

**Research Article**

**Biotechnology as Factor for the Fourth Generation  
of Human Rights Formation**

**Ivanii Olena Mykolaivna<sup>1</sup>, Kuchuk Andrii Mykolaiovych<sup>2</sup>  
and Orlova Olena Oleksandrivna<sup>3</sup>**

<sup>1</sup>Sumy State Pedagogical University named after A.S. Makarenko, Ukraine,

<sup>2</sup>Sumy State Pedagogical University named after A.S. Makarenko, Ukraine,

<sup>3</sup>Dnipropetrovsk State University of Internal Affairs, Ukraine,

\*Corresponding author: Email: [kucshuk@ukr.net](mailto:kucshuk@ukr.net), Tel: +38-0956237758

[Received: 07/04/2019; Accepted: 25/04/2019; Published: 01/06/2019]

**ABSTRACT:**

The development of biology, medicine, and engineering has caused significant social changes that could not but affect the legal regulation of social relations in the field of use of biotechnology. The new opportunities that people received from biotechnology went beyond the classical understanding of human rights and their three generations. Since the last quarter of the twentieth century international organizations have adopted separate international treaties (including those belonging to soft law), the main purpose of which is to prevent the use of biotechnology in cases that could lead to an attack on human dignity. The latter is recognized as the factor determining the boundaries of biotechnology development.

The intensive development of biotechnology has led to the emergence of new rights that scientists call somatic, which are suggested to be attributed to the fourth generation of human rights. This generation of human rights is associated with a specific object – the human body and is dependent on the state of development of biology, genetics, medicine, technology, as well as society in general. At the same time, somatic rights affect the development of these areas, limiting (forbidding) the development of those encroaching upon human dignity.

It is suggested to classify existing approaches to the understanding of somatic rights into four groups: 1) the right to euthanasia, 2) reproductive rights and rights related to the disposal with organs and tissues, 3) rights in the sexual sphere, 4) the right to change sex. The rights in the sexual sphere have an indirect link with the development of biotechnology.

Within the European countries there is no single approach to understanding the essence and the list of somatic rights, the legal regulation of their scope varies in each of the states, as evidenced by the practice of the European Court of Human Rights. By the broad discretion of the states in the legal regulation of relations related to the use of biotechnology, it is the theory of the fourth generation of human rights that can be the basis of consensus on the development of biotechnology in order to prevent the loss by a person of himself/herself.

**Key words:** biotechnology, European Court of Human Rights, fourth generation of human rights, human rights, somatic rights.

**[I] INTRODUCTION**

Since the second half of the twentieth century, fundamental changes have taken place in various

spheres of public life. The intensive development of the information sphere, Internet technologies

and nanotechnologies significantly influences the development of, in particular, the medical, technical and biological branches of science. These factors also influence such a regulator of behavior within society as law, on the one hand, reducing its regulatory capacity, and on the other – strengthening it. Since the very law begins to be given the major role in ensuring order. Ushakov I. states the need of the modern society in the long-term technologies, which, however, playing an important role in the society's life, make heightened risk for the human health and provoke both social and political opposition [13, 7].

Under such terms the principles of law and fundamental legal concepts, one of which are human rights, are reinterpreted. If the emergence of the second generation of human rights is associated with the First World War, then the Second World War was a factor in the emergence of human rights beyond the boundaries of a separate state and the formation of the third generation of human rights – the so-called solidary rights. However, the theory of three generations of human rights, finally formed at the end of the second third of the twentieth century, does not encompass and does not provide for human rights associated with the administration by a human being with his/her body, the factor of development of which has become the intensive development of biotechnology. Therefore, at the present stage of development of society, a significant part of lawyers argues about the emergence of the fourth generation of human rights – somatic rights. Among the factors of formation of this generation of human rights are mentioned, first of all, scientific discoveries in genetics, microbiology and medicine. The issue of somatic rights is not purely theoretical, since the link between biotechnology and human rights has a binary nature: biotechnology is the factor that contributes to the formation of somatic rights; somatic rights are the factor that determines the further change of biotechnology (either in the direction of the restriction of its development, or in the direction of its growth).

