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GOD'S HAND IN THE LABORATORY. WHAT DOES INTERNATIONAL HUMAN RIGHTS LAW HAVE TO OFFER?

LA MANO DE DIOS EN EL LABORATORIO Y EL DERECHO INTERNACIONAL DE LOS DERECHOS HUMANOS

IVONNE TÉLLEZ PATARROYO

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GOD'S HAND IN THE LABORATORY. WHAT DOES INTERNATIONAL HUMAN RIGHTS LAW HAVE TO OFFER?

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KEY WORDS: Human rights, Biotechnology, Human being, Stem cells
PALABRAS CLAVES: Derechos Humanos, Biotecnología, Ser humano, Células madre

RESUMEN

En este artículo se explorará a los derechos humanos como un elemento constitutivo de la Biotecnología, centrándome en sus principales características y su rol hacia este campo de la ciencia. Si se tiene en cuenta que los derechos humanos son un campo muy amplio, el objetivo de este trabajo es, por tanto, identificar qué derechos están involucrados directamente con las ciencias de la vida, con especial atención a la Dignidad como principio fundamental, Identidad, Privacidad y Autonomía, a través de la exploracion de la investigación con Células Madre. Es casi imposible concebir a la Biotecnología sin considerar sus implicaciones sobre los derechos humanos. Es precisamente esta peculiar relación lo cual genera que los fenómenos que ocurren en un campo tengan un impacto casi inmediato en el otro.

ABSTRACT

In this article, I shall explore Human Rights as a constituent element of Biotechnology, by focusing on their main features and their role towards this

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field of science. Bearing in mind that human rights is an extremely wide field, the aim of this piece of work is, therefore, to identify which rights are directly involved with life sciences, with special regard to Dignity as the foundational principle, Identity, Privacy and Autonomy, through the exploration of Stem Cell research. It is nearly impossible to engage in Biotechnology without considering its implications in Human Rights. It is precisely this peculiar relationship which makes phenomena occurring in one field have an almost immediate impact on the other.

1. INTRODUCTION

Without research, medical progress will be impossible

"Without research medical progress would be impossible" (Jackson, 2006). As human beings, we have a natural tendency to encourage all kinds of practices that promote development and enhance our wellbeing; hence, contemporary societies favor medical and scientific research. The problem is that the values that guide our actions in biotechnology are subject to the paradigms of world commodification. Societies encourage investigation and development within a high profile human rights' discourse, but they are not always consistent with them in practice. However, global governance is persistent with the human rights regime therefore, domestic law and international law have worked to provide for exigent regulations aiming at encouraging research but, at the same time, tending to afford the highest protection to those subject to it.

Research is divided into two big groups: Therapeutic and Non Therapeutic. The former has an outstanding feature and that is that the subject of research may also benefit from it, while in the non-therapeutic, there is no direct benefit for the people who agree to it.

Biomedicine requires the use of human material and this also includes human embryos. It is in this point that all the questions begin to arise, because the moral status of the embryo enters the debate. Several appreciations of its moral status have appeared, and cultural and religious beliefs have come to the discussion around this idea as well. It is not clear and definitely not agreed upon yet, what the moral status of the embryo really is. In this article we will take a look inside Embryo Stem Cell research and some ethical concerns associated with it.

It can be argued that the biggest fear of research is, possibly, the fact that

human beings can be subject to instrumentalisation, and that the limits between humans as means and humans as ends may not be identifiable. That is why international instruments have joined efforts to ban practices and conducts that will end up being methods of commodification. It is not to be said though, that contemporary society is not benefiting from scientific progress, it is some sort of a double-edged-sword, and again, this makes us question if the end is justifying the means.

Taking into account the previously stated: Under which conditions should we allow research? If we have the capacity to do what Biotechnology allows us to do, should we still do it?

2. IMMUTABLE IDEALS OF HUMAN RIGHTS

Human rights are guiding principles conceived as fundamental and inherent of the human condition. The human rights discourse goes back to the post Second World War period when they were initially conceived to deal only with civil and political rights; however, with their evolution in response to the diverse processes that the international community has undergone, new concerns have given rise to new perceptions. As a result, they have turned to areas such as science, which represents a challenge to the basic conceptions of life as we have long known it. In this sense, science is not a separate field; it is intrinsically tied to human rights because it involves us all far beyond cultures and religions. This globalised realism has brought awareness to International Law and Human Rights Law, compelling them to make a stand before these contemporary processes; the astounding speed of science demands a quick reaction, even with the complexity for adjustment to a changeable panorama. Yet, is this actually possible? Are those ideals of Dignity and Identity, Privacy, and Autonomy immutable? If they are, where can we look for flexibility in the regulation?

