

full signal

by talal jabari

the hidden cost of cell phones

fullsignalmovie.com

portland screening sunday february 21 @4pm

with special appearance
by director talal jabari

hollywood theater
40th & sandy

full signal

sunday

february 21

@4pm

hollywood theater | with special appearance
40th & sandy | by director talal jabari

Hundreds of cell antennas are mounted on and around Portland schools, churches, and commercial buildings. The City is telling us to expect 800 new cell towers on residential streets in the next four years.

Attend this one-time-only special Portland screening of Full Signal, an important new documentary about cell towers, the wireless industry, and the contradiction between health and finance.

details: www.RespectPDX.org

Studies on the health effects of RF radiation, from The Ecologist

The DEC/JAN 2008 issue of The Ecologist magazine, "the world's most respected environmental affairs magazine," carried a report on the health impacts of Wi-Fi transmissions. The following peer-reviewed studies on health effects from cell towers ("mobile phone masts" in U.K. parlance) and other sources of RF radiation were included in the report. For links to the actual studies, visit: www.RespectPDX.org

Santini et al., 2002: 530 people living near to mobile phone masts reported more symptoms of headache, sleep disturbance, discomfort, irritability, depression, memory loss, and concentration problems the closer they lived to the mast.

Oberfeld et al., 2004: 97 people living near to mobile phone masts reported more symptoms of fatigue, irritability, headaches, nausea, loss of memory, visual disorder, dizziness and cardiovascular problems the higher their level of microwave exposure.

Eger et al., 2004: A three-fold increase in the incidence of malignant tumours was found after 5 years exposure in people living 400 metres from a mobile phone mast.

Wolf & Wolf, 2004: A four-fold increase in the incidence of cancer among residents living near a mobile phone mast for between 3 and 7 years was detected.

REFLEX, 2004: A four year study on human cells found that, after exposure to low-power microwaves, the cells showed signs of DNA damage and mutations which were passed on to the next generation.

Abdel-Rassoul, 2007: Residents living under and opposite a long-established mobile phone mast in Egypt reported significantly higher occurrences of headaches, memory changes, dizziness, tremors, depressive symptoms and sleep disturbance than a control group.

Bortkiewicz et al., 2004: Residents close to mobile phone masts report more incidences of circulatory problems, sleep disturbances, irritability, depression, blurred vision, and concentration difficulties the nearer they live to the mast.

Hutter et al., 2006: 365 people living near to mobile phone masts reported higher incidences of headaches the greater the closer they lived to the masts.

Stewart report, 2000: Research conducted by HPA [Health Protection Agency, UK] chief William Stewart advised that the main beam of a mobile phone mast should not be allowed to fall on any part of a school's grounds.

Hecht & Balzer, 1997: A huge review of studies which concluded a vast array of health effects, including insomnia, changes in brain-wave activity, cardiovascular problems and increased susceptibility to infections.

Carpenter & Sage, 2007: Conclude that an outdoor maximum exposure limit of 0.6 V/m should be set, and that Wi-Fi systems should be replaced with wired alternatives

ECOLOG-Institut, 2000: Found evidence for increases in immune system damage, central nervous system damage, and reduced cognitive function. Recommends an exposure limit 1000 times lower than current guidelines.

Kolodynski & Kolodynska, 1999: School children living near a radio location station in Latvia suffered reduced motor function, memory and attention spans.

FULL SIGNAL

Since 1997 and the onset of GSM telephony, more and more cellular antennas have been popping up in neighborhoods, near children's schools and on rooftops all around the world to support an ever-growing number of cell phone users.

Today with over 3.5 billion cell phone users around the world and hundreds of thousands of cell phone towers people are starting to feel the effects.

Full Signal talks to a number of leading scientists that have been studying the effects of cellular technology on human beings for years; sheds light on the triumphs and tribulations of lawmakers, lawyers and activists fighting to regulate antenna placement; and hears from those who have suffered and lost due to cellular technology.

Filmed in ten countries, Full Signal examines the contradiction between health and finance, one of the many ironies in the fight to regulate antenna placement.

With hundreds of cell towers and antennas all over Portland's schools, churches and buildings, and the City telling us to expect 800 cell towers on residential streets in the next few years, now is the time to learn about this important issue!