## **[II] MATERIALS AND METHODS**

The achievement of the study's purpose has necessitated the processing of 46 judgments of the ECHR in cases against Austria, Belgium, Greece, Ireland, Italy, Lithuania, Moldova, Poland, Portugal, Russia, Romania, Slovakia, Slovenia, the United Kingdom, Turkey, Hungary, Finland, France, Croatia, Czech Republic, Sweden that was carried out using, in addition to the methods of analysis and synthesis, the comparative method. The study of international legal acts in the field of the provision of human rights related to the use of biotechnology was carried out using logical methods of analysis and synthesis.

## **[III] RESULTS**

Lawyers distinguish three generations of human rights. The first generation is made up of civil rights, which include the right to inviolability, equality before the law, the right to freedom of thought, conscience and religion, and others and associate them with such legal acts as Magna Carta (1215), Petition of Right (1628), Habeas Corpus Act (1679), Bill of Rights (1689).

The second generation of human rights is constituted of social and economic rights, which include the right to education, the right to medical care, the right to housing, the right to social security, etc. and are associated with such legal acts as the Universal Declaration of Human Rights (1948), the International Covenant on Economic, Social and Cultural Rights (1966).

The third generation of human rights is formed as a result of aggravation of the world challenges after the Second World War and the national and liberation movement of certain African countries. Solidary rights include the right to peace, the right to political, economic, social and cultural self-determination, the right to health and safe environment, and others and are associated with such legal acts as the Declaration on the Granting of Independence to Colonial Countries and Peoples (1960), the Declaration on Principles of International Law Concerning Friendly Relations

and Cooperation among States in Accordance with the Charter of the United Nations (1970).

The emergence of technologies at the end of the twentieth century that allow, in particular, cloning of animals, genetic engineering, transplantation of organs and tissues of a human being, in vitro fertilisation, implementation of surgeries for change of sex, etc. revealed the failure of the existing system of law at that time to provide legal certainty for the participants of relations as to the use of the abovementioned technologies. The domestic laws of states came into conflict with human rights, which required its improvement. Given the globalization, this situation also arises within the international law. However, a certain consensus has been found. So, at the UNESCO's 29th General Conference on November 11, 1997, the Universal Declaration on the Human Genome and Human Rights was adopted. The Council of Europe adopted Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (1997), Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings (1998), Additional Protocol to the Convention on Human Rights and Biomedicine concerning Transplantation of Organs and Tissues of Human Origin (2002), Additional Protocol to the Convention on Human Rights and Biomedicine, concerning Biomedical Research (2005), Additional Protocol to the Convention on Human Rights and Biomedicine concerning Genetic Testing for Health Purposes (2008). In addition, an important international act is the United Nations Declaration on Human Cloning (2005). Although, as Ismini Kriari points out, the analysis of individual recommendations of the Council of Europe allows us to conclude that the organization has been interested in biomedicine issues since 1976 [9].

In the context of the subject of our study, we note that already in the preamble of the Convention for

the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine it is pointed to the factors of its adoption, in particular, the intensive development of biology and medicine which is to be used for the benefit of the society (without harm to human dignity) and all humanity through the international cooperation [3]. At the same time, let's also note the corresponding impact of human rights on the development of biotechnology. Human rights are the restraining factor in the development of biotechnology, the application of which affects human dignity; only technologies, promoting the progress of the society without threatening human dignity can be applied and improved. This idea has become central to the adoption of the Oviedo Convention, which has become "the first legally binding international text designed to preserve human dignity, rights and freedoms through a series of principles and prohibitions against the misuse of biological and medical advances" [3].

