

Expert Forum: Wireless Radiation and Human Health  
Hebrew University Medical School, January 23-26 2017

Sponsored by The Israel Institute for Advanced Study and Environmental Health Trust  
With Support from National Institutes of Health/ National Institutes of Environmental  
Health Sciences and Dr. Lucy Waletzky



*Introduction and Welcome, Michal Linial, PhD, Director of The Israeli Institute for Advanced Study* [Linial Full Bio](#)  
**Richard Laster, JD, LLD**, Professor - Faculty of Law, Hebrew University of Jerusalem [Laster Full Bio](#)

Background Materials: [Cellular Antennas – Applying Democratic Principles with Precaution \(2007\)](#)



*Overview of Health Effects and Benefits impacts of Wireless Radiation* **Devra Davis, PhD, MPH, FACE**, Founder and President of Environmental Health Trust, Visiting Professor of Medicine at The Hebrew University Hadassah Medical School and Ondokuz Mayıs University Medical School and was Founding Director of the Center for Environmental Oncology, University of Pittsburgh Cancer Institute [Full Bio](#)

[PDF of January 23 2016 IAS Presentation](#)

[PDF of Research Citations](#)

[Q & A on the National Toxicology Program Study prepared by Environmental Health Trust](#)  
[Environmental Health Trust Washington Research Agenda](#)



*Report from the U.S. National Toxicology Program: Increased Cancers and Genetic Damage Tied with Current Levels of Wireless Radiation from Cell Phones and Other Devices*, **Linda Birnbaum, PhD, DABT, ATS** Director National Institute of Environmental Health Sciences and National Toxicology Program (NTP) [Full Bio](#)

*Note: Dr. Birnbaum came to Israel to present at the conference but unexpectedly had to return to the United States and her prepared presentation was delivered by Ronald Melnick PhD, retired NIH scientist who helped design the NIEHS study.*

*Background Materials:*

[PDF of January 23 2016 IAS Presentation](#)

National Toxicology Program Carcinogenesis Studies of Cell Phone Radiofrequency Radiation  
(Video of June 15 Presentation at NIEHS)



*Recent findings on wireless radiation and health from the Ramazzini Institute,* **Fiorella Belpoggi, PhD, FIATP**, Head of the Research Department at the Ramazzini Institute and Director of the Cesare Maltoni Cancer Research [Full Bio](#)  
[PDF of January 23 2016 IAS Presentation](#)

Background Materials:

[Carcinogenic Synergism of S-50 Hz MF Plus Formaldehyde in Rats \(2016\)](#)

[Life-span exposure to sinusoidal-50 Hz magnetic field and acute low-dose  \$\gamma\$  radiation induce carcinogenic effects in Sprague-Dawley rats \(2016\)](#)



*Tumor Treatment Fields for Glioblastoma: Clinical Trials and Potential Mechanism of Action* **Frank S. Lieberman, MD**, Chief of Adult Neuro-Oncology at UPMC Hillman Cancer Center; Professor of Neurology, Neurosurgery and Medical Oncology at the University of Pittsburgh School of Medicine [Full Bio](#)  
[PDF of January 23 2016 IAS Presentation](#)



*Multi-media efforts to promote public and health professional understanding of wireless radiation,* **Stella Canna-Michaelidou, PhD**, President of the National Committee on Environment and Children's Health, Former Acting Permanent Secretary of the Cypriot Ministry of Health, Director of the State General Laboratory [Full Bio](#)

[PDF of January 24 2016 IAS Presentation](#)

Background Materials:

[Advice on Children, Cell Phones and Wireless, The Cyprus National Committee on Environment and Children's Health](#), [Advice on Pregnancy and Wireless, The Cyprus National Committee on Environment and Children's Health](#), [Website of the Cyprus National Committee on Environment and Children's Health](#)



*Update on National Legislative and Regulatory Framework for Reducing Wireless Radiation in Argentina (By Teleconference),* **Sergio Bergman, MA, MEd, MTh**, Minister of the Environment of Argentina by Videoconference [Full Bio](#)

**JANUARY 24, 2016**

***Morning Plenary: Cancer Risk, Basic Science & Medical Applications,***



*Technical Update on NTP Positive Bioassay of RFR/MW, Plans for Release of Full Report, U.S. and Other National Policy Response, **Linda Birnbaum, PhD, FACT**, Director National Institute of Environmental Health Sciences* [Full Bio PDF of January 24 2016 IIAS Presentation](#)

*Note: Dr. Birnbaum came to Israel to present at the conference but unexpectedly had to return to the United States and her prepared presentation was delivered by Ronald Melnick PhD, retired NIH scientist who helped design the NIEHS study.*