Full Signal is playing at the Hollywood Theater on Sunday Feb. 21st at 4pm. Director Talal Jabari will be attending and will speak after the film. Tickets are \$8 and are available at the Hollywood Theater box office or online at www.hulahub.com/event?id=92855

Sunday Feb. 21st at 4pm HOLLYWOOD THEATER

► **For more information please visit RespectPDX.org**

Sponsored by RespectPDX

Endorsed by The Oregon Center for Environmental Health and Jobs With Justice



TALAL JABARI, DIRECTOR

Talal Jabari is a Palestinian/American who upon completing his Masters degree studies in 2000 and returning to Jerusalem, found himself thrust into the world of journalism by the onset of the Second Intifada. First as a fixer, then as a reporter, he covered the escalating violence for such prominent news sources as BBC World Service, South Florida Sun-Sentinel, and Al Ahram Weekly.

In 2002, Talal started his TV career as an associate producer for CBS News as well as a field producer for the CBS news magazine 60 Minutes.

His next career jump was as line producer and production coordinator of a 5-documentary film series entitled "The Shape of the Future," which has won several awards. He also produced 4 episodes and did a portion of the filming, for Al Jazeera Documentary Channel's flagship 8-part series: "Israel from Within".

Research shows that installing a cell tower reduces the property values of homes near the tower. An in-depth study from the Summer 2005 issue of the respected real estate journal, *The Appraisal Journal*, looked at the effects of wireless base stations on property values in New Zealand. The study concluded that "[t]he results of the sales analysis show prices of properties were reduced by around 21% after a[n] [antenna facility] was built in the neighborhood." A more limited follow-up study, conducted by the same authors in Florida and appearing in *The Appraisal Journal's* Fall 2007 issue, also found a statistically significant negative effect on property values.

Concerns about negative health effects

Multiple peer-reviewed studies have documented significant effects on people living in the vicinity of cell towers. For a list of some of these studies, see the back of this page.

In 2009, the European Parliament voted 559 to 22 (with 8 abstentions), to pass a sweeping resolution on health concerns from electromagnetic fields (EMFs), including RF radiation from cell towers. The EU resolution states that "it is important to ensure at least that schools, [day-care centers], retirement homes, and health care institutions are kept clear [of cell towers and high-voltage power lines], within a specific distance determined by scientific criteria." The proposed cell tower on Fremont and 37th Avenue would be within a few yards of neighborhood homes. (Visit our website for a link to the EU resolution.)

The Los Angeles Unified School District (LAUSD) passed a resolution in 2000 opposing the placement of cell towers on or immediately adjacent to school property, and then in 2009 passed a stronger resolution, again raising concerns about the "long-term health effects of low-frequency electromagnetic and radio-frequency emissions [from cell towers]." (Links to both resolutions are available on our website.)

Many prominent organizations and individuals endorsed the 2009 LAUSD Resolution. Among the endorsements was a powerful letter from Dr. Martin Blank, Associate Professor of Physiology and Cellular Biophysics at Columbia University. That letter is attached.

Columbia University, College of Physicians and Surgeons

Department of Physiology and Cellular Biophysics
630 West 168 Street
New York, NY 10032

Telephone: (212) 305-3644
Telefax: (212) 305-5775
EMAIL: mb32@columbia.edu

May 22, 2009

Ms. Julie Korenstein
Board Member
Los Angeles Unified School District,
Board of Education
333 South Beaudry Avenue, 24th Floor
Los Angeles, CA 90017

Re: Health effects of cell tower radiation

Dear Ms. Korenstein,

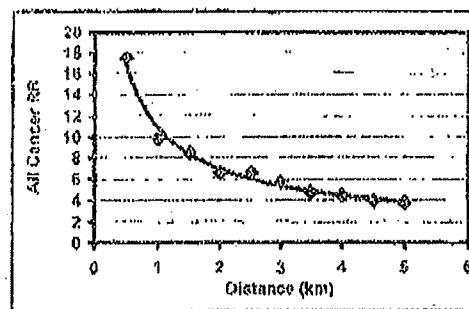
As an active researcher on biological effects of electromagnetic fields (EMF) for over twenty five years at Columbia University, as well as one of the organizers of the 2007 online Bioinitiative Report on the subject, I am writing in support of a limit on the construction of cell towers in the vicinity of schools.