#### [IV] DISCUSSION

The emergence and intensive development of biotechnology has determined the next in turn appeal of a human being to the issue about himself/herself and his/her essence, the limits of the possible, etc. Who is a human being? Is a human being a human being from the moment of his/her birth or from the moment of pregnancy of a woman? Does the embryo have human rights (note that the Oviedo Convention requires the protection of embryos when countries allow research in vitro)? A person who has undergone surgical correction of sex, in further legal relations, acts as a person with a gender before the correction or after such a correction? Can a surrogate mother, having given a birth to a child, refuse to pass that child on to her genetic parents? The abovementioned issues indicate the complexity of finding a simple answer, given their inter-sectoral nature and moral content. And as the practice of the European Court of Human Rights shows, in many issues of morality, there is no pan-

European approach; there remains a fairly wide margin of discretion among public authorities. “In the legal and social systems of different states-parties to the treaty it is impossible to find a universal pan-European concept of morality. Thus, public authorities are in a better position than an international judge in expressing an assessment of the value of certain moral requirements, as well as the “necessity” of any “restriction” or “punishment” provided for their violation” [5] declared the European Court of Human Rights. As a result, in the world and in Europe, in particular, the study of the relativity of the content of human rights has updated. We recall the following papers “Non-Universality of Law” (S.P. Sinha), “Human Rights: Universality and Diversity” (E. Brems), “Philosophische Argumente für und wider die Universalität der Menschenrechte” (J. Hinkmann). According to the modern French philosopher A. Badiou, there is no traditional understanding of ethics with the classical understanding of its universality. Accordingly, there is no ethics in general [1, 34]. M. Koskeniemi substantiates the hypothesis that the human rights policy is a peculiar form of colonialism – neocolonialism. At the same time, the author notes the fact that international law is predominantly European and does not even stand close to becoming universally recognized [8]. This situation affects the lack of a single vision of the contents of the rights of the fourth generation and even their list.

F. Rudinsky notes that the fourth generation of human rights is associated with discoveries in the field of biology, in particular, with cloning, and is the barrier that protects a human being from the experiments in the field of genetic heredity [11, 16].

In the opinion of the Ukrainian researcher D. M. Shebanits, the fourth generation of human rights consists of: the right to the use of the virtual information, the right to euthanasia, the right to sex change, the right to cloning, the right to organ transplantation [12, 60].

But the Russian lawyer M. Lavrik considers somatic rights as an opportunity for a person to dispose with his/her body, which includes “his/her” “modernization”, “renovation” and even “fundamental reconstruction”, to change the functional capabilities of the organism and expand their due to technical and aggregate or medication means” [10, 16], therefore, somatic rights include: the right to death, the right to gender change, homosexual contacts, organ transplantation, the use of drugs or psychotropic substances, the right to artificial reproduction, sterilization, abortion, as well as cloning and virtual simulation himself/herself (in the future) [10, 16].

Given the lack of the single vision of the list of somatic rights, we typologize the existing approaches. Here we will take into account several factors. The first one is related to the subject of our study. We will study those groups of somatic rights that are associated with the development of biotechnology. The second factor is not hypothesis but the reality of somatic rights in the context of their implementation problems (this factor requires the analysis of legal practice, in particular, the European Court of Human Rights practice).

**The first** among the somatic rights is called the right to euthanasia (sometimes it is called the right to death). As with the other somatic rights, there are no common standards for legal regulation of the right on euthanasia among the states. The European Court of Human Rights is constantly considering cases of euthanasia. The most famous is the case “Pretty v. The United Kingdom” where the Court stated that it did not recognize the cogency of the assertion that the right to life had a negative aspect, as well as formulated the provision that Art. 2 of the Convention for the Protection of Human Rights and Fundamental Freedoms “cannot, without a distortion of language, be interpreted as conferring the diametrically opposite right, namely a right to die; nor can it create a right to self-determination in the sense of conferring on an individual the entitlement to choose death rather than life” [6].

At the same time, euthanasia is legally permitted (or was allowed) in some states or their administrative units (for example, in Belgium, Luxembourg, Switzerland, the United States of America). One should also mention the 1952 appeal to the UN, signed by scientists, doctors, cultural figures (more than 2,500 signatures) on the need to supplement the Universal Declaration of Human Rights with the right to euthanasia [14].