The practices that Biomedicine entails represent a great challenge for human rights. The novelty of the topic is the reason why international law through its instruments has made an attempt to provide a feasible framework for their regulation, with special regard to those methods that undoubtedly question human nature and have the potential of articulating *God movements in the laboratory,* in order to keep up with the amazing speed of the fascinating human capacity of self-discovery.

Dignity

In order to consider the concept of human dignity within the framework of human rights, we have to identify it and define it to understand its relevance towards Biomedicine as the guiding value for the rest of the rights that are involved in the process. Hence, we have to ask ourselves the same question Beyleveld and Brownsword presented before: "Could it be that human dignity is, in some sense, a more profound value than that of human rights?" (Beyleveld, D., Brownsword, R. 2001) Is it possible to look at human dignity as a starting point and guiding principle for human rights?

There are two perspectives that we can use in order to approach a better definition of human dignity. The first one is to consider it as an innate characteristic of human nature; that is to say, that every single human being has dignity because of the sole reason of being, so dignity stems directly from human nature. On the other hand, we can think of dignity as an intangible, immovable principle that is "already there", which grants a person the characteristic of being human and deserving rights. In this way, dignity comes before the person, or human nature itself.

Dignity, therefore, is what makes a human organism a human being, for it is intrinsically linked to our nature, grants us respect for ourselves due to the mere fact that we are part of the human race, and creates a duty to respect the rest. With this elevated sense of respect we are, by nature, obliged to respect life by placing restraints on our actions; that is to say, that our rights and duties cannot trespass others. Human beings should not lack dignity, and the possibility of attempting to consider a human without dignity would diminish his/her value, and this idea goes far beyond this statement. The idea of lacking value would leave life roughly as a coincidence and would definitely change our perception of existence and the reasons why we are here. Thus, life would no longer be seen as the most powerful engine. Despite religious or cultural beliefs, there is a tacit agreement of conceiving life as the most blessed fact of existence. Regardless of the attempt to answer *why* we are here, when we face the fact that we are here, indeed, we have developed the notion that humans are, just because of that fact, worthy of equal treatment. We have the natural tendency of protecting what is more sacred; in that sense, if I consider myself as a unique entity worthy of respect, I shall offer the same. At least that is the rule. (Beyleveld, D., Brownsword, R. 2001).

Furthermore, regardless of the approach that we take in our attempt to define dignity, either if we consider it as a right stemming from the human con-

dition or as a granting principle *out there*, it is certainly located as the starting point of the human rights discourse. It is justification for the human rights structure and is, without a doubt, its cornerstone. The most remarkable evidence of this idea can be found in the diverse international instruments regarding the topic.

The Universal Declaration of Human Rights (United Nations, 1948), the most significant international instrument in the field and the guiding norm from which all of the other regulations and provisions originate, states in its Preamble: "*Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,...*" (United Nations, 1948), and the recognition given to human dignity in this text places it as the "foundation" of three of the main objectives for human peaceful coexistence; under this light, the development of the other human rights is not possible unless this basic condition is achieved. (United Nations, 1948)

On the same path, the Charter of the United Nations in its introductory note proclaims with hope: "*to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small...*" (United Nations, 1948).

The International Covenant of Civil and Political Rights (United Nations, 1966) also considers the right to dignity in its preamble when its states:

> *Considering that, in accordance with the principles proclaimed in the Charter of the United Nations, recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world, Recognizing that these rights derive from the inherent dignity of the human person,* (United Nations, 1966)

Finally, the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966) establishes:

> *Considering that, in accordance with the principles proclaimed in the Charter of the United Nations, recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,*
> *Recognizing that these rights derive from the inherent dignity of the human person,* (United Nations, 1966)

In sum, all of the instruments illustrated above include human dignity and grant it the special feature of being the foundational principle from which fundamental human rights arise (Beyleveld, D., Brownsword, R. 2001).

