



New Developments in Stem Cell Research



Statement of the Working Group on *New Developments in Stem Cell Research: Induced Pluripotent Stem Cells and Their Possible Applications in Medicine* (16-17 April 2012)

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We are very pleased to present the Statement of the Workshop on *New Developments in Stem Cell Research: induced Pluripotent Stem Cells and their Possible Applications in Medicine*. As stated by the title itself, the aim of the Workshop was to study iPS (induced Pluripotent Stem) cells. As defined in the following Statement, iPS cells are not derived from any stage of embryonic or fetal development. On the contrary, they derive from a non-pluripotent cell – typically an adult somatic cell – by inducing a “forced” expression of specific genes. They are extremely promising in the development of adult tissue stem cells, which are the goal of regenerative medicine. It is therefore a new gift of science to provide iPS cells which have never come from an embryo or fetus or oocyte; nevertheless, these cells are pluripotent and therefore analogous to ES cells in a certain phase. ES cells, which were not included in the subject of this workshop, are referred to in the present Statement only in relation to iPS cells. Aristotle said that “the knowledge of the act must precede the knowledge of the potency” (*Metaph.* ix, 9, 1049 b 16) and Jesus Christ said that “every tree is known by its own fruit” (*Lk* 6:44). Thus, since iPS cells cannot generate *per se* a human being or a clone, their use does not seem to be contrary to biblical anthropology as taught by the Church, which considers that, unlike other living beings of nature, each human being, since the beginning of his or her conception, is “the only creature on earth which God willed for itself” (*Gaudium et Spes* 24). In thanking our outstanding group of scientists for their important collaboration and hard work and especially Professor Nicole Le Douarin for her exceptional leadership and expertise, we would like to point out that the opinions expressed in this Statement with absolute freedom by the scientists present at our workshop represent only their points of view and not those of the Academy.

H.Em. Georges M.M. Cardinal Cottier

H.E. Msgr. Marcelo Sánchez Sorondo