**The second group** consists of reproductive rights and rights related to the disposal with organs and tissues. This is the broadest group that covers a wide range of somatic rights. Perhaps the most numerous category of cases in the European Court of Human Rights. These are the cases related to Access to abortion (Open Door and Dublin Well Woman v. Ireland (14234/088, 14235/88), A and B v. The United Kingdom (No. 80046/17), A., B. and C. v. Ireland (application No. 25579/05), P. and S. v. Poland (No. 57375/08), R.R. v. Poland (No. 27617/04), etc.) (Baranov A. N., Sannikov A. L., Sizyukhina N. N. note about 46 million (22%) of 210 million pregnancies annually end with artificial abortion, and throughout the world, the vast majority of women, as a rule, did at least one abortion at the time when they were 45 years old [2]), Home birth (Dubská and Krejzová v. the Czech Republic (№ 28859/11, 28473/12), Kosaitė-Čypienė and Others v. Lithuania (№ 69489/12), Pojatina v. Croatia (№ 18568/12), Ternovsky v. Hungary (№ 67545/09) etc.), i Medically-assisted procreation (Charron and Merle-Montet v. France (№ 22612/15), Costa and Pavan v. Italy (№ 54270/10), Dickson v. United Kingdom (№ 44362/04), Evans v. United Kingdom (№ 6339/05), Knecht v. Romania (№ 10048/10), Nedescu v. Romania (№ 70035/10), S.H. and Others v. Austria (№ 57813/00)), Sterilisation operations (Csoma v. Romania (№ 8759/05), G.B. and R.B. v. the Republic of Moldova (№ 16761/09), Gauer and Others v. France (№ 61521/08), I.G., M.K. and R.H. v. Slovakia (№ 15966/04), K.H. and Others v. Slovakia (№ 32881/04), N.B. v. Slovakia (№ 29518/10), V.C. v. Slovakia (№ 18968/07) та

и.), Surrogacy (Braun v. France (№ 1462/18), D. and Others v. Belgium (№ 29176/13), Labassee v. France (№ 65941/11), Laborie v. France (№ 44024/13), *Mennesson v. France* (№ 65192/11), Paradiso and Campanelli v. Italy (№ 25358/12), Saenz and Saenz Cortes v. France (№ 11288/18) and others) and others.

Almost the most famous of these cases is *Evans v. United Kingdom*, in which the Court reiterated its position regarding the lack of consensus in European states regarding the finding of the beginning of a human life and the abandonment of this issue within the discretion of States. At the same time, the Court agreed with the national courts of England as to the fact that “an embryo does not have independent rights or interests and cannot claim – or have claimed on its behalf – a right to life under Article 2” [7].

**The third group** is made up of the rights in the sexual sphere. They are related to the free choice of a partner, the choice of sexual activity or passivity, etc. The following cases of the European Court of Human Rights should be distinguished: *Oliari and Others v. Italy* (№ 18766/11, 36030/11), *M.E. v. Sweden* (№ 71398/12), *Schalk and Kopf v Austria* (№ 30141/04), *Sousa Goucha v. Portugal*, (№ 70434/12), *V.V. v. Russia* (N 13817/14), *Vallianatos and Others v. Greece*, (№29381/09, 32684/09), *E.B. v. France* (№ 43546/02). Since this category of somatic rights is not directly related to biotechnology, but, such an aspect as, for example, the possibility of the same-sex couples to give birth to a child (through an artificial insemination, the use of a surrogate mother, etc.) makes it possible to isolate such rights into a separate group.

**A particular (fourth) group** includes the right to change sex. Relatively numerical group of cases of the European Court of Human Rights, the most well-known among which are *B. v. France* (№ 13343/87), *Christine Goodwine v. United Kingdom* (№ 28957/95), *Cossey v. United Kingdom* (№ 10843/84), *H. v. Finland*, (№ 37359/09), *Parry v. United Kingdom*

(№ 42971/05), *R. and F. v. United Kingdom* (№ 35748/05), *Rees v. United Kingdom* (№ 9532/81), *Schalk and Kopf v. Austria* (№ 30141/04), *X., Y. and Z. v. United Kingdom* (№ 75/1995/581/667) and other.

