Disease Markers 20 (2004) 1–2
IOS Press

Foreword

ICT X Satellite Meeting on Molecular Epidemiology

Linking Toxicology to Epidemiology – Biomarkers and New Technologies

Haikko, Porvoo, Finland, 8–10 July 2004

Kirsti Husgafvel-Pursiainen, PhD
Department of Industrial Hygiene and Toxicology, Finnish Institute of Occupational Health, Helsinki, Finland

Richard B. Hayes, PhD
Occupational and Environmental Epidemiology Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892, USA

Harri Vainio, MD
Director General, Finnish Institute of Occupational Health, Helsinki, Finland

It is our great pleasure to provide summaries of the work to be presented by lead scientists in molecular epidemiology at the ICT X Satellite Meeting on Molecular Epidemiology, Haikko, Finland. The meeting program includes reporting of recent advances and the latest methodological approaches in this field of research. The main themes of the meeting focus on biomarker research, mechanisms of disease causation, risk assessment and prevention, recent technological advances, and new concepts and future areas in international collaboration.

The Keynote Lectures provide an overview of recent developments in key areas of molecular epidemiologic investigation of major diseases including cancer, cardiovascular disease, and respiratory diseases. Strategies are described for biologic-based exposure assessment, markers of intermediate effect, predictive markers of subsequent disease, and assessment of disease susceptibility patterns. Lectures on important disease-causing agents, including air pollution, diesel exhaust, metals and wood dust provide a link between population-based epidemiology, human biomarker studies, and experimental toxicology. Methodologic advances in laboratory sciences for population-based studies and in the design of molecular epidemiologic studies are discussed, in view of needs for advancement in the understanding of human disease. The poster session abstracts summarize results from studies carried out in the main topic areas of the meeting. In particular, multiple studies investigating associations between genetic polymorphisms and disease outcomes are reported.

0278-0240/04/$17.00 © 2004 – IOS Press and the authors. All rights reserved

Material may be protected by copyright law (Title 17, U.S. Code)

We hope that the meeting will contribute to discussions and development of molecular epidemiology, and will offer views how to incorporate genomics into research on environmental and occupational health. The aim is to contribute to a better understanding of gene-environment interactions in the etiology and development of human diseases, and to find ways how to use this knowledge for disease prevention.

We are particularly appreciative for the financial and organizational support provided by the FIOH, and for the contributions of other sponsors, including the Work Environment Fund, Finland; the Academy of Finland; the National Institute of Environmental Health Sciences, USA; the Environmental Protection Agency, USA; the Health Effects Institute, USA; the National Institute for Occupational Health, USA; and the European Association for Cancer Research.

Material may be protected by copyright law (Title 17, U.S. Code)