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## **Protecting Health and Welfare of Students and their Families During the COVID-19 Pandemic - Specific to Wireless Technology Use**

The corona virus epidemic has resulted in thousands of schools closing for an extended period of time. California's Governor Newsom is proposing an increase in Title 1 funding to support continued online learning at home in response to this crisis. While we congratulate Governor Newsom for his leadership on COVID-19, we urge him to support options for home schooling that do not rely on wireless technology. The BioInitiative Working Group has previously detailed science and public health implications of wireless in learning environments to Ministers of Health and Education internationally (see attached letter).

Some schools have also proposed to lend out wireless routers to families. Placing a new source of wireless radiation (a router) in homes in order to promote distance learning during this crisis is to compound the health concerns not only for students but for others in the family.

Both proposals will likely have unintended and harmful health consequences that likely outweigh any benefits to learning. Immunosuppression is an effect of chronic exposure to wireless radiofrequency radiation at levels produced by wireless routers and wireless laptop use. One router in a typical family home will affect all occupants, which may include infants and the elderly who have less resilient immune systems and as a result are at very high risk from this virus.

Internet connectivity via ethernet or hardwired computers is a safe and available alternative for most. Local television stations in California, most notably in Los Angeles have offered to dedicate TV channels to broadcast educational materials to students. This is also an excellent approach. Wireless use should be discouraged while people are sequestered at home, so that exposures can be reduced. If wireless routers are used at home, it should be for the shortest time possible and turned off overnight when not in use.

On behalf of the BioInitiative Working Group by:

David O. Carpenter, MD  
Director, Institute for Health and the Environment  
University at Albany, Rensselaer, New York USA  
Email: [dcarpenter@albany.edu](mailto:dcarpenter@albany.edu)

Cindy Sage, Co-Editor  
BioInitiative Reports  
Grass Valley, CA 95949  
Email: [sage@silcom.com](mailto:sage@silcom.com)

Dr. Lennart Hardell, MD, PhD, Professor,  
Department of Oncology, Faculty of Medicine and Health,  
Örebro University, SE-701 82 Örebro, Sweden (retired)  
The Environment and Cancer Research Foundation, Sweden  
[lennart.hardell@environmentandcancer.com](mailto:lennart.hardell@environmentandcancer.com)

See: [www.bioinitiative.org](http://www.bioinitiative.org)  
[https://bioinitiative.org/wpcontent/uploads/pdfs/sec08\\_2007\\_Evidence\\_%20Effects\\_%20Immune\\_System.pdf](https://bioinitiative.org/wpcontent/uploads/pdfs/sec08_2007_Evidence_%20Effects_%20Immune_System.pdf)  
[www.mdsafetech.org](http://www.mdsafetech.org)  
<https://mdsafetech.org/wi-fi-in-schools-2/> and <https://mdsafetech.org/wi-fi-effects/>

## **Contributing Authors to the 2007 and 2012 BioInitiative Reports**

Jitendra Behari, PhD, India  
Carlo V. Bellieni, MD, Italy  
Igor Belyaev, Dr.Sc., Slovak Republic  
Carl F. Blackman, PhD, USA  
Martin Blank, PhD, USA  
Michael Carlberg, MSc, Sweden  
David O Carpenter, MD, USA  
Zoreh Davanipour, DVM, PhD USA  
Adamantia F. Fragopoulou, PhD, Greece  
David Gee, Denmark  
Yuri Grigoriev, MD, Russia  
Kjell Hansson Mild, PhD, Sweden  
Lennart Hardell, MD, PhD, Sweden  
Martha Herbert, PhD, MD, USA  
Paul Héroux, PhD, Canada  
Michael Kundi, PhD, Austria  
Olle Johansson, PhD, Sweden  
Henry Lai, PhD, USA  
Ying Li, PhD, Canada  
Abraham R. Liboff, PhD, USA  
Lukas H. Margaritis, PhD, Greece  
Henrietta Nittby, MD, PhD, Sweden  
Gerd Oberfeld, MD, Austria  
Bertil R. Persson, PhD, Sweden  
Iole Pinto, PhD, Italy  
Paulraj Rajamani, PhD, India  
Cindy Sage, MA, USA  
Leif Salford, MD, PhD, Sweden  
Eugene Sobel, PhD, USA  
Amy Thomsen, MPH, MSPAS, USA



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The Swedish National Agency for Education  
Skolverket, SE-106 20  
Stockholm

On behalf of the BioInitiative Working Group, we urge decision-makers, public health experts and the public to educate themselves on the potential risks from wireless technologies in schools, and to choose wired teaching technologies. The well-being and educational potential of our children depend on it.

No one denies that bringing high-speed connectivity to schools is important. But it can be a wired connection and does not have to be Wi-Fi. Wireless classroom infrastructure and wireless devices for school children should be avoided. Wireless (radiofrequency radiation) emissions have been classified as a Possible Human Carcinogen by the World Health Organization International Agency for Research on Cancer since 2011. To promote wireless technologies in schools is to deliberately and knowingly disregard current health warnings from international science and public health experts ([www.bioinitiative.org](http://www.bioinitiative.org) and the 2009 Special Edition of Pathophysiology 16: 2009).

Saturating schools with wireless technology will also create unnecessary liability for school districts and municipalities. Public concern is reasonably justified and is already high. Ignoring warnings about risks from wireless technologies to school children will likely result in a loss of public trust and confidence in institutions.