The fact that Biomedicine deals with life and has the capacity to alter nature by providing alternatives to our reproduction, in other words, to our basic source of existence, this means that it has become a threat provoking diverse reactions. Religious and cultural beliefs are challenged because science stretches enough to encompass all, despite the heterogeneousness of humanity.

Human dignity, as stated above, is a common principle acknowledged by almost all the population around the world. In the same way, science impacts us all and the risk it entails for treating human beings as ends rather than means is a shared concern.

The Universal Declaration on the Human Genome and Human Rights (UNESCO, 1997) does not escape this idea, and it is based on respect for human dignity with the exigency of limiting the exercise of science when it involves the risk of commodification. Article 2 (b) states: *"That dignity makes imperative not to reduce individuals to their genetic characteristics and to respect their uniqueness and diversity"* (UNESCO, 1997) and Article 4 *"The human genome in its natural state shall not give rise to financial gains"* (UNESCO, 1997).

The Convention on Human Rights and Biomedicine (Council of Europe, 1997) states *"conscious that the misuse of biology and medicine may lead to acts endangering human dignity"* (Council of Europe, 1997); furthermore, this covenant is clear about the prohibitions that entail a possible instrumentalisation of human beings:

> *Tests which are predictive of genetic diseases [...] may be performed only for health purposes or for scientific research linked to health purposes [...]"* and *"An intervention seeking to modify the human genome may only be undertaken for preventive, diagnostic or therapeutic purposes and only if its aim is not to introduce any modification in the genome of any descendants* (Council of Europe, 1997)

Moreover, the Additional Protocol to the Convention on Human Rights and Biomedicine on the Prohibition of Cloning Human Beings (Council of Europe, 1998) as its name states, introduces the fundamental reasons for banning such a practice, when it states:

> *Considering that the cloning of*

> *human beings may become a technical possibility; [...] considering however that the instrumentalisation of human beings through the deliberate creation of genetically identical human beings is contrary to human dignity and thus constitutes a misuse of biology and medicine;* (Council of Europe, 1998)

As a result, its Article 1 expresses: "*1. Any intervention seeking to create a human being genetically identical to another human being, whether living or dead, is prohibited*" (Council of Europe, 1998).

The relation of human dignity to Biomedicine is evident: the scientific field is surrounded by ethical limits placed, in principle, by this aforementioned right. Whether it can be considered as empowering for people who deal with science or limiting for them is not the concern of this article. I am only observing and evidencing the relationship that binds both fields and efforts from the human rights standpoint to control Biomedicine's fast advance, and prevent it from entering into issues where it could be a point of no-return.

Identity

Identity is a peculiar concept. It has been given so many interpretations that it is difficult to establish a unique approach. It is, though, accepted, that it derives from the concept of human dignity and, for that reason, enjoys the characteristic of a fundamental right, with special regard to Biomedicine.

The etymology of the word is also complex since it is dependent upon the context that surrounds it although, in a general sense, the word refers to the idea that every human being is different and unique.

From the standpoint of international law, identity has evolved as the right referring to civil rights exclusively, and in regard to Biomedicine, it is related to the person's civil status and the possibilities that may arise in case of cloning or other practices that involve the transfer of genetic information. Thus, the right to identity, even if often acknowledged with the right to dignity, is not a foundation for human rights, as it is the latter, for it is rather a recognized right that stems from the former. The right to dignity guarantees the existence of the right to identity, and international law has also grouped its efforts to offer regulation on this right. It has not, however, given this right the development or scope as dignity, mainly because it has been understood as a constituent part of dignity, and recognition for this right ensures that identity is being taken into account as well. This is one of the means in which human rights have been incor-

porated in Biomedicine, given that science has based its compliance with human rights as a whole when guaranteeing respect for dignity. That is the special nature of the rights that are directly involved in the Biotechnology discourse.

The first instrument to deal with the notion of identity is the Convention on Human Rights and Biomedicine (Council of Europe, 1997), which gives the right to dignity and identity equal weight as foundational principles for Biomedicine, when stating in the first paragraph of article No. 1:

> *Parties to the Convention shall protect the dignity and identity of all human beings and guarantee everyone, without discrimination, respect for their integrity and other rights and fundamental freedoms with regard to the application of biology and medicine.* (Council of Europe, 1997)

Nonetheless, even if international law and states themselves focus on guarantees of respect for dignity, there is still a need to offer identity a place, due to the need to agree on a legal framework able to envisage the wide range of situations that may derive from scientific practices.

