

Commonwealth Club of California
595 Market Street, 2nd Floor, San Francisco, CA, 94105
Tel.: 415-597-6700 or www.commonwealthclub.org

“The Health Effects of Electromagnetic Fields”

NOVEMBER 18, 2010 – 11:15 a.m. Registration and Light Lunch.
Program: 12:00-4:30 p.m. (\$20 members/\$32 non-members/\$10 students)

Radiation emitted by cell phones and cell towers has been linked to DNA damage, cancer, immunological impairment, neurological diseases, impaired fertility and impacts on neurological function, including cognition, behavior, performance, mood status, and disruption of sleep. The radiation is also harming animals and nature, and is as much an environmental as human health issue. Join us for an afternoon of riveting scientific and health policy presentations about the little known consequences of telecommunications technologies, electrification and new utility technologies like Smart Meters, and for a discussion afterwards of how governments, businesses, parents and schools should best respond. Important new research will be presented on EMF impacts on DNA, heart function and the role of electrification in the diseases of civilization, such as heart disease, diabetes, cancer and suicide.

12:00 – 12:10 p.m.: Introductory Remarks –

William Grant, PhD, Chairman of the Health & Medicine Forum, The Commonwealth Club, & Camilla Rees, Co-Author of “Public Health SOS: The Shadow Side of the Wireless Revolution”

12:10 – 1:15 p.m.

PANEL I – History of Electromagnetic Pollution in Our Midst



Eileen O'Connor is Director of the **Radiation Research Trust** in the U.K., one of Europe's most effective health advocates on the subject of electromagnetic fields, and founding Board Member of the International EMF Alliance, a consortium of global EMF advocacy groups. Nine years ago, Eileen learned she had breast cancer, and was living in a cancer cluster within 100 meters of a cell tower. With the support of leading scientists, CEOs and politicians, Eileen became a health catalyst who has educated the

British Parliament, UK Health Protection Agency, WHO and the European Union on this emerging public health issue.



Olle Johansson, PhD, Associate Professor and head of the Experimental Dermatology Unit, Department of Neuroscience, **Karolinska Institute**, Stockholm, Sweden, and Professor, The Royal Institute of Technology. Dr. Johansson is a leading world authority in the field of EMF radiation and health effects. He has published more than 500 original articles, reviews, book chapters and conference reports within the field of basic and applied neuroscience. His interests include the health effects of man-made electromagnetic fields, as well as the functional impairment electrohypersensitivity.



Starling W. Childs, M.S. is a geologist, forestry consultant, and adjunct faculty member at the **Yale School of Forestry and Environmental Studies**, who has focused on the effects of electromagnetic radiation on wildlife and nature. He is President of the Berkshire-Litchfield Environmental Council and a partner in EECOS, an environmental land-use consulting firm. He is heir to Great Mountain Forest in Norfolk, CT, a 6,000-acre privately-held property, home to many ongoing environmental research and educational projects as well as experiential education for Yale Forestry graduate students in resource mapping, land navigation, wildlife inventory, etc. (3 min video)



Magda Havas, PhD is Associate Professor of Environmental & Resource Studies at **Trent University, Canada**, where she teaches and does research on the biological effects of environmental contaminants, including radio frequency radiation, electromagnetic fields, dirty electricity and ground current. She has served as expert witness on matters dealing with electrical pollution in both Canada and the United States. Dr. Havas was the author of a 50-page scientific analysis on the potential adverse health and environmental impacts of a proposed citywide Wi-Fi initiative in San Francisco in 2007. Havas is author of the new BRAG Antenna Ranking of Schools Report, which teaches schools how they can assess radiation risk from neighborhood cell towers and antennas, and educates on minimizing microwave radiation in schools generally. She has conducted groundbreaking scientific research on the health impacts of electromagnetic fields, including demonstrating connections between wireless radiation and heart irregularities and diabetes. Dr. Havas is co-author of “Public Health SOS: The Shadow Side of the Wireless Revolution”, published from questions asked at a forum on EMF & Health at the Commonwealth Club in 2008, widely distributed globally to educate governments and the media on biological effects of microwave radiation. Dr. Havas is the creator of an important new EMF educational series, “Zory’s Archives”, summarizing thousands of previously classified U.S. military research studies and translations from Eastern European and Russian research demonstrating it has been well known, since at least the 1950s, that radiation of the kind used by cell phones and Wi-Fi networks is extremely harmful to health. www.magdahavas.com.



