

Extended Bioethics as a Response to Global Biological Consciousness

Raul Isea^{1,*}

¹Fundación IDEA, Hoyo de la Puerta, Baruta, Venezuela.

Abstract

Humanity is persistently threatened by global pandemics- exemplified by the Black plague, the Spanish flu, and COVID-19, which reveal a continual absence of concern in real-time prevention. To forecast biological threats in the future and spur proactive human response, the term Global Biological Consciousness (GBC) is introduced.GBC requires an Extended Bioethics, a dynamic ethical framework for conscious management mediated by GBC. This perspective will enable preventive actions and will seek global biological resilience through the algorithmic responsibility of AI and systemic justice, as will be explained in the work. The GBC, through Extended Bioethics, will provide an ability to analyze biological data as it occurs using AI and quantum computing, expect outbreaks before they happen and attenuate their effects, here creates a new ethical contract for all humankind as they co-exist in a biological world.

Editorial

Open Access &

Peer-Reviewed Article

DOI:10.14302/issn.2766-8681.jcsr-25-

5618

Corresponding author:

Raul Isea, Institute of Advanced Studies Foundation – IDEA.

Keywords:

Bioethics, Resilience, Global Biological Consciousness, Artificial Intelligence

Received: July 07, 2025

Accepted: July 22, 2025

Published: July 30, 2025

Academic Editor:

Anubha Bajaj, Consultant Histopathologist, A.B. Diagnostics, Delhi, India

Citation:

Raul Isea (2025) Extended Bioethics as a Response to Global Biological Consciousness. Journal of Current Scientific Research-2(3):1-5. https://doi.org/10.14302/ issn.2766-8681.jcsr-25-5618

Introduction

The 21st century is characterized by numerous advancements in biotechnology. Tools like CRISPR demonstrate a capability for genetic editing to address diseases that currently have no cure [1]. However, their use provokes ethical controversies surrounding genomic manipulation, condemning individuals afflicted by such scourges [2]. Simultaneously, artificial intelligence (AI) contributes to the medical revolution, from automated diagnosis and the identification of new drugs to advancements in neurotechnology, creating a capability for intervention and analysis that challenges already established ethical frameworks [3].

Bioethics is at a crossroads. Its classical definition focuses on the systematic study of human conduct in life sciences and healthcare, in light of moral values and principles considered by a small group of people. However, this vision, which was created to address certain issues, demonstrates its limited ability to react globally.

Bioethics must adapt and embrace a holistic vision that takes into account the world's interconnection and the rapidly expanding state of modern science, as seen by global health challenges and the scale and complexity of new technology.

There is a gap in our combined capability to address a world health threat through a holistic vision and a real time biological surveillance system. As much





as we continue to develop technology, without a common spatial awareness of biological information across the globe, we remain open to outbreaks that rapidly escalate into pandemics, as demonstrated historically. This paper proposes Global Biological Awareness (GBC) and an extension of bioethics as a decisive way to fill this gap.

Background

Humanity has faced pandemics since the beginning of time, initially caused by a lack of knowledge of pathogens, later reflecting our inability to timely detect epidemic outbreaks, for which reason humanity has paid a very high price for its ignorance. It is important to remember the Black Death (14th century) that devastated communities devoid of knowledge of microbiology or of the mechanisms of contagion [4]. Subsequently, the Spanish Flu (1918) is recalled, which, despite the scientific advancements of that time, lacked an epidemic surveillance system, and where millions of people lost their lives due to viral propagation, killing more people than the world wars [5]. Now we are still suffering from the pandemic caused by COVID-19 [6]. It is undeniable that humanity survived the pandemics through natural evolution, acquired immunity, or reactive measures considered more out of desperation than by a conscious, planned survival strategy.

Indeed, the COVID-19 pandemic is the most impactful reminder of this constant vulnerability in a contemporary era. Despite our achievements, the world lacks a unified "biological perception" system that detects a virus in real time, much less one that tracks its origin or understands its propagation on a global scale. This absence of vision and direction resulted in an uncoordinated and chaotic response, with a devastating human and economic cost.

Therefore, it is necessary to coin the term Global Biological Consciousness (GBC). GBC is characterized as a global system conceived to identify biological threats in real time at a global level, implementing an analysis based on classical and quantum computing systems, providing an unprecedented capacity to detect and monitor biological threats at molecular, epidemiological, and environmental levels globally. GBC is the essential tool that allows the transition towards a proactive response, marking a turning point in human biological destiny.

Global Biological Consciousness (GBC)

Global Biological Consciousness (GBC) is an obligatory response that we must implement after the aforementioned pandemics. It is not merely an early epidemic detection protocol but a cognitive capacity that endows humanity with a deep vision of its biological health status at a collective level. This implies that, through the integration of advanced AI and quantum computing, GBC can process, analyze, and correlate immense amounts of genomic, epidemiological, and environmental data to identify patterns and predict threat trajectories that humanity could not comprehend on its own, as evidenced by COVID-19.

In parallel, an egalitarian consciousness must be established with the development of the early threat detection system, bearing in mind that this system does not seek to control humanity but rather to facilitate intervention before threats escalate and it is too late to contain them.

GBC merges the immense computational capacity of artificial intelligence (including quantum processing of massive and complex data) for interpretation, decision-making, and even suggesting governmental agendas to contain a biological threat, and for this, its development will require an expansion of the concept of bioethics, called Extended Bioethics, which recognizes responsibility in the use of AI and prioritizes equitable social justice on a global scale, not by groups or countries, but by integrating everything as a whole.