Epidemiological studies show links between radiofrequency radiation (RFR) exposure and cancers, neurological disorders, hormonal changes, symptoms of electrical hypersensitivity (EHS) and more. Laboratory studies show that RFR exposure increases risk of cancer, abnormal sperm, learning and memory deficits, and heart irregularities. Fetal exposures in both animal and human studies result in altered brain development in the young offspring, with disruption in learning, memory and behavior. The brain development of a fetus can be impaired by in-utero cell phone radiation exposure from the pregnant mother. The evidence for these statements is based on hundreds of published, peer-reviewed scientific studies that report adverse effects at levels much lower than current federal safety limits. Wi-Fi in schools, in contrast to hardwired internet connections, will increase risk of neurologic impairment and long-term risk of cancer in students. Those who are responsible for schools, pre-schools and day-care centers cannot avoid responsibility simply by asserting compliance with existing legal, but outdated and inadequate public safety limits.

Those who develop educational technology should be looking forward and helping school administrators and municipal leaders to access safe, wired solutions. Alternatives to potentially hazardous exposures to wireless radiation should be offered by choosing to support wired educational technologies.



For the BioInitiative Working Group by:

Lennart Hardell, MD, PhD  
Department of Oncology Orebro University Hospital Orebro, Sweden  
E-mail: [lennart.hardell@orebroll.se](mailto:lennart.hardell@orebroll.se)

Cindy Sage, MA  
Sage Associates, Santa Barbara, CA USA  
Email: [sage@silcom.com](mailto:sage@silcom.com)

David O. Carpenter, MD  
Director, Institute for Health and the Environment  
University at Albany, Rensselaer, New York USA  
Email: [dcarpenter@albany.edu](mailto:dcarpenter@albany.edu)

cc: Jan Björklund, Minister for Schools (Ministry of Education and Research, Swedish Government Offices, SE-103 33 Stockholm; E-mail: [utbildningsdepartementet.registrator@gov.se](mailto:utbildningsdepartementet.registrator@gov.se))

Maria Larsson, Minister for Children and the Elderly (Ministry of Health and Social Affairs, Swedish Government Offices, SE-103 33 Stockholm; E-mail: [socialdepartementet.registrator@gov.se](mailto:socialdepartementet.registrator@gov.se))

Göran Hägglund, Minister for Health and Social Affairs (Ministry of Health and Social Affairs, Swedish Government Offices, SE-103 33 Stockholm; E-mail: [socialdepartementet.registrator@gov.se](mailto:socialdepartementet.registrator@gov.se))

Lena Ek, Minister for the Environment (Ministry of the Environment, Swedish Government Offices, SE-103 33 Stockholm; E-mail: [miljodepartementet.registrator@gov.se](mailto:miljodepartementet.registrator@gov.se))

The Swedish National Agency for Education (Skolverket, SE-106 20 Stockholm, E-mail: [registrator@skolverket.se](mailto:registrator@skolverket.se))

The National Board of Health and Welfare (Socialstyrelsen, SE-106 30 Stockholm; E-mail: [socialstyrelsen@socialstyrelsen.se](mailto:socialstyrelsen@socialstyrelsen.se))

**Swedish Radiation Safety Authority** (Strålsäkerhetsmyndigheten, SE-171 16 Stockholm; E-mail: [registrator@ssm.se](mailto:registrator@ssm.se))

The Public Health Agency of Sweden (Folkhälsomyndigheten, SE-171 82 Solna; E-post: [info@folkhalsomyndigheten.se](mailto:info@folkhalsomyndigheten.se))

The Swedish Association of Local Authorities and Regions (Sveriges Kommuner och Landsting, SE-118 82 Stockholm; E-mail: [info@skl.s](mailto:info@skl.s))

The Ombudsman for Children in Sweden (Barnombudsmannen, Box 22106, SE-104 22 Stockholm; E-mail: [info@barnombudsmannen.se](mailto:info@barnombudsmannen.se))



## **Contributing Authors of the the 2007 and 2012 BioInitiative Working Groups**

Jitendra Behari, PhD, India  
Carlo V. Bellieni, MD, Italy  
Igor Belyaev, Dr.Sc., Slovak Republic  
Carl F. Blackman, PhD, USA  
Martin Blank, PhD, USA  
Michael Carlberg, MSc, Sweden  
David O Carpenter, MD, USA  
Zoreh Davanipour, DVM, PhD USA  
Adamantia F. Fragopoulou, PhD, Greece  
David Gee, Denmark  
Yuri Grigoriev, MD, Russia  
Kjell Hansson Mild, PhD, Sweden  
Lennart Hardell, MD, PhD, Sweden  
Martha Herbert, PhD, MD, USA  
Paul Héroux, PhD, Canada  
Michael Kundi, PhD, Austria  
Olle Johansson, PhD, Sweden  
Henry Lai, PhD, USA  
Ying Li, PhD, Canada  
Abraham R. Liboff, PhD, USA  
Lukas H. Margaritis, PhD, Greece  
Henrietta Nittby, MD, PhD, Sweden  
Gerd Oberfeld, MD, Austria  
Bertil R. Persson, PhD, Sweden  
Iole Pinto, PhD, Italy  
Paulraj Rajamani, PhD, India  
Cindy Sage, MA, USA  
Leif Salford, MD, PhD, Sweden  
Eugene Sobel, PhD, USA  
Amy Thomsen, MPH, MSPAS, USA