Moderator: Camilla Rees, MBA, Ms. Rees is Founder of ElectromagneticHealth.org, **Campaign for Radiation Free Schools** and the [EMF Help Blog™](http://EMFHelpBlog.com); Co-Author, “*Public Health SOS: The Shadow Side of the Wireless Revolution*” with Magda Havas, PhD, and Co-Author of “*Cellphones and Brain Tumors: 15 Reasons for Concern*” with the International EMF Collaborative. She has spoken widely on this topic, including at a U.S. Congressional briefing on wireless hazards in 2010. She is an Advisor to the International EMF Alliance.

1:15-1:25 p.m. – BREAK

1:25 – 2:25 p.m.:

PANEL II – Perspectives on the Science: Impacts on DNA, Cells, Organs and the Body’s Regulatory Systems

DNA, Fertility & Developmental Impacts



Martin Blank, PhD, Associate Professor, **Columbia University**, Department of Physiology and Cellular Biophysics; Researcher in Bioelectromagnetics; Author of the BioInitiative Report’s (www.Bioinitiative.org) section on Stress Proteins; Editor of the journal *Pathophysiology*’s special issue on Electromagnetic Fields in March 2009; and

Past President, Bioelectromagnetics Society. Dr. Blank holds a PhD from Columbia University in Physical Chemistry and a PhD from Cambridge University in Colloid Science, an interdisciplinary (biology, physics and chemistry) department.

Cell Phones & Brain Tumors—What Does the Science Show?



Joel Moskowitz, PhD, Director, Center for Family and Community Health, School of Public Health, **University of California, Berkeley**. As the UC Berkeley Prevention Research Center, it is one of 37 Prevention Research Centers supported by the Centers for Disease Control and Prevention. The center's mission is to improve the health of families and communities by establishing linkages between the University and government and community-based organizations. Dr. Moskowitz was recently involved in a review of 23 case-control studies on mobile phone use and tumor risk, involving 37,916 participants. The meta-analysis, published in the *Journal of Clinical Oncology* in October 2009, found that the more robust studies showed using a mobile phone for a decade or longer was associated with increased risk for developing a brain tumor.



Lloyd Morgan, BS, Lead author, **“Cellphones and Brain Tumors: 15 Reasons for Concern”**, Senior Science Fellow, Environmental Health Trust and Member, *Bioelectromagnetics Society*. A retired electronics engineer with 38 years of industrial experience, Morgan became involved in EMF research and advocacy as a brain tumor survivor. He is a co-author on two epidemiological papers: “Long-term use of cellular phones and brain tumours: increased risk associated with use for > or =10 years” (awarded “one of the top ten articles for 2007 in the journal of Occupational and Environmental Medicine), and “A new electromagnetic exposure metric: high frequency voltage transients associated with increased cancer incidence in teachers in a California school”. He is also author of “Estimating the Risk of Brain Tumors from Cellphone Use: Published Case-Control Studies” published in *Pathophysiology* in August 2009.



Moderator: Elizabeth Kelley, MA is Founder of **Electromagnetic Safety Alliance, Inc.** Ms. Kelley has been actively engaged in international efforts to address the potential harmful effects of electromagnetic fields from a health and public policy perspective for over 14 years. She formerly directed the International Commission for Electromagnetic Safety (ICEMS), a scientific organization, headquartered in Italy. She also was a public policy analyst for the U.S. Department of Health and Human Services in Washington D.C. Her father, Floyd L. Goss, a prominent electric engineer with the Los Angeles Department of Water and Power, was a chief designer of the first electric power grid throughout North America. Ms. Kelley has testified before the national legislative bodies of the United States, United Kingdom, Japan and Brazil.