Background Materials:

[National Toxicology Program Carcinogenesis Studies of Cell Phone Radiofrequency Radiation Video of June 15 NIEHS Presentation](#)



*Update on the Ramazzini Institute Bioassays Regarding ELF and RFR/MW, **Fiorella Belpoggi, PhD, FIATP**, Director at the Ramazzini Institute and Director of the Cesare Maltoni Cancer Research* [Full Bio PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[Carcinogenic Synergism of S-50 Hz MF Plus Formaldehyde in Rats \(2016\)](#)

[Life-span exposure to sinusoidal-50 Hz magnetic field and acute low-dose  \$\gamma\$  radiation induce carcinogenic effects in Sprague-Dawley rats \(2016\)](#)



*Tumor Treating Fields: Preclinical Science and Clinical Trials **Frank Lieberman MD**, Chief Neuro-oncology, University of Pittsburgh Cancer Institute* [Full Bio PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[Tumor treating fields: a novel treatment modality and its use in brain tumors.](#)

[Overview of Alternating Electric Fields Therapy for Treatment of Malignant Glioma](#)

[An Overview of Sub-Cellular Mechanisms Involved in the Action of TTFs](#)



*Neurological, Developmental and Reproductive Impacts of RF*, **Devra Davis, PhD, MPH, FACE**, Founder and President of Environmental Health Trust, Visiting Professor of Medicine at The Hebrew University Hadassah Medical School and Ondokuz Mayıs University Medical School [Full Bio](#)  
[PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[Effects of Cell Phone Radiofrequency Signal Exposure on Brain Glucose Metabolism](#)

[Mobile phones and head tumours. The discrepancies in cause-effect relationships in the epidemiological studies - how do they arise?](#)

[Environmental Health Trust Washington Research Agenda 2009](#)

## **Afternoon Plenary Session *Basic Science and Policy Innovations***

Co-chairs: Benjamin Klein MD, Dariusz Leszczynski PhD



*Recent Evaluations of Wireless Exposure for the EU*, **Esra Neufeld, PhD**, Head of Computational Life Sciences Group at IT'IS Foundation for Research on Information Technologies in Society; Chief Scientific Officer, Zurich MedTech AG [Full Bio](#)  
[PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[Functionalized Anatomical Models for EM-Neuron Interaction Modeling](#)

[Investigation of Assumptions Underlying Current Safety Guidelines on EM-Induced Nerve Stimulation](#)

*Potential Risks to Human Health Originating from Future Sub-MM Communication Systems*,

Background Materials: [Human Skin as Arrays of Helical Antennas in the Millimeter and Submillimeter Wave Range](#)

[Potential Risks to Human Health Originating from Future Sub-MM Communication Systems](#)



**Yuri Feldman, PhD**, Head of the Dielectric Spectroscopy Laboratory, Department of Applied Physics, Hebrew University of Jerusalem [Full Bio](#)



**Paul Ben-Ishai, PhD**, Lecturer in the Department of Physics, Ariel University, Israel [Full Bio](#)



*MAPK/ERK Activation as a Readout for Cellular Response to Non-ionizing Radiation*, **Rony Seger, MD, PhD**, Head of the Department of Biological Regulation, Weizmann Institute of Science, Rehovot, Israel [Full Bio](#)  
[PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[Mechanism of short-term ERK activation by electromagnetic fields at mobile phone frequencies.](#)  
[PDF](#)



*Environmental Impact on Semen Quality - What is the Role of Non-ionizing Radiation?* **Hagai Levine, MD**, Head of the Environmental Health Track, Senior Lecturer and Senior Physician, Braun School of Public Health and Community Medicine, Hebrew University Hadassah Medical School, Jerusalem [Full Bio](#)

[PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[Effect of mobile telephones on sperm quality: A systematic review and meta-analysis.](#)  
[The effects of radiofrequency electromagnetic radiation on sperm function.](#)



*Update from the Israeli National Information Center for Non-Ionizing Radiation Center*, **Siegal Sadetzki, MD, MPH**, Director of Cancer and Radiation Epidemiology Unit and Senior Lecturer, The Gertner Institute, Israel [Full Bio](#)  
[PDF of January 24 2016 IIAS Presentation](#)

[The Israeli National Information Center for Non-Ionizing Radiation](#)

**JANUARY 25, 2016**

***Morning Plenary - Epidemiology and Case Reports on Cancer and Other Endpoints Since the IARC Monograph*** Plenary Chairs: Hagai Levine and Anthony Miller