Likewise, both the Additional Protocol on the Prohibition of Cloning (Council of Europe, 1997) and the Additional Protocol on the Transplantation of Organs (Council of Europe, 2002) to the Convention of Human Rights and Biomedicine (Council of Europe, 1997), confer the right to identity the position of a central part of the human rights structure, not only by including it in its Preambles and thus giving it the standard of guiding principle to the covenants, but by considering it in the object and scope of the treaties, which is the case of the latter.

The Additional Protocol to the Convention concerning Biomedical Research (Council of Europe, 2005) in its Explanatory Report (Council of Europe, 2005) when making reference to the object and purpose of the Protocol, explains that the main objective of the treaty is to afford protection to human dignity and identity with regard to scientific research involving intervention on living human beings. It is also explained that the direct reference to human beings involves the need felt by its drafters to afford protection to people in their inherent dignity and identity from the beginning of their lives. The treaty goes further when it refers to scientific and medical research by clarifying that even though the general rule provided by this treaty is to guarantee freedom in biomedical research, it is limited by the fundamental rights considered by this instrument, adding that human

dignity and identity above all must be guaranteed and safeguarded.

Autonomy

Some people link together the notion of human dignity with the notion of autonomy, restraining their existence to one another. Looking at it in this way, human beings are autonomous because they have inherent dignity and, on the other hand, due to the fact that human beings have the autonomy to control their own lives, according to each particular criterion, they are exercising the right to dignity at the same time. Despite the approach, human dignity is still at the base of the human rights superstructure and, under the perspectives of international law, it is the starting point. That leads one to conclude that the respect afforded to human dignity guarantees respect for the other group of rights.

Autonomy is identifiable in much more individualized situations while human dignity is tacitly present at all times. For example, when medicine deals with the problem of consent, it is dealing implicitly with the patient's autonomy, because it involves the capacity for self-determination and freedom of choice. It is then in particular situations when it becomes easier to identify which human rights are involved, because they cease to be merely static principles and become active players in the conscience of people involved in them. Thus, it is barely impossible to separate one concept from another when we are dealing with practices that confront life and ethics.

There is one feature, though, that can be highlighted from autonomy, making a distinction from the rest of the rights, and it is *capacity*. Autonomy is much more related to the notion of capacity because it is present when we make choices and choices are actions – or omissions. Human dignity and identity in comparison with autonomy as capacity are intangible.

If we turn to the recognized definitions or, at least, the attempts to define autonomy, it will be seen that it is conceptualized as the right to self-govern oneself, and the capacity that all rational human beings hold to make decisions freely. International law has developed the notion of autonomy as *capacity*, the faculty to self-determine oneself and make decisions without coercion, granting this right the ability to be a safeguard for personal interests, and also provide mechanisms to those who cannot fully exercise their autonomy. Under this perspective, autonomy, understood as capacity, is developed through other rights, which means that when these rights are respected, autonomy is respected too. The right to self-

determination, the right to choose freely, and the right to give consent, are manifestations of autonomy. Most of today's international treaties do not make a direct reference to autonomy as a right, but plead for the protection of these rights instead.

As an example, UNESCO's Universal Declaration on Bioethics and Human Rights (UNESCO, 2005) makes a direct allusion to autonomy in its Article 5:

> *The autonomy of persons to make decisions, while taking responsibility for those decisions and respecting the autonomy of others, is to be respected. For persons who are not capable of exercising autonomy, special measures are to be taken to respect their rights and interests* (UNESCO, 2005)

In the same way, the Declaration on Human Genome by UNESCO seeks protection and full exercise of autonomy when in its article 5 (b), it states that "*In all cases, the prior, free and informed consent of the person concerned shall be obtained*" by preserving self- determination, the right to choose and consent. (UNESCO, 1997).

The Council of Europe's Convention on Human Rights and Biomedicine (Council of Europe, 1997) develops respect for the right to autonomy when it approaches consent, and provides for the mechanisms ensuring its respect, and draws an outline for it: "*An intervention in the health field may only be carried out after the person concerned has given free and informed consent to it*"; furthermore, articles 6 and 7 of the same Convention provide the framework for protection of self-determination and choice for those persons who are not able to consent.