There is now sufficient scientific data about the biological effects of EMF, and in particular about radiofrequency (RF) radiation, to argue for adoption of precautionary measures. We can state unequivocally that EMF can cause single and double strand DNA breakage at exposure levels that are considered safe under the FCC guidelines in the USA. As I shall illustrate below, there are also epidemiology studies that show an increased risk of cancers associated with exposure to RF. Since we know that an accumulation of changes or mutations in DNA is associated with cancer, there is good reason to believe that the elevated rates of cancers among persons living near RF towers are probably linked to DNA damage caused by EMF. Because of the nature of EMF exposure and the length of time it takes for most cancers to develop, one cannot expect 'conclusive proof' such as the link between helicobacter pylori and gastric ulcer. (That link was recently demonstrated by the Australian doctor who proved a link conclusively by swallowing the bacteria and getting the disease.) However, there is enough evidence of a plausible mechanism to link EMF exposure to increased risk of cancer, and therefore of a need to limit exposure, especially of children.

EMF have been shown to cause other potentially harmful biological effects, such as leakage of the blood brain barrier that can lead to damage of neurons in the brain, increased micronuclei (DNA fragments) in human blood lymphocytes, all at EMF exposures well below the limits in the current FCC guidelines. Probably the most convincing evidence of potential harm comes from living cells themselves when they start to manufacture stress proteins upon exposure to EMF. The stress response occurs with a number of potentially harmful environmental factors, such as elevated temperature, changes in pH, toxic metals, etc. This means that *when stress*

protein synthesis is stimulated by radiofrequency or power frequency EMF, the body is telling us in its own language that RF exposure is potentially harmful.

There have been several attempts to measure the health risks associated with exposure to RF, and I can best summarize the findings with a graph from the study by Dr. Neil Cherry of all childhood cancers around the Sutro Tower in San Francisco between the years 1937 and 1988. Similar studies with similar results were done around broadcasting antennas in Sydney, Australia and Rome, Italy, and there are now studies of effects of cellphones on brain cancer. The Sutro tower contains antennas for broadcasting FM (54.7 kW), TV (616 kW) and UHF (18.3 MW) signals over a fairly wide area, and while the fields are not uniform, and also vary during the day, the fields were measured and average values estimated, so that one could associate the cancer risk with the degree of EMF exposure.



The Sutro tower contains antennas for broadcasting FM (54.7 kW), TV (616 kW) and UHF (18.3 MW) signals over a fairly wide area, and while the fields are not uniform, and also vary during the day, the fields were measured and average values estimated, so that one could associate the cancer risk with the degree of EMF exposure.

The data in the figure are the risk ratios (RR) for a total of 123 cases of childhood cancer from a population of 50,686 children, and include a 51 cases of leukaemia, 35 cases of brain cancer and 37 cases of lymphatic cancer. It is clear from the results that the risk ratio for all childhood cancers is elevated in the area studied, and while the risk falls off with radial distance from the antennas, as expected, it is still above a risk ratio of 5 even at a distance of 3km where the field was $1\mu\text{W}/\text{cm}^2$. This figure is what we can expect from prolonged RF exposure. In the Bioinitiative Report, we recommended $0.1\mu\text{W}/\text{cm}^2$ as a desirable precautionary level based on this and related studies, including recent studies of brain cancer and cellphone exposure.

As I mentioned above, many potentially harmful effects, such as the stress response and DNA strand breaks, occur at nonthermal levels (field strengths that do not cause a temperature increase) and are therefore considered safe. It is obvious that the safety standards must be revised downward to take into account the nonthermal as well as thermal biological responses that occur at much lower intensities. Since we cannot rely on the current standards, it is best to act according to the precautionary principle, the approach advocated by the European Union and the scientists involved in the Bioinitiative report. In light of the current evidence, the precautionary approach appears to be the most reasonable for those who must protect the health and welfare of the public and especially its most vulnerable members, children of school-age.

Sincerely yours,

Martin Blank
Martin Blank, Ph.D.

Associate Professor of Physiology and Cellular Biophysics



Oregon Center for Environmental Health

February 10, 2010

Re: Opposition to 60 ft. Cell phone pole/tower to be installed at 37th and Fremont

Dear neighborhood businesses:

The Oregon Center for Environmental Health is a non-profit dedicated to protecting public health and the environment through community action to eliminate toxic pollutants. Our business is located at 49th and NE Fremont. As your neighbor we feel it important to let you know our position on the cell phone tower debate and our support for Respect PDX, a neighborhood group which recently formed to oppose the siting of a cell tower in our neighborhood.

