# IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 102: Non-Ionizing Radiation, Part II: RADIOFREQUENCY ELECTROMAGNETIC FIELDS

[INCLUDES MOBILE TELEPHONES, MICROWAVES AND RADAR]
Lyon, France: 24-31 May 2011

### LIST OF PARTICIPANTS

### **Members**

Bruce Armstrong, University of Sydney, Australia

Igor Y. Belyaev, Cancer Research Institute, Slovak Academy of Science, Slovak Republic Carl F. Blackman, USA

Maria Blettner, University of Mainz, Germany

Elisabeth Cardis, Center for Research in Environmental Epidemiology (CREAL), Spain Clemens Dasenbrock, Fraunhofer Institute for Toxicology and Experimental Medicine, Germany

Etienne Degrave, Belgian Ministry of Defence, Belgium [retired] (not present during evaluations)

René de Seze<sup>1</sup>, INERIS (Institut National de Environnement industriel et des RISques), France

Jean-François Doré, INSERM (Institut national de la santé et de la recherche médicale), France

Lennart Hardell, Örebro University Hospital, Sweden

Peter D. Inskip, National Cancer Institute, USA (not present during final evaluations)

Jukka Juutilainen, University of Eastern Finland, Finland

Nam Kim, Chungbuk National University, Republic of Korea

Dariusz Leszczynski, STUK – Radiation and Nuclear Safety Authority, Finland

Simon Mann, Health Protection Agency, United Kingdom

David L. McCormick, IIT Research Institute, USA (Subgroup Chair, Animal Cancer Studies)

James McNamee, Health Canada, Canada

Ronald Melnick, Ron Melnick Consulting, USA (Subgroup Chair, Exposure)

Meike Mevissen<sup>2</sup>, University of Bern, Switzerland

Junji Miyakoshi, Kyoto University, Japan

Christopher J. Portier, Centers for Disease Control and Agency for Toxic Substances and Disease Registry, USA (Subgroup Chair, Mechanistic and other relevant data)

David B. Richardson, University of North Carolina at Chapel Hill, USA

Martin Röösli<sup>3</sup>, Swiss Tropical and Public Health Institute, Switzerland

<sup>&</sup>lt;sup>1</sup> René de Seze received significant research support (more than 100.000€ ceased in 2009) from Fondation Santé et Radiofréquences, a research foundation created under the leadership of the French Ministry of Research and with public interest status. Half of the budget is State funded, the other half is provided by industry. The Foundation's independence and the transparency of its operations are guaranteed by its Ethics Charter. In 2009, René de Seze has prepared a report for a plaintiff's lawyer on the association between radiofrequency fields and brain cancer.

<sup>&</sup>lt;sup>2</sup> Meike Mevissen receives research funding for gene-pathway effects of radiofrequency EMF from Forschungsstiftung Mobilfunk, a non-profit-making research foundation at the ETH Zürich. Neither industry, nor NGOs are represented on the Scientific Board of the Foundation.

<sup>&</sup>lt;sup>3</sup> Martin Röösli receives research funding for studies on adverse health effects of mobile phone use from Forschungsstiftung Mobilfunk, a non-profit-making research foundation at the ETH Zürich. Neither industry, nor NGOs are represented on the Scientific Board of the Foundation. He also serves as a Member on the Board of this foundation.

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Jonathan M. Samet, University of Southern California, USA (Overall Chair)
Tomoyuki Shirai, Nagoya City University, Japan [retired]
Jack Siemiatycki, University of Montreal, Canada (Subgroup Chair, Epidemiology)
Malcolm Sim<sup>4</sup>, Monash University, Australia
Stanislaw Szmigielski, Military Institute of Hygiene and Epidemiology, Poland [unable to attend]
Luc Verschaeve<sup>5</sup>, Scientific Institute of Public Health, Belgium
Vijayalaxmi, University of Texas Health Science Center, USA

## **Invited Specialists**

Anders Ahlbom<sup>6</sup>, Karolinska Institute, Sweden (withdrew his participation)
Niels Kuster<sup>7</sup>, IT'IS Foundation for Research on Information Technologies in Society,
Switzerland

## Representatives of national and international health agencies

Laurent Bontoux, European Commission, Directorate-General for Health and Consumers (DG SANCO), Brussels

Katja Bromen, European Commission, Directorate-General for Health and Consumers (DG SANCO), Brussels

Hamadi Dekhil, Agence Nationale de Contrôle Sanitaire et Environnementale des Produits, Tunisia

Clara Galland, French Agency for Food, Environment and Occupational Health Safety (ANSES), France

David Gee, European Environment Agency, Denmark [did not attend]

Olivier Merckel, French Agency for Food, Environment and Occupational Health Safety (ANSES), France

<sup>4</sup> Malcolm Sim owns stock (less than 5.000 €) in Telstra, an Australian telecommunication service provider.