Privacy

Privacy may be one of the most controversial and influential principles with regard to Biomedicine. The right to privacy is fully developed along domestic legal systems and international instruments because it involves a high risk for those who exercise scientific practice and research, given that their jobs involve dealing with personal information and affect the personal sphere, inherently treasured and protected. Nowadays, it has become easier to access personal genetic information that was almost impossible to obtain in earlier days; that is the point where it has become so necessary to create mechanisms to prevent the misuse of such a capacity. The confidentiality commitment that medicine professionals undertake with each patient turns into a rather conflicting compromise, since Biomedicine practices include not only the access, but also the handling of per-

sonal data. When a patient undertakes an experimental treatment involving the study of his/her DNA, for example, automatically, access to his/her family genetic information is granted, and if it shows that not only the patient but his descendants are at high risk of developing a mortal disease, how should the professional act? What would be ethically correct? Remaining silent or making public the situation in order to search for solutions? Furthermore, if silence is the decision, would this mean that the patient's rights to autonomy and choice are being trespassed? What is the criterion that has to be used in order to judge these actions? Access to this sort of information is extremely delicate, which is why the right to privacy is one of the best guarded and developed rights within human rights' instruments.

Even though privacy is being approached in a general context, it is clear that the concept is dependent upon the conditions in which "*The Judgments we make about our privacy arrangements must take the rest of our cultural ideals largely as we find them*" (Benn, I. 1988). Under this view, privacy will be analysed from the standpoint of the general provisions of international law.

Privacy can be thought of as the right of people to seek their wellbeing by exercising their right to self-determination without intervention of the state or international organizations. In this manner, all personal matters are protected by the law and no government or organization can penetrate this sphere. That is the function of the law: to guarantee individuals that their personal space will not be disturbed. However, when it comes to Biomedicine, this warranty faces new challenges; nowadays, it is not that 'easy' to ensure that privacy will not be affected when scientific research and Biomedicine practices are being allowed at the same time. For this purpose, international instruments have long sought to guarantee privacy by ensuring protection to identity, in the same way that autonomy is directly guaranteed by freedom and self-determination.

The Universal Declaration on Bioethics and Human Rights (UNESCO, 2005) establishes the context in which privacy can be understood "Also, bearing in mind that a person's identity includes biological, psychological, social, cultural and spiritual dimensions" (UNESCO, 2005). In addition, its guiding principles also encourage the protection of privacy when stating:

> *The privacy of the persons concerned and the confidentiality of their personal information should be respected. To the greatest extents possible such information should not be used or disclosed for purposes other than those for which it*

was collected or consented to, consistent with international law, in particular international human rights law (UNESCO, 2005)

Similarly, UNESCO's Declaration on the Human Genome (UNESCO, 1997) builds up protection for privacy when in its Article 7, sets out a limitation for the exercise of gathering genetic information: "*Genetic data associated with an identifiable person and stored or processed for the purpose of research or any other purpose must be held confidential in the conditions set by law*" (UNESCO, 1997). But most importantly, in its Article 1, it states that "*The human genome underlies the fundamental unity of all members of the human family ...*" upgrading the human genome to an untouchable value which cannot be intervened, and demands for the most special treatment.

Both Declarations aim at protecting privacy by providing a legal framework for researchers and specialists, and placing limits and restraints on their activities, bearing in mind that the duty to keep the information confidential, related to genetic data, is the most important mandate in this sense.

3. A LOOK INSIDE: EMBRYO STEM CELL RESEARCH (SCR)

The Inner Mass Cells (ICM) are the responsible cells that create the embryo and are *pluripotent* which means that they have the capacity of becoming anything within the embryo. They are undifferentiated cells that, when isolated and grown in a laboratory, can continue to divide. These are the Embryonic Stem Cells which are Inner Cell Mass but receive their name when they are given this treatment. Embryonic Stem Cells have some special characteristics which are the main reasons why they are so useful and yet, so controversial. They can divide indefinitely and they can produce either a similar stem cell or a particular cell. It is this mentioned capacity that has given Stem Cells their importance because they have proved that if they receive the right stimuli they can create any type of cell and, in therapeutic treatments, these newly-born cells can be transplanted. (Gilbert, S., Tyler, A., Zackin, E. 2005)

Stem Cells (SC) represent a wide range of alternatives to provide health solutions that were thought as impossible, they have proven to be successful with a large number of treatments and this could be the reason why they represent a dilemma. Their therapeutic, scientific and technological potential is not discussed in this article whatsoever; it is

clear that they have opened options to increase life expectancy and the quality of life itself, improving health conditions: the conflict arises from their source which is the objective of the following discussion.