Visualize this with an example where individual cases of flu emerge in different sectors of a region. These outbreaks are invisible to health decision-makers, but GBC, in contrast, would simultaneously analyze this, even suggesting the analysis of the virus's genomic sequence after measuring its propagation speed and detecting population movement patterns, complemented by climatic data, and interpreting the consequences of the response. GBC determines whether they are isolated outbreaks or if, on the contrary, they indicate the probability and trajectory of a future epidemic with weeks or months of anticipation, identifying critical points and systemic vulnerabilities before the crisis manifests as another pandemic.

Implications of Global Biological Consciousness

GBC will promote an effective response to any biological threat to society, thus minimizing its effect. The implementation of detection tactics in accordance with the principles defined by an Extended Bioethics will guarantee that humanity does not suffer another pandemic.

The transition from being passive to proactive is a crucial outcome. An early identification of rising pathogens and their propagation patterns will facilitate the implementation of preventive and containment actions long before an uncontrolled epidemic, significantly decreasing the human and economic cost historically linked to massive responses such as extended isolations and social disruption.

On the other hand, GBC could, if necessary, facilitate the intelligent distribution and optimization of vital resources such as vaccines, treatments, and protective equipment, efficiently orienting them to where they are most needed, without accumulation or disparities.

Expanding the Concept of Bioethics

The promise of a pandemic-free humanity demands an ethical framework that seems a dream to integrate worldwide. Unfortunately, we are not taking full advantage of the maximum potential of cuttingedge biotechnologies and surveillance systems due to limitations imposed under a traditionalist vision.

Therefore, it is essential to reinterpret bioethics within a global and dynamic ethical framework that conceives human health as an interrelated and complex system without barriers in information. Hence the need to promote an Extended Bioethics based on four essential ethical foundations for its implementation:

Conscious Management: It is crucial that humanity guide its biological and technological path without bias towards specific responses and where information flows without restrictions for the early detection of any epidemic outbreak.

Global Biological Resilience: The main goal of Extended Bioethics is to enhance the ability to detect, contain, and resist diseases, and above all, to recover from biological crises, preserving its integrity and ability to maintain life.

Algorithmic Responsibility: The moral commitment that must ensure that the developments of artificial intelligence systems function transparently, justly, and with mechanisms to monitor them. In view of the possibility of biased algorithms that go against human health, Extended Bioethics will ensure that GBC is not a "black box" and, therefore, will guarantee that decision-makers are responsible and equitable in political decisions to combat such diseases.

Systemic Justice: Thanks to Extended Bioethics, GBC will not only identify biological threats but will also be able to conduct analyses and reports on global policies that help ensure a fair distribution of benefits and resources among all countries and communities facing these biological threats.





This extension will allow bioethics to progress at the speed of technology, ensuring that Global Biological Consciousness is not only a detection system but also helps to distribute resources more equitably, bearing in mind that it advises and warns but will not be able to make such decisions on its own.

Conclusion

Humanity has traveled a path marked by historical blindness to pandemics (from the Black Death and the Spanish Flu to the recent COVID-19), which leads this work to propose a radical solution: Global Biological Consciousness (GBC). A vision that leverages modern technologies to ensure our survival is far from being a technological chimera.

Promoting GBC demands a profound transformation in the moral compass. Classical bioethics, anchored in individuality and the reaction and perception of what is moral for a group of people, is an insufficient model to navigate the complexities of a future where the health of one person is intrinsically linked to the health of everyone on the planet. Therefore, the redefinition of bioethics is not merely a terminological adjustment but a new ethical contract for humanity in a global era.

This Extended Bioethics promotes a conscious management of our biological destiny, transcending the lessons of historical negligence, guided by algorithmic responsibility, and oriented under systemic justice.

The policy recommendations that stem from GBC and Extended Bioethics would include the building of GBC globally, creation of bi-lateral and multilateral agreements that allow for unrestricted biological information, and the development of ethical and legal policy for AI to ensure rights of fairness, truth and openness. It is also important to create appropriate governance for equitable access to resources (e.g., vaccines, treatments) as well as support for multi-national scientific collaboration, ensuring that GBC operates as an Early Warning System and serves health social justice across the world

For all this, Global Biological Consciousness is the reflection of the aspiration for a civilization that adapts in modern times, under the umbrella of an Extended Bioethics to guarantee a dynamic and global ethical framework. This is the path towards a future where fear gives way to vision, and vulnerability is overcome by collective wisdom.

References

- Jasieniecka A, Domingues I. CRISPR-Cas9 and Its Bioinformatics Tools: A Systematic Review. Curr Issues Mol Biol. 2025 Apr 27;47(5):307. doi: 10.3390/cimb47050307.
- Ayanoğlu FB, Elçin AE, Elçin YM. Bioethical issues in genome editing by CRISPR-Cas9 technology. Turk J Biol. 2020 Apr 2;44(2):110-120. doi: 10.3906/biy-1912-52.
- Di Costanzo A, Spaccarotella CAM, Esposito G, Indolfi C. An Artificial Intelligence Analysis of Electrocardiograms for the Clinical Diagnosis of Cardiovascular Diseases: A Narrative Review. J Clin Med. 2024 Feb 11;13(4):1033. doi: 10.3390/jcm13041033.
- 4. Cohn SK Jr. Epidemiology of the Black Death and successive waves of plague. Med Hist Suppl. 2008;(27):74-100.
- Parmet WE, Rothstein MA. The 1918 Influenza Pandemic: Lessons Learned and Not-Introduction to the Special Section. Am J Public Health. 2018 Nov;108(11):1435-1436. doi: 10.2105/ AJPH.2018.304695.
- 6. Vonderschmitt J, Wöhlke S, Schicktanz S. Scarce resources, public health and professional care:





the COVID-19 pandemic exacerbating bioethical conflicts - findings from global qualitative expert interviews. BMC Public Health. 2023 Dec 13;23(1):2492. doi: 10.1186/s12889-023-17249-4.