<sup>&</sup>lt;sup>5</sup> Luc Verschaeve's research institute received a small research grant (less than 5.000 € ceased in March 2011) from the GSM Operators Forum on environmental effects of mobile phone base stations.

<sup>&</sup>lt;sup>6</sup> Anders Ahlbom served (until May 2011) on the Board of Directors of Gunnar Ahlbom AB, a consulting firm in the domains of EU affairs, especially within telecommunications.

<sup>&</sup>lt;sup>7</sup> Niels Kuster is Director and Board member of the non-profit IT'IS Foundation that performs exposure assessments for industry and governments and he is President of the Board and shareholder of Near-Field Technology AG, a holding controlling the two companies SPEAG and ZMT that are active in development of near-field measurement instruments, simulation software and medical test equipment.

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#### **Observers**

Joe A. Elder<sup>8</sup>, for the Mobile Manufacturers Forum Claire Marrant, for the Léon Bérard Centre, France Robert Nuttall, for the Canadian Cancer Society Jack Rowley<sup>9</sup>, for the GSM Association Mays L. Swicord<sup>10</sup>, for CTIA – The Wireless Association

#### IARC secretariat

Robert Baan, IARC Monographs section (Responsible officer)

Lamia Benbrahim Tallaa, IARC Monographs section

Véronique Bouvard, IARC Monographs section

Graham Byrnes, Biostatistics group

Rafael Carel, Visiting Scientist, University of Haifa, Israel, IARC Monographs section

Isabelle Deltour, Visiting Scientist, Institute of Cancer Epidemiology, Denmark

Fatiha El Ghissassi, IARC Monographs section

Laurent Galichet, IARC Monographs section (Scientific editor)

Nicolas Gaudin, Communications

Yann Grosse, *IARC Monographs* section

Neela Guha, IARC Monographs section

Aslak Harbo Poulsen, Visiting Scientist, Visiting Scientist, Institute of Cancer Epidemiology, Denmark

Farhad Islami, IARC Monographs section

Ausrele Kesminiene, Environment and Radiation section

Béatrice Lauby-Secretan, IARC Monographs section

Monika Moissonnier, Environment and Radiation section

Rodolfo Saracci, Visiting Scientist, IARC

Joachim Schüz, Environment and Radiation section

Kurt Straif, IARC Monographs section (Head of IARC Monographs section)

Emilie van Deventer, WHO, Geneva

<sup>&</sup>lt;sup>8</sup> Joe Elder is self-employed as a RF Bioeffects Consultant. He was employed by Motorola (until 2009) and his wife holds stocks from Motorola. His participation as an Observer in this IARC Monographs meeting is sponsored by the Mobile Manufacturers Forum representing manufacturers of mobile and wireless communication devices and the network infrastructure that supports them.

<sup>&</sup>lt;sup>9</sup> Jack Rowley is employed by the GSM Association whose member companies use RF to deliver communication services. He has represented the GSM Association in government inquiries in North America and at workshops organized by the European Commission and national authorities. His participation as an Observer in this IARC Monographs meeting is sponsored by the GSM Association.

<sup>&</sup>lt;sup>10</sup> Mays Swicord worked as a consultant for Motorola (until 2008). His participation as an Observer in this IARC Monographs meeting is sponsored by the CTIA – The Wireless Association.

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**NOTE REGARDING CONFLICTS OF INTERESTS:** Each participant submitted WHO's Declaration of Interests, which covers employment and consulting activities, individual and institutional research support, and other financial interests. Participants identified as Invited Specialists do not serve as meeting chair or subgroup chair, draft text that pertains to the description or interpretation of cancer data, or participate in the evaluations. The Declarations were updated and reviewed again at the opening of the meeting.

**NOTE REGARDING OBSERVERS:** Each Observer agreed to respect the Guidelines for Observers at *IARC Monographs* meetings. Observers did not serve as meeting chair or subgroup chair, draft any part of a *Monograph*, or participate in the evaluations. They also agreed not to contact participants before the meeting, not to lobby them at any time, not to send them written materials, and not to offer them meals or other favours. IARC asked and reminded Working Group Members to report any contact or attempt to influence that they may have encountered, either before or during the meeting.

Posted 24 March 2011, updated 26 August 2011