Special Issue

Gene-Environment Interaction in Chronic Diseases

Message from the Guest Editors

The pathogenesis of common diseases, especially chronic conditions, is a multifactorial process modulated by a complex interplay between genes and the environment. The burden of chronic diseases is rapidly increasing worldwide. The World Health Organization has estimated that, in 2020, chronic diseases will contribute approximately 57% of the global burden of disease. Chronic inflammatory and immunemediated diseases, such as asthma, COPD, and diabetes are among the most common. This has led to concern about how the modern lifestyle and the environment may trigger innate physiologic defense mechanisms and, based on genetic predisposition. determine phenotype development. Medical research is facing a significant challenge: improving the accuracy and precision in evaluating the role of environmental and genetic risk factors and their interaction. The awareness of the multifactorial nature of the phenotype development will greatly help in the early diagnosis, management, and prevention of chronic diseases, with important consequences on people and public health achievements.

Guest Editors

Dr. Simona Villani

Department of Public Health, Experimental and Forensic Medicine, University of Pavia, 27100 Pavia (PV), Italy

Dr. Maria Cristina Monti

Department of Public Health, Experimental and Forensic Medicine, Unit of Biostatistics and Clinical Epidemiology, University of Pavia, 27100 Pavia (PV), Italy

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Message from the Editor-in-Chief

Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Scientific discoveries and advances in this research field play a critical role in providing a rational basis for informed decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards.

IJERPH provides a forum for discussion of discoveries and knowledge in these multidisciplinary fields. Please consider publishing your research in this high quality peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Paul R. Ward

Centre for Public Health, Equity and Human Flourishing, Torrens University Australia, Adelaide 5000, Australia

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