

Ethics Guidelines for ES Cell Research

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1) Language that is appropriate for a public forum that discusses the morality of embryonic stem (ES) cell research and probes the status of the early human embryo (i.e., whether it is the subject of human rights) should refer to the embryo in scientific, objective terms: as an organism and as a member of the human species.

A) Embryological science confirms that the human embryo is a member of the human species and, like all members of a given species, will eventually be capable of inter-breeding and producing fertile offspring.

B) Embryological science also demonstrates that, at the completion of the process of fertilization when the male and female pronuclei of the human progenitors' sperm and ovum are indistinguishable and lose their nuclear envelopes (or from the subsequent spontaneous production of a monozygotic twin), a new human creature emerges as a whole, genetically distinct, individuated zygotic human organism. This individuated human organism has the natural, radical capacity for the person-defining activities of reasoning, willing, desiring, and relating to others. The human individual also possesses the natural, radical capacity to develop continuously into the mature (maximally differentiated) organism of a functional adult human being, the organic structural development of which is under the control of a sequence of primordial centers from the zygote's nuclear DNA up to the central nervous system (CNS) and the fully developed brain with its cerebral cortex. The difference between individuals in their adult as opposed to their zygotic stages is not one of humanhood or personhood but of development.

2) Ethical theories that ignore, distort, or contradict the above data must be suspected of bias. Ethical discussions that insist that the question of whether the human embryo is the subject of rights is to be decided *primarily* or *solely* on a philosophical rather than scientific basis defeat the main consideration: the defense of the human rights of human beings against, among other things, the undue eagerness of some scientists for freedom of research under the guise that this will ultimately be to the advantage, not indeed of the human subject that is destroyed in research, but of others.

3) While it is true to say that one may not be able to definitively prove from the viewpoint of philosophy that the human embryo is a human person, it should be remembered that one cannot definitively disprove it either. A conscientious philosophical probe of the question of the personhood of the human embryo leads either to the

conclusion that the human embryo is a potential person, a form of human life on the way to becoming a human person, or to the view that the human embryo is a human being and therefore a person. Conducting destructive ES cell research is, for the second, a direct attack on an innocent human person or, for the first, the risk of such an attack. By either light, destructive ES cell research represents a diminishment of respect for embryonic and fetal human life and, therefore, a threat to the integrity of every uncontested human person.

4) In response to three of the more common arguments raised in favor of potential personhood, the following ought to be kept in mind (for a more detailed paper on the personhood of the human embryo, see Sr. R. Mirkes, "NBAC and Embryo Ethics," *NCBC Quarterly*, Vol 1, no. 2, 2001):

A) The human embryo is not a person because it does not function or behave like a person.

RESPONSE: Person-defining powers or capacities, both in their natural and functional phases, are present in the organic structure of every human being as essential to its nature. These are present in their *developed or functional state* in adult human beings who have the capacity to perform their respective activities. The person-defining powers are also present in their *undeveloped or radical state* (simply as capacities to develop mature and effective human behavior) in embryonic, fetal, and neonatal human beings. Both phases of human powers, the natural and the functional, are real, and both define the same human being in which they reside, whether at its embryonic or mature phase, as a human person.

B) The human embryo is not a person because it lacks developmental individuation.

RESPONSE: Those who propose twinning as proof of delayed hominization argue that, if an embryo splits into two embryos, one cannot claim that the original embryo is an individuated or single organism, i.e., a person. However, twinning would never occur unless an original embryo began to develop normally up to the point of twinning. The normal development of the first embryo is possible only because it is guided by its genome, proving that it is already a fully individuated organism. Experimental cloning of a second individual animal from cells taken from a first individual animal does not imply that the first animal was not already a complete individual organism. Similarly,

in twinning, the detachment of some cell or cells from the original conceptus that by reason of their totipotentiality (or at least pluripotentiality in later stage twinning) can develop into a second, genomically identical individual does not disprove but confirms that the first individual existed in organic integrity.

