

## EDITORIAL

The World Health Organization has recognised chronic non-communicable diseases (NCDs) as a growing health problem. The incidence of cancer, diabetes, cardiovascular diseases, obesity, musculoskeletal disorders, reproductive and developmental defects, chronic respiratory diseases, and mental health disorders have been increasing all over the world. Moreover, cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases account for most of the premature deaths worldwide, whereas other chronic NCDs increase the burden of disability in the developing countries<sup>1</sup>. Reasons for the epidemic of NCDs could lie in changing social and living conditions that go hand in hand with globalisation and urbanisation, and increased life expectancy. Factors from the environment in which people live and work, and factors related to lifestyle, especially smoking, diet, time spent indoors, and lower physical activity are strongly associated with the risk of NCD development. An interaction between environmental factors, lifestyle, and genetic predisposition ultimately determines whether a disease will develop and advance. Recognising these risk factors and disease patterns should help to improve prevention.

Our scientific programme “Environmental and lifestyle effects on health”, supported by the Croatian Ministry of Science, Education and Sports, has been implemented at the Institute for Medical Research and Occupational Health in Zagreb since 2007. The

programme includes seven collaborative research projects studying the influence of ageing, environmental exposure to chemical (toxic metals), physical (non-ionising radiation, occupational physical load) and biological (allergens, endotoxin, organic dust) harmful agents, lifestyle (diet, psychosocial and behavioural factors, smoking) and occupational factors, and their interactions on human health.

This supplement of *Archives of Industrial Hygiene and Toxicology*<sup>2</sup> summarises the main achievements of our programme research over the last five years. We hope to bring the most recent scientific information about the general and occupational exposure to dust mite allergens, biological effects of non-thermal radiofrequency/microwave radiation, reproductive toxicity of metals in men, regulation of sleepiness, relation between quality of life and neuroticism, influence of gene-environment interactions on peak bone density, as well as information about healthy ageing in Croatian population. The articles in this issue illustrate the multidisciplinary approach to research and promote a new understanding of complex interactions between the environment and lifestyle in the development and progression of chronic NCDs and behavioural problems.

*Guest editors*  
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<sup>1</sup> WHO. *The Global Burden of Disease: 2004 Update*. Geneva: World Health Organization; 2008.

<sup>2</sup> All papers have been peer-reviewed according to the journal's usual requirements.