Stem cells (SC) can be obtained in two ways: either from embryos at the blastocyst stage –a human conceptus of 5-6 days that has an Inner Cell Mass surrounded by trophoblast cells or an outer layer of cells- or from cells removed from such embryos. (Gilbert, S., Tyler, A., Zackin, E. 2005)

As mentioned, the conflict that Stem cells (SC) provoke is related to their source of acquisition that is linked directly to the moral status of the embryo due to the fact that the process of their gathering requires the destruction of young embryos. This leads us to the problem of identifying the exact moment when an embryo could be considered a human being:

> *Some who support human embryonic stem cell research argue that because embryonic stem cells are isolated from an early-stage embryo, prior to any differentiation into organs, and because once isolated these cells are incapable of giving rise to an embryo, the moral issue of whether the embryo has acquired 'personhood' is avoided. Some religions argue against using human embryos based on the belief that 'personhood' begins at fertilization* (Gilbert, S., Tyler, A., Zackin, E.2005).

The determination of the moment when life begins is surely the basic point for this identified problem, since the right to dignity stems from human nature and it makes a human organism a human being. It not only has scientific issues, but religious, philosophical and cultural beliefs involved that could perhaps be much stronger. The SCR confronts our obligation to improve life quality through scientific research and the obligation to preserve human life. How can be defined the exact moment of human existence? Are they human or potential humans? If human embryos lack all the characteristics of personhood on a first basi how can the right to identity make an embryo unique and different? The same question arises with regard to autonomy, since an embryo definitely does not have the capacity to self determine itself, though it should be accorded respect since it is life. At present, among the scientific world, there are four commonly 'accepted' moments in which we can argue that life begins: Fertilization, Gastrulation, Electroencephalogram (EEG) activation and birth, when the baby can breathe independently from the mother.

Technically speaking, *Fertilization* –or conception- takes place when the sperm of the male fertilizes the ovum and their DNA combines. This has been one of the most commonly accepted views, not only among science but also among religions such as the Roman Catholic Church, and has supported the rejection to abortion on the idea that this practice puts an end to a human being. In fact, under my own personal view, I support the idea that before conception, both ovum and sperm remain independent from one another and virtually 'nothing' has happened and no process has begun. However, this position generates diverse opinions as noted by the authors of the book *Bioethics and the New Embryology:*

> *The entity created by fertilization is indeed a human embryo, and it has the potential to be a human adult. Whether these facts are enough to accord personhood is a question influenced by opinion, philosophy, and theology rather than by science.* (Gilbert, S., Tyler, A., Zackin, E. 2005)

The second option for personhood is *Gastrulation*. It has been well received by those who promote scientific research and for the most revolutionary domestic regulations like the United Kingdom's. It sustains that personhood begins around day fourteen (14) after fertilization when the embryo –which at this stage is called gastrula- and its cells can no longer be *pluripotent* or turn into something else. In this stage, the gastrula can only develop a single person (Gilbert, S., Tyler, A., Zackin, E. 2005).

Electroencephalogram (EEG) *activation* refers technically, to the moment when the fetus' brain activity begins:

> *Cerebral nerve cells accumulate in number and continually differentiate through the end of the second trimester of human pregnancy. However, it is not until the seventh month of gestation that a significant number of connections between the newly amassed neurons begin to take form. It is only after the neurons are linked via these 'synaptic connections' that the wave pattern characteristic of active, conscious brain activity emerges. [...]. If one considers the quality of conscious awareness to define a human individual, this is a legitimate view of the starting point of a person's life.* (Gilbert, S., Tyler, A., Zackin, E. 2005)

The fourth moment which can be identified as the beginning of human life is *birth* when the newly-born breathes independently for the first time. Since we do not have the capacity to actually see the embryo or fetus as it is but

only through the eyes of others, this is certainly the best theory to support that life begins at birth. It is the only 'physical' manifestation that is open to everyone's eyes and it is tangible -not that the other phenomena isn't- but the mere fact that we can experience it with our five senses affords it a higher degree of acceptance. Nonetheless, this hypothesis derives to the problem of determining what happens before this moment. If a miscarriage occurs or an anomaly takes place before birth, what did we lose, a *potential* human being?

