions were much followed by European representatives at that time, thanks to its real pluralist composition. Mr Busquin then regretted that the EGE had become less and less pluralistic with an overrepresentation of Christian beliefs.

Mr Busquin finally insisted on the fact that the funding for stem cells research was a political issue, not a religious one. He affirmed that the main problem was the strong lobbying of the churches which was efficient to a certain extent in several EU countries. He therefore urged the humanist organisations to stay mobilized on this issue.

“Embryonic stem cells, cell reprogramming, and biomedical research: new opportunities and challenges”

By Pr Pierre Vanderhaeghen, Senior Research Scientist at FNRS for the Institute of Interdisciplinary Research in human and molecular Biology, ULB

Professor Vanderhaeghen reminded the audience that researchers have always been interested in understanding and reaching pluripotency. Therapeutic cloning can be a way but is highly complex and difficult to implement. In the 1990s, scientists discovered human embryonic stem cells (retrieved from the human embryo at its earliest development stage, after about 5-7 days). These cells are very interesting because they have unique biological properties: they can multiply endlessly and can morph into any type of cell found in the body (pluripotency). One of the main objectives of hESC is to study these determination mechanisms.

These cells can be used for cells therapies (in the case of degenerative diseases such as diabetes, epilepsy, vascular injuries etc.) but also for fundamental research. In his research, Pr Vanderhaeghen has tried to generate cerebral cortex neurons.

According to him, these cells are a great opportunity for medicine. But further research is needed in order to understand how they can become specified cells and be used as therapeutic treatment.

But human embryonic stem cells raise ethical and scientific issues. On an ethical ground, some argue that the human embryo cannot be destroyed, even for research and medical purposes. On a scientific ground, some argue that hESC are now useless in the light of new scientific discoveries. The 2012 Nobel Prize of Medicine has indeed shown that adult stem cells could be re-programmated in order to have the same biological properties than embryonic stem cells.

Despite this spectacular breakthrough, hESC are still very much needed. Even if re-programmated, these adult stem cells are not perfectly similar to embryonic stem cells and so do not have exactly the same potential. Embryonic stem cells are still the most promising to differentiate into any type of cells of the body (e.g. liver, heart or brain). They are still the golden standard in this research field.

“Why « Brüstle » cannot be used to block funding under Horizon 2020”

By Julian Hitchcock, Intellectual property & life science lawyer at Lawford Davies Denoon

Download his presentation on our website.