2:25 – 2:35 p.m. – BREAK

2:35 – 3:30 p.m.:

Panel III – Underappreciated Risks



Schools, Cell Towers & Dirty Electricity

Magda Havas, PhD is Associate Professor of Environmental & Resource Studies at **Trent University, Canada**, where she teaches and does research on the biological effects of environmental contaminants, including radio frequency radiation,

electromagnetic fields, dirty electricity and ground current. She has served as expert witness on matters dealing with electrical pollution in both Canada and the United States. Dr. Havas was the author of a 50-page scientific analysis on the potential adverse health and environmental impacts of a proposed citywide Wi-Fi initiative in San Francisco in 2007. Havas is author of the new BRAG Antenna Ranking of Schools Report, which teaches schools how they can assess radiation risk from neighborhood cell towers and antennas, and educates on minimizing microwave radiation in schools generally. She has conducted groundbreaking scientific research on the health impacts of electromagnetic fields, including demonstrating connections between wireless radiation and heart irregularities and diabetes. Dr. Havas is co-author of “Public Health SOS: The Shadow Side of the Wireless Revolution”, published from questions asked at a forum on EMF & Health at the Commonwealth Club in 2008, widely distributed globally to educate governments and the media on biological effects of microwave radiation. Dr. Havas is the creator of an important new EMF educational series, “Zory’s Archives”, summarizing thousands of previously classified U.S. military research studies and translations from Eastern European and Russian research demonstrating it has been well known, since at least the 1950s, that radiation of the kind used by cell phones and Wi-Fi networks is extremely harmful to health. www.magdahavas.com.



Sam Milham, MD, MPH, retired physician-epidemiologist, Washington State Department of Health; author of new book ***“Dirty Electricity: Electrification and the Diseases of Civilization”*** and Member of the Bioelectromagnetics Society. Dr. Milham is a winner of the prestigious Ramazzini prize for his pioneering work in the occupational risks for cancer from electromagnetic fields. He has long been on the forefront of understanding biological effects from electromagnetic fields and was the

first to link workers exposed to EMFs with higher rates of leukemia in 1982. Milham’s recent research has linked a school cancer cluster among teachers to ‘dirty electricity’, and has connected diseases such as heart disease, cancer, diabetes and suicides in the early part of the 20th century, previously assumed to be a function of urbanization, with electrification. He has also shown that much cancer in firefighters is due to radiofrequency radiation (RF) exposure, not to inhaled carcinogens. In addition to the Ramazzini Prize, Dr. Milham was awarded the Washington State Public Health Association Annual Award and the Robert Carl Strom Foundation Humanitarian Award.

‘Smart Meters’ – The Shortsightedness of New, Radiation-Emitting Utility Technologies



Elizabeth Kelley, MA is Founder of **Electromagnetic Safety Alliance, Inc.** Ms. Kelley has been actively engaged in international efforts to address the potential harmful effects of electromagnetic fields from a health and public policy perspective for over 14 years. She formerly directed the International Commission for Electromagnetic Safety (ICEMS), a scientific organization, headquartered in Italy. She also was a public policy analyst for the U.S. Department of Health and Human Services in Washington D.C. Her

father, Floyd L. Goss, a prominent electric engineer with the Los Angeles Department of Water and Power, was a chief designer of the first electric power grid throughout North America. Ms. Kelley has testified before the national legislative bodies of the United States, United Kingdom, Japan and Brazil.



Moderator: Camilla Rees, MBA, Ms. Rees is Founder of ElectromagneticHealth.org, **Campaign for Radiation Free Schools** and the [EMF Help Blog™](http://EMFHelpBlog.com); Co-Author, *“Public Health SOS: The Shadow Side of the Wireless Revolution”* with Magda Havas, PhD, and Co-Author of “Cellphones and Brain Tumors: 15 Reasons for Concern” with the International EMF Collaborative. She has spoken widely on this topic, including at a U.S. Congressional briefing on wireless hazards. She is an Advisor to the International

EMF Alliance.

3:30 – 3:40 p.m. – BREAK

3:40 – 4:30 p.m.:

Panel IV – Toward the Future

New Recommended Exposure Guidelines—The Rationale?



Olle Johansson, PhD, Associate Professor and head of the Experimental Dermatology Unit, Department of Neuroscience, [Karolinska Institute](#), Stockholm, Sweden, and Professor, The Royal Institute of Technology. Dr. Johansson is a leading world authority in the field of EMF radiation and health effects. He has published more than 500 original articles, reviews, book chapters and conference reports within the field of basic and applied neuroscience. His interests include the health effects of man-made electromagnetic fields, as well as the functional impairment electrohypersensitivity.

