

**Editorial** 

# Welcome to the Inaugural Issue of *Disease Biology, Genetics,* and *Socioecology (DBGS)*

Michel Tibayrenc

Institute of Research for the Development, 34394 Montpellier, France; michel.tibayrenc@ird.fr Received: 30 August 2024; Accepted: 2 September 2024; Published: 10 September 2024

Welcome to the inaugural issue of *Disease Biology, Genetics, and Socioecology (DBGS)*. We are thrilled to introduce this new journal, envisioned as a groundbreaking platform that integrates biological sciences, genetics, social sciences, and medicine. Our mission is to advance the understanding of the complex interactions underlying human health and disease, and to promote research that bridges traditionally compartmentalized fields.

## 1. Purpose and Objectives

The primary aim of *DBGS* is to dismantle the barriers between biology (biochemistry, CRISPR technologies, ecology, ethology, epigenetics, evolution, genetics, genomics, immunology, population genetics, and proteomics, among others) and social sciences (anthropology, economics, gender studies, geography, history, philosophy, politics, psychiatry, psychoanalysis, psychology, and sociology, collectively referred to as "socioecology" in the present project), facilitating a holistic approach to disease research. The journal is grounded on the belief that human health is a product of both our biological constitution and the socioenvironmental contexts in which we live. We aim to bring together studies that explore how genetic, environmental, social, and cultural factors intertwine to shape health outcomes.

### For example:

- Type II diabetes is considered a "complex disease", resulting from the combined effects of multiple
  genes, each contributing a small effect. However, this genetic predisposition can often be managed or
  mitigated by socioeconomic and environmental factors such as a balanced diet, weight management,
  and physical activity.
- Similarly, many mental disorders have a genetic component. However, familial, cultural, and political environments, as well as psychological processes, play crucial roles too.
- Many cancers are influenced by both genetic background and environmental factors.
- In the case of infectious diseases, both genetics and environmental factors significantly impact their spread. The genetic variability of pathogens (including viruses, bacteria, parasites, yeasts, and fungi) significantly influences their pathogenicity and resistance to drugs. Additionally, the host's genetic makeup plays a crucial role in determining susceptibility to resistance to pathogens. While biological factors are essential in the control of infectious diseases, it is equally important to consider environmental and sociological factors such as health management, education, hygiene policies, and efforts to combat discrimination.

## 2. Our Objectives Are Threefold

- (1) Promote Interdisciplinary Collaboration: By creating a forum for researchers from diverse fields, we hope to encourage collaboration that leads to emergence of innovative solutions to complex health challenges.
- (2) Advance Holistic Understanding: We are committed to publishing research that not only deepens our understanding of disease biology and genetics but also integrates insights from the social sciences to offer more comprehensive perspectives.
- (3) Impact Public Health and Policy: We aspire to influence both academic discourse and real-world practices by providing evidence-based insights that can inform clinical approaches and public health policies.

#### 3. Future Aspirations

Looking ahead, we envision that *DBGS* will become a prominent leader in the global conversation on health and disease. We aspire to be the journal of choice for researchers who are dedicated to exploring the full spectrum of factors that contribute to human health. Our long-term goal is to contribute to the creation of integrated health models that consider genetic, environmental, and social determinants in a unified framework.

We are particularly excited about the potential to drive innovation in areas such as personalized medicine, where the intersection of genetics and socioecological factors can lead to the creation of more personalized healthcare solutions. As we grow, we hope to expand our reach, attracting submissions from a diverse range of disciplines and geographical regions.

#### 4. Call for Submissions

As we embark on this journey, we invite researchers, scholars, and practitioners from around the world to contribute to *DBGS*. We are inviting researchers to submit original research articles, reviews, case studies, position papers and commentaries that explore the intersections of biology, genetics, and the social sciences. Whether your work focuses on the genetic basis of disease, the socioecological determinants of health, or the integration of these fields, we want to hear from you.

No one can be simultaneously an expert biologist, medical practitioner, and competent social scientist. However, it is possible to bridge the gaps between these compartmentalized disciplines by relying on diverse teams of specialists with varied backgrounds. Such an interdisciplinary platform is not just a convergence of fields; it is a necessity born from the complex, multifaceted nature of human diseases that defy the boundaries of any single discipline

By contributing to *DBGS*, you have the opportunity to be part of a groundbreaking effort to redefine how we understand and address human health.

#### 5. Conclusion

The challenges of the 21st century—ranging from pandemics to chronic diseases and mental disorders—demand innovative approaches and collaborative efforts. *DBGS* is poised to be at the forefront of these efforts, offering a platform where the biological sciences meet the social sciences, where genetics informs policy decisions, and where medicine becomes truly integrative and personalized.

Thank you for joining us on this exciting journey. Together, we can build a healthier, more informed world. **Conflicts of Interest:** The author declares no conflict of interest.