C) The human embryo is not a person because it is too nascent a form of life.

RESPONSE: Many times, the argument that denies personhood to the embryo because of its inchoate development presupposes the Aristotelian/Thomistic theory of delayed hominization. Once we understand the ancient theory of hominization, the significance of four facets of the contemporary appropriation of the theory surfaces. First, the Aristotelian theory was based on faulty biology of the 5th century B.C. However, if we look to the principle invoked in the theory and apply it to contemporary embryological science, we can conclude that the being or the "matter" of the zygote and early embryo is human because its "body" is human. That is, a greater portion of the information needed to construct the zygote's embryonic, fetal, and adult human body, including the human brain, is contained in its nuclear DNA. It is a human body because it is brought to life—informed, organized, unified—by the life principle of a human intellectual soul.* In sum, the human zygote who is a human body informed by a human soul *is* a human person, i.e., an individuated organism. Second, the fetal events of the appearance of the primitive streak and the developed brain indicate important stages in the maturation of the individuated human organism that began at fertilization, not the emergence of a new organism where there was previously none. Third, contemporary theologians, bioethicists, and persons of science and medicine that invoke the Aristotelian/Thomistic delayed hominization theory to defend personhood at some point post-conception fail to grasp the theory's primary principles: a particular body is human when it is animated or informed by a rational soul. And, germane to our discussion, a particular human body that is alive by means of its life principle, i.e., the rational soul and all of its person-defining powers, is a living, human person. Fourth, it is a paradox wrapped in an enigma that some Catholic theologians continue to cite, without appropriate modification, this obsolete controversy for delayed hominization and even to revive a competing theory of another medievalist, Duns Scotus, who was also misinformed about human biological development.

* Aristotle defines the soul of any living substance—vegetative, sentient, or rational—as its life principle or substantial form, that which animates the respective material body in the sense of organizing and unifying it.

- 5) If all human beings, no matter their stage of development, are not persons before the adult human community and before the law, then the question of who is included and who is excluded from that community is forever condemned to the arbitrary and utilitarian will of the power-brokers that be.
- 6) As those whose personhood is uncontested and who were once zygotes themselves, citizens of a libertarian democracy in general and members of the academe in particular ought to be committed to erring on the side of life by generously awarding rights not only to adult human beings but also to those on the way to adulthood.
- 7) Neither the scientific bias for freedom of research on the one hand, nor the attainment of legitimate therapeutic goals on the other, should be allowed to blind us to the wrong of destroying the lives of some members of the human race for the benefit of others.
- 8) Science must be at the service of human beings and human life. All legitimate goals of biomedical research are to be lauded, but only moral means to realizing those goals are to be pursued.
- 9) Given the lack of consensus on the central issues of the personhood of the embryo, other directly related ethics questions surrounding ES cell research, e.g., consent and cooperation, are necessarily in a similar state of unsatisfactory moral resolution.
- 10) Approval of ES cell research must be viewed within the larger picture of an emerging bioethics ideology which proposes person-defining criteria that would ever more stringently limit humanhood and personhood to an ever diminishing sector of humanity all the while suggesting that moral status be extended to animals and inanimate objects. The question is: Does a University system and the people of its respective state want to set down this path?
- 11) Approval of ES cell research is not now, nor will it be in the future, an isolated, discrete decision. The researcher, the research institution, the University President and Board of Regents must carefully assess the "for now," incremental approach of proponents of ES cell research. Prudence dictates that persons in authority ascertain whether it will be feasible to hold in check downstream proposals (SCNT-produced embryos for research only, use of stem cells for germline interventions, etc.), even when they might be deemed less morally acceptable than the first round of research.
- 12) Human Adult stem (hAS) cell research represents a win-win situation: pursuing the moral end of promising therapies and cures for debilitating diseases through a moral means. u

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