

Special Issue

Advancing Occupational Health Through Omics Technologies

Message from the Guest Editor

Occupational health risks arise from a complex interplay between chemical, physical, biological, organizational, and psychosocial factors. Traditional biomonitoring approaches, such as the measurement of toxicants and their metabolites in human specimens, play a pivotal role in understanding environmental exposures. However, recent advancements in omics technologies have opened new avenues for personalized worker health analyses. These novel methods, including genomics, epigenomics, transcriptomics, proteomics, and exposomics, provide a comprehensive framework for elucidating the biological mechanisms underlying these health risks. Such approaches facilitate not only the discovery of mechanistic interactions between biological and psychosocial factors but also enable personalized risk assessments tailored to each worker's unique exposures. This Special Issue focuses on the application of omics technologies in occupational medicine, emphasizing their potential to revolutionize personalized health assessments and develop intervention strategies for high-risk professions.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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