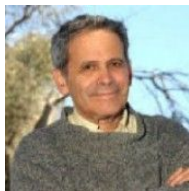


*Epidemiology of Cell Phones and Other Wireless Transmitting Devices - An Update*, **Anthony Miller, MB, MRCP, MD, FRCP, FRCP (C), FFPH, FACE**, Professor Emeritus, Dalla Lana School of Public Health; Senior Medical Advisor, Environmental Health Trust, USA; Previous Director of Epidemiology, National Cancer Institute of Canada [Full Bio](#)

[PDF of January 2016 IIAS Presentation](#)

Background Materials:

[Dr. Anthony Miller RF and Cancer Bibliography](#)



*Methodological challenges of Case Series and Updates of Occupational Exposures to Wireless Radiation* **Elihu Richter, MD, MPH**, Associate Professor Emeritus of Occupational Medicine, Hebrew University of Jerusalem, Israel [Full Bio](#)

[PDF of January 24 2016 IIAS Presentation](#)

Background Materials:

[The Seletun Scientific Statement: Lower EMF Standards for World Health Are Urgently Needed, International Scientists Say](#)

[Benevento Resolution](#)

[A sentinel case series of cancer patients with occupational exposures to electromagnetic non-ionizing radiation and other agents](#)



*Making the Leap from a Clinical Case Series to Evidence-Based Medicine to Reduce Health Impacts of RF*, **Iris G. Udasin, MD, FACPM**, Professor & Medical Director of Employee Health, Rutgers University Environmental and Occupational Health Sciences Institute; Principal Investigator for the World Trade Center Medical Monitoring and Treatment Program, USA [Full Bio](#)

[PDF of January 2016 IIAS Presentation](#)

Background Materials:



Persistence of multiple illnesses in World Trade Center rescue and recovery workers: a cohort study

***Afternoon Plenary: Evaluating and Modeling Exposures and Impacts of Wireless Radiation and Pediatric Health: average versus peak exposure modeling*** Chairs: Ely Levine and Leeor Alon



*Simulations of Peak Spatial Exposures to Children and Adults from Multiple Devices, Claudio Fernandez, Federal University of Rio Grande De Sul, Brazil*  
[PDF of January 2016 IIAS Presentation](#)

Background Materials:

[Dosimetric Simulations of Brain Absorption of Mobile Phone Radiation–The Relationship Between psSAR and Age](#)

[SAR simulations of EMF exposure due to tablet operation close to the user’s body](#)

[SAR simulations in SAM varying the dimensions, the distances and the age dependent dielectric parameters](#)



*Precaution and Prevention: Public Health Tools to Reduce Children's Exposure to Mobile Phone, and Wireless Radiation* **Stella Canna-Michaelidou, PhD**, President of the [National Committee on Environment and Children's Health](#), Former Acting Permanent Secretary of the Cypriot Ministry of Health, Director of the State General Laboratory, Cyprus [Full Bio](#)  
[PDF of January 2016 IIAS Presentation](#)

Background Materials:

[VIDEO: Advice of The Cyprus National Committee on Environment and Children's Health on Cell Phones and Wireless Devices](#)

[VIDEO: Advice of The Cyprus National Committee on Environment and Children's Health to Pregnant Women.](#)  
[French National Agency of Health Security of Food, Environment and Labour Report “Radiofrequency Exposure and The Health of Children”](#)

**JANUARY 26, 2016**

***Morning Plenary Panel: Real World Exposures, Assessment, Impacts and Policy Recommendations*** Co-Chairs: Richard Laster, Tamar Berman, & Devra Davis



*"What Can be Done" - Reducing Exposure to Children in Schools and at City Level, **Reuven Kurman, BSc, MBA**, Chief Information Officer, Education Department of Haifa, Israel*

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*Adverse Effect of Exposure to Media in Children, **Eitan Kerem, MD, FAAP**, Head of the Division of Pediatrics, Hadassah Medical Center, Jerusalem*

[Full Bio](#)

[PDF of January 2016 IIAS Presentation](#)



*Environmental Indicators and Opportunities for Evaluating Current Patterns of Use, **Yael Stein, MD**, Resident Anesthesiologist, Hadassah Medical Center, Jerusalem* [Full Bio](#)

[PDF of January 2016 IIAS Presentation](#)



*Physiological and Psychological Impacts of Digital Media, **Gadi Lissak, PsyD**, Clinical and Behavioral Medicine Psychologist, Meuhedet Health Services, Israel*

**Background Materials:**

[Circadian rhythms and treatment implications in depression](#)