10 Minute Video – Public Health Policy on Wireless Radiation



David O. Carpenter, MD serves as director of the Institute for Health and Environment at **University of Albany’s School of Public Health**. He previously served as director of the Wadsworth Laboratory of the New York State Department of Health. Carpenter was recently named to New York’s Renewable Energy Task Force, charged with implementing plans to reduce electricity use through new energy efficiency programs in industry and government. Carpenter, who received his doctorate from Harvard Medical School, has 220 publications, 37 reviews and book chapters and 12 other publications to his credit.



Gabriel North Seymour, Esq. Gabriel North Seymour is a legal advocate engaged in fighting corporate bullies and abusive government agencies to protect individual constitutional rights, environmental resources, preservation of landmarks, human rights, and birds and wildlife. Her legal practice is heavily focused on the effects of non-ionizing radiation on nature and wildlife. She follows in the large footsteps of her father, Whitney North Seymour, Jr., co-founder of the Natural Resources Defense Council, and grandfather, Whitney North Seymour, who was President of the American Bar Association.



Whitney North Seymour, Jr., Esq. Mr. Seymour is Co-Founder, Natural Resources Defense Council; Board Member, Center for Responsive Politics (tracks money in politics and its effect on elections and public policy), former New York State Senator and United States Attorney, Southern District of New York; Independent Counsel in the Watergate era, and long-time pro bono attorney focused on electromagnetic fields. A longstanding environmentalist, much of his work has been focused on the impact of EMFs on wildlife.



B. Blake Levitt is an award-winning science journalist who has researched the biological effects of nonionizing radiation since the late 1970’s. She is author of **Electromagnetic Fields, A Consumer’s Guide To The Issues And How To Protect Ourselves** (1995; 2007) for which she won an Award of Excellence from the American Medical Writers Association. She is also the editor of **Cell Towers, Wireless Convenience? or Environmental Hazard?** Proceedings of the “Cell Towers Forum” State of the Science/State of the Law (2001). Ms. Levitt authored a chapter in **Electromagnetic Environments and Health in Buildings** (2004), entitled “Moving Beyond EMF Public Policy Paralysis”, and also

formerly wrote for the New York Times. Ms. Levitt is a member of the Bioelectromagnetics Society. She has participated in U.S. Congressional briefings and was an invited speaker at the Royal College of Physicians in London on the environmental effects of ambient nonionizing radiation.



Moderator: Sissel Halmoy, M.S., Founder and **Chair, International EMF Alliance**, and Secretary General for **Citizens' Radiation Protection in Norway**. Ms. Halmoy holds a Master of Science in Cybernetics, an interdisciplinary field of study in the structure of regulatory systems. Her career has been in technical development and project management in military and oil and gas industries, involving Penguin missiles and subsea oil production technology.

Closing Words



Camilla Rees, MBA, Ms. Rees is Founder of ElectromagneticHealth.org, **Campaign for Radiation Free Schools** and the **EMF Help Blog™**; Co-Author, "*Public Health SOS: The Shadow Side of the Wireless Revolution*" with Magda Havas, PhD, and Co-Author of "*[Cellphones and Brain Tumors: 15 Reasons for Concern](#)*" with the International EMF Collaborative. She has spoken widely on this topic, including recently at a U.S. Congressional briefing on wireless hazards. She is an Advisor to the International EMF Alliance.

Program co-organized by the Commonwealth Club and ElectromagneticHealth.org in association with Citizens for Health, the American Academy of Environmental Medicine, Radiation Research Trust, EMF Safety Alliance and the International EMF Alliance. It is being sponsored by three Commonwealth Club Member-Led Forums: *Health and Medicine*, *Environment and Natural Resources* and *Science and Technology*.

MEDIA:

Members of the Press with credentials are invited for lunch in the Commonwealth Club Board Room with the panelists at 11:15 a.m. on Thursday, November 18th.

A private reception will be held off site after the program for speakers and invited guests. Credentialed media wishing to attend the reception, please email Camilla Rees at CRGR@aol.com. Capacity is limited.

TICKETS: Commonwealth Club (415) 597-6700 or
http://tickets.commonwealthclub.org/auto_choose_ga.asp?area=1