Respect PDX (www.RespectPDX.org) organized in the Wilshire/Beaumont district to oppose installation of the Wi-max tower at the Wilshire Market and Deli located at NE Fremont and 37th. Parents who live in the shadow of the potential tower are concerned about the long-term health effects on their children from the electromagnetic radiation that the tower emits. Also there is broader neighborhood concern because the location of the potential tower is in close proximity to a school and in a residential area.


Cell phones and cell towers are on the newer end of technology. As with any new technology or chemical it is often put on the market without adequate study or with limited studies paid for by the manufacturer.

Today, more and more scientific research is coming out which suggests there is a risk from cumulative exposure to low level radiofrequency waves. Even the FCC which licenses cell phone towers cannot say that they are safe. In 2004, The International Association of Fire Fighters (IAFF) opposed locating cell towers on fire stations because of health and safety concerns over radio frequency and microwave radiation. According to the IAFF they will "oppose such sitings until such time it is proven that such sitings are not hazardous to the health of our members". It has not been proven safe to date.

OCEH stands with our neighbors in opposition to the siting of the cell tower based on "The Precautionary Principle" which states: *"When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."* The evidence points to the potential for serious public health consequences with the widespread use of and exposure to such emissions. This being the case, surely we should be taking a precautionary approach!

The Beaumont Wilshire Neighborhood Association recently took a vote to oppose locating the 60 foot pole/tower in the area. Even West Linn-Wilsonville School District recently turned down a tower near its schools declining the money that was offered to keep the tower on property inherited by the district.

We are asking for your support in opposing the new wi-max tower in our neighborhood. Please feel free to contact me or Respect PDX if you have further questions. (Respect PDX -503-228-6384 or anne@RespectPDX.org)

 *Secondarily Chlorine Free*

We also invite you to learn more! OCEH is helping sponsor the documentary "Full Signal" on Sunday Feb. 21st at the Hollywood Theatre at 4 p.m. Talal Jabari, the film's director will be speaking after the film. In 2002, Jabari started his TV career as an associate producer for the CBS news magazine 60 : minutes. This is his first film as the director. "There are 3.5 billion cell phone users in this world. So the chances are if you are alive, you are being touched by electromagnetic radiation related to cell phone frequencies." says Jabari. "An increasing number of studies are starting to correlate certain ailments with cellular technology, ranging from dizziness to tumors." Full Signal takes the position that it is highly unlikely that these scientist's findings are all incorrect. Tickets are available online at www.RespectPDX.org . We hope to see you there.

Could you please notify OCEH of any Beaumont Wilshire Business Association meetings related to this issue? And please feel free to stop by our store and say hi. This is a wonderful neighborhood and we feel honored to be a part of it. It is important to stand with our neighbors during these tough times. We hope you will join us and oppose the siting of a cell tower at 37th and Fremont.

Sincerely

A handwritten signature in cursive script that reads "Mari Anne Gest".

Mari Anne Gest
Executive Director
Oregon Center for Environmental Health

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Parsons, Susan

From: Talal Jabari [director@fullsignalmovie.com]
Sent: Tuesday, February 09, 2010 4:36 PM
To: Parsons, Susan
Subject: Full Signal

Ms. Parsons,

I would like to speak before City Council at the Wednesday February 17 meeting.

My name is Talal Jabari. My address is 84 Sandalwood Lane, Rhinebeck, NY
Phone: 1-302-565-4948

I am the director of the film FULL SIGNAL, which will be shown in Portland February 21.

I would like to speak about cell towers, health and public policy, and invite the council to attend the film showing.

Please let me know if you need more information.

Thank you.
Talal Jabari

Talal Jabari
Director

Full Signal (2009)

"AWARD of MERIT" Accolade Competition 2010

"BEST DOCUMENTARY" 5th Myrtle Beach International Film Festival

"OFFICIAL SELECTION" 7th Big Sky Documentary Film Festival, Missoula MT

"OFFICIAL SELECTION" 18th Environmental Film Festival, Washington DC

"OFFICIAL SELECTION" 10th Santa Fe Film Festival

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Skype: captureproductions

FullSignalMovie.com

And check out our Facebook Page

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2/10/2010

Request of Talal Jabari to address Council regarding the film Full Signal, cell towers, health and public policy (Communication)

FEB 17 2010

PLACED ON FILE

Filed FEB 11 2010

LaVonne Griffin-Valade
Auditor of the City of Portland

By 

COMMISSIONERS VOTED AS FOLLOWS:		
	YEAS	NAYS
1. Fritz		
2. Fish		
3. Saltzman		
4. Leonard		
Adams		