



## Epigenetic Mechanisms of Environmental Diseases

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### Message from the Guest Editors

This Special Issue, “Epigenetic Mechanisms of Environmental Diseases” will mainly focus on environmental influences on human health.

The human genome encodes approximately 30,000 genes. It is estimated that over 8,000 human diseases are caused by defects in single genes. These unifactorial or monogenic diseases are individually rare and affect approximately one percent of the human population. In contrast, complex human diseases such as cancer and type 2 diabetes are believed to involve both susceptibility genes and their interactions with the environment. Gene-environment interactions are thought to be mediated by epigenetic modifications across the genome that represent orchestrated phenomena which modulate the transcriptional output of the genetic code. In this sense, identifying the aberrant changes in the epigenetic landscape associated with environmental diseases such as type 2 diabetes, obesity, cancer and cardiovascular, neurodegenerative and immunological diseases could provide the potential for new approaches for disease prevention and intervention.





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