Any position that we decide to take towards the dilemma seems to be a never-ending problem permeated by all sort of opinions coming from all fields. All different theories have a scientific support that could be argued in favour and not even the scientific world is in the position of denying one or another. In this sense, we may have to look somewhere else: Law. Is it possible that through law we can achieve a common ground that, whilst fostering human rights, offers a viable way to carry on scientific research and improve science? It could be. It is the quest that International Law has undertaken.

To supersede the problem of the sources of Stem cells (SC), three important alternatives have been envisaged: Therapeutic cloning, Chimera embryos, and Stem cells (SC) from the umbilical cord. Requiring such a technical explanation, it is a better option to describe it from the standpoint of scientists. Thus, therapeutic cloning:

> *inserts the nucleus from a differentiated somatic cell 'taken from the patient' into a donor's egg cell that has had its nucleus (and thus its genes) removed. The fused egg is then stimulated to divide in culture. When the embryo had been cultured to the blastocyst stage (approximately 5 days) the cells of the inner cell mass are removed and cultured to create a population of stem cells. These stem cells might then be induced to form the specific tissue needed for transplantation by adding exogenous inducers.* (Gilbert, S., Tyler, A., Zackin, E. 2005)

The arguments in favour of therapeutic cloning are that this method is aimed at the creation of Stem cells (SC) for the only purpose of research and in no way intends to be a reproductive technique. The argument against it derives from its defense: if the creation of these embryos does not intend to clone human beings, the mere fact that it opens this possibility represents a potential risk. (Gilbert, S., Tyler, A., Zackin, E. 2005)

Chimera embryos have emerged as a new viable solution to the problem

of the sources of Stem cells (SC). However, it seems to involve more ethical concerns than the already existing ones, mainly because it includes merging animal DNA into human material. The method consists in using animal cells and a nucleus from a human cell through a process called somatic cell nuclear transfer. The chimera embryos resulting from it would have then human nuclear DNA and animal DNA, although a very small amount of (mithocondrial) non-human DNA. (Gilbert, S., Tyler, A., Zackin, E. 2005)

Stem cells (SC) from the umbilical cord have proven to be another good source since the blood from the umbilical cord also contains *pluripotent* Stem cells (SC) which can be removed and frozen at birth and used later. (Gilbert, S., Tyler, A., Zackin, E. 2005)

One of the main concerns of Stem cell (SC) research is the potential that they have to grow into a human being. In this sense, defendants of this method like John Harris sustain that:

> *the fact that an entity can undergo changes that will make it significantly different does not constitute a reason for treating it as though it had already undergone those changes. We are all potentially dead, but no one supposes that this fact constitutes a reason for treating us as if we were already dead.* (Harris, J. and Dyson, A. 2012)

The argument in favour of the creation of embryos for the purpose of carrying out research sustain that the intention for the creation of these embryos is not reproductive. Furthermore, the immense range of benefits that Stem cell (SC) research offers enhances human dignity, improves our lives and the use of genetic material that in no way is destined to be a 'person' cannot possibly be censured while it is contributing to our well being. (Harris, J. and Dyson, A. 2012)

If a strict regulation is provided, how can we deny the possibility of science offering a chance to life? A young couple from Glasgow in 2008 found in umbilical cord stem cells a life saver alternative for their three-year-old son who was diagnosed with leukemia. The little boy received cells transplantation from an anonymous donor in Spain that were a perfect match for him and in a very little timeframe the boy had replaced the ill cells and is now producing its own to survive. (Daily Record. 2008) Before these real-life examples, it is for the reader to adopt a position and take its own conclusions.