[Microwave frequency electromagnetic fields \(EMFs\) produce widespread neuropsychiatric effects including depression](#)

[BioInitiative 2012](#)





*US and International Policy Developments /Medical Recommendations on Children, **Theodora Scarato, MSW**, Clinical Psychotherapist; Director of Public Affairs and Educational Resources, Environmental Health Trust [Full Bio](#) PDF of January 2016 IIAS Presentation*

*Background Materials:*

[Blueprint for Protecting Children's Environmental Health: An Urgent Call to Action, from the Children's Environmental Health](#)

[Environmental Health Trust International Policy on Cell phones/Wi-Fi and Children](#)

[Combined biological and health effects of electromagnetic fields and other agents in the published literature](#)

[Captured Agency by Harvard Press: How the Federal Communications Commission is dominated by the industries it presumably regulates.](#)

[Mobile phone infrastructure regulation in Europe: Scientific challenges and human rights protection](#)

[International policy and advisory response regarding children's exposure to radio frequency electromagnetic fields \(RF-EMF\).](#)

## **Specially Invited Talks to Workgroups**



*Radiofrequency Radiation: A Possible Human Carcinogen? **Ronald Melnick, PhD**, Senior Science Advisor, Environmental Health Trust; Fellow Emeritus, Collegium Ramazzini; Former Toxicologist at the National Institute of Environmental Health Sciences and National Toxicology Program; Recipient of the American Public Health Association's 2007 David P. Rall Award [Full Bio](#)*

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*Background Materials:*

[Determining Disease Causality From Experimental Toxicology Studies](#)

[Scientific Briefing on the NTP Study on the Carcinogenicity of Radiofrequency Radiation](#)



*Proteomics and Stress Response Signalling and Impacts of RF-EMF on the Blood Brain Barrier, **Dariusz Leszczynski, MSc, DSc, PhD**, Chief Editor of 'Radiation and Health' specialty of the 'Frontiers in Public Health', Switzerland; Adjunct Professor, University of Helsinki, Finland [Full Bio](#)*

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*Autism and Cell Signaling—proposed investigations of stem cells*, **Benjamin Klein, MD**,  
Researcher at the Institute for Medical Research, Hebrew University of Jerusalem  
[PDF of January 24 2016 IIAS Presentation](#)



*RF and Cell Signaling as the Foundation of Diagnostic, Therapeutic and Prognostic Indicators for the Autistic Spectrum and other Chronic Illnesses* **Rony Seger, MD, PhD**, Head of the Department of Biological Regulation, Weizmann Institute of Science, Rehovot, Israel [Full Bio](#)  
[PDF of January 2016 IIAS Presentation](#)



*Radio Frequency Radiation Related Cancer – Assessing Causation in the Occupational/Military Setting*, **Michael Peleg, MSc**, Engineer, Rafael Ltd.;  
Visiting Researcher in the Field of Engineering, The Technion - Israel Institute of Technology [Full Bio](#)

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[A Thermodynamic Perspective on the Interaction of Radiofrequency Radiation with Living Tissue](#)  
[Radio Frequency radiation related cancer – assessing causation in the occupational/military setting](#)



*Opportunistic and Experimental Epidemiology with Cross-Sectional Evaluations of Hearing, Memory, Reaction Time, Reproductive Function*, **Devra Davis, MSc, MPH, PhD**, Founder and President of Environmental Health Trust, Visiting Professor of Medicine at The Hebrew University Hadassah Medical School and Ondokuz Mayıs University Medical School [Full Bio](#)



*Electrohypersensitivity: Clinical Observations, Data Gaps*, **Yael Stein, MD**,  
Resident Anesthesiologist, Hadassah Medical Center, Jerusalem  
[Full Bio](#)  
[PDF of January 2016 IIAS Presentation](#)



*Comments on the Relative Value of Cohort, Case-Control and Case Series Analyses*, **Iris Udasin, MD, FACPM**, Professor, & Medical Director of Employee Health, Rutgers University Environmental and Occupational Health Sciences Institute (EOHSI); New Jersey Principal Investigator for the World Trade Center Medical Monitoring and Treatment Program [Full Bio](#)

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*Pending Reviews by ICNIRP Regarding 4g/5g and Future Modeling Issues, **Leor Alon, MS, PhD**, Postdoctoral Fellow in Electrical Engineering, NYU School of Medicine*



*Virtual Reality: Modeling of Exposures to Children and Adults: An Update, **Claudio Fernandez, MSc, PhD**, Associate Professor at the Federal Institute of Education, Science and Technology of Rio Grande do Sul, Canoas, Brazil; Founding Dean of the Electrical Engineering School*

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