In the case of *B. v. France* the court for the first time recognized the violation of the right to privacy of a transsexual, while pointing out “that there still remains some uncertainty as to the essential nature of transsexuals and that the legitimacy of surgical intervention in such cases is sometimes questioned” [4].

In such cases, the Court faces a range of problems – biological, psychological, moral, legal, scientific and technical, as for which there is no pan-European approach.

#### [V] CONCLUSION

Thus, the development of biotechnology has created the opportunities for the improvement of human life. At the same time, such opportunities are on the verge of adhering to / encroaching on human dignity, which causes the actualization of human rights issues, the formation of their new generation - somatic rights.

The fourth generation of human rights is connected with a specific object – the human body and is dependent on the state of development of biology, genetics, medicine, technology, and society in general.

At the same time, somatic rights affect the state of development of the areas mentioned above, limiting (forbidding) the development of those encroaching on human dignity.

In the conditions of the absence of an international approach, including the pan-European one, as to the understanding of the content and essence of somatic rights, at the discretion of States in the legal regulation of relations related to the use of biotechnology, it is the theory of the fourth generation of human rights that can be the basis of consensus on the development of biotechnology in order to prevent the loss by a human being of himself/herself.

#### REFERENCES

1. Bad'ju, A. (2006). *Ethics: Essay on the Mind of Evil*. St. Petersburg: Machina. [in Russian].
2. Baranov A., Sannikov, A., Sizjuhina N. (2006). *Abortion: an Interdisciplinary Perspective*. *Human Ecology*. 2006, 6, 49-55. [in Russian].
3. Council of Europe, *Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine*. (1997).
4. European Court of Human Rights (1992), *Case of B. v. France* (№13343/87). Retrieved from <http://hudoc.echr.coe.int/rus?i=001-57770>.
5. European Court of Human Rights (1992), *Case of Open Door and Dublin Well Woman v. Ireland*, Application (14234/088, 14235/88). Retrieved from <http://hudoc.echr.coe.int/eng?i=001-57789>.
6. European Court of Human Rights (2002), *Case of Pretty v. the United Kingdom* (2346/02). Retrieved from [http://hudoc.echr.coe.int/fre?i=001-122664#{%22fulltext%22:\[%222346/02%22 \],%22itemid%22:\[%22001-60448%22\]}](http://hudoc.echr.coe.int/fre?i=001-122664#{%22fulltext%22:[%222346/02%22 ],%22itemid%22:[%22001-60448%22]}).
7. European Court of Human Rights (2006), *Case of Evans v. United Kingdom* (№6339/05), Retrieved from <http://hudoc.echr.coe.int/rus?i=001-72684>.
8. Koskenniemi, M. (2005). *International Law in Europe: Between Tradition and Renewal*. *The European Journal of International Law*, 16(1), 113-124.
9. Kriari, I. (2002). *The Convention for the Protection of Human Rights and Dignity of the Human Being With Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine*. *Journal of Asian and International Bioethics*, 12, 90-93.

10. Lavrik, M. (2005). To the Theory of Somatic Human Rights. *Siberian Law Journal*, 3, 16-26. [in Russian].
11. Rudinskij, F. (2000). Civil Rights: General and Theoretical Issues. *Law and Life*, 31, 15-18. [in Russian].
12. Shebanits, D. (2015). Modern Issues of the Theory of “Generations of Human Rights” in the Conditions of European Interstate Integration. *Scientific Journal of Uzhgorod National University*, 31 (1), 57–61. [in Ukrainian].
13. Ushakov, I. (2004). Ecological Risk and Quality of Life. *Human Ecology*, 6, 7-14. c. 7 [in Russian].
14. Vavilkina, T. (2014). To the Issue of Euthanasia in the Legislation of Foreign Countries. *Electronic Scientific Journal “Science. Society. State”*. Retrieved from <https://cyberleninka.ru/article/n/k-voprosu-ob-evtanazii-v-zakonodatelstve-zarubezhnyh-stran>. [in Russian].