Those who disagree with the practice of Stem cell (SC) research found

their arguments in the moral status of the embryo by stating that it is a human being that cannot be subject to manipulation nor have its life ended for the purposes of experimentation. Basically, the hypothesis of the fertilization stage as the starting point of our lives is the theory that sustains this approach, similarly to the positions against abortion. Despite the benefits that Stem cell (SC) research can offer, under this view no reason could be strong enough to support the killing of a young embryo because the ends and aims of science cannot hinder the flow of human nature and it is not ethically acceptable to use a person for the benefit of others (Harris, J. and Dyson, A. 2012). This position defends the idea that human embryos should be afforded in all cases the same protection as more developed embryos, human interests are protected because they are valuable to the entity itself despite the society's point of view.

4. CONCLUSION

> *Human rights have escaped a universally acceptable definition, presenting a problem to international regulation. Human rights more than any other issue highlight the distinction between universalism and cultural relativism. (Wallace, R. 2005)*

Despite the enormous efforts to set a common ground for the understanding and development of mechanisms to guarantee the protection of human rights, an identical approach is far more than difficult since they are dependent upon cultural factors. However, the surprising speed and development of Biomedicine has brought awareness and turned the attention of the international community to override these differences and attempt to provide a framework with minimum standards, based on fundamental values and ethics.

Following this idea, international human rights law has established a structure for human rights by dividing them in First, Second, and Third Generation rights. Again, this attempt is not totally successful, since it has brought along vast reactions touched by denial. I also support this view since rights *are* rights, irrespective of their classification, and must be protected equally, making such a division illogical. One of the main reasons sustaining this classification is the fact that rights from the First generation demand mere recognition, while rights from the Second generation need positive action. In other words, First generation rights demand immediate acknowledgment, while Second genera tion rights are achieved by a process through measures seeking their accomplishment. (Wallace, R. 2005)

However, no matter how strong the reasons are for this classification, it is irrefutable that both groups of rights work together and live interdependently. This is the motivation that International Human Rights Law has to lean on in order to override obstacles for the healthy advance of Biotechnology, requiring a deep analysis of the context in which science is taking place, that will – hopefully- allow for the identification of universal principles that can be protected by international regulation, but always with a high dose of flexibility, since our globalised world does not leave space for static initiatives.

Notwithstanding the stated, this article intended to approach the early stages in which International Human Rights Law has developed in its attempt of identifying a common ground for rights directly involved in Biotechnology by looking at the Embryo Stem Cell research as one of the most interesting fields in which the ethical concerns allow the analysis of those rights, with an interpretation and a very personal view. This first approach intends to provide the foundations for future research, which will involve the analysis of the most generalized practices in Biotechnology and their specific regulation, in observance of International Human Rights Law.

Our modern world, surrounded by diversity, calls for shared agreements towards Biomedicine and Biotechnology principles that need to transcend our own particular perspectives. Today's technological changes leave us with no choice but to adjust to the new reality, taking priority over the obstacles attributable to cultural diversity; hence, we have to be open to disagreement and from this point identify the universal values that allow general consensus. This does not imply, however, that we should ignore our values and beliefs as long as we respect our differences in order to understand each other; hence, cultural relativism should not serve as a justification to hinder scientific development.

It is by far predictable that we will continue to find ourselves reproducing the same questions as we presently do, because ethical concerns are tied to our intrinsic nature, and cultural and religious beliefs are not easy to disregard. Nonetheless, if there is a legal system to rely on, this should not be an obstacle. Complex queries such as the degree of dignity that I hold as an adult and the dignity that a human embryo holds, may never concur in one answer.

International Law and International Human Rights Law are facing new and defying situations nowadays, and it is only under the light of the foundational human values and through the sensible use of reason and tolerance that we can reach a coherent field of action. These are the demands from the

globalised world that we live in, and our diversity as humans: the range of options that Biotechnology offers and our tendency to preserve human life.

As Henry Steiner affirms:

> *The human rights movement–young, fragile, universal and consensual in its official discourse about norms but internally conflicted among its diverse political and cultural systems, animated by high ideals but too often hostage to state's material interests, long on norms but short on their enforcement, wavering if not feeble at critical moments of decision, passionate in its rhetoric but needful of a cool and probing understanding of its multiple environments and strategic choices–could hardly remain stable, let alone constant, while the tormented world that is addressed experienced cataclysmic events together with shifts in ideas, technology and the distribution of power.* (Steiner, H. 2007)

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