

Eileen O'Connor, Director of the Radiation Research Trust and Susan Foster, Medical Writer and Radiation Research Trust Advisor



Discovering Cancer: From Grassroots to Global Thursday, 16 July 2015 University of Liverpool





The EM Radiation Research Trust Reg. Charity No: 1106304 http:www.radiationresearch.org

The Radiation Research Trust (RRT) are leading supporters of the precautionary approach to Electromagnetic Radiation. The RRT gained charitable status in 2003. We are also indebted to Independent Scientific, Public Health and Technical Advisors.

> Photograph taken at Number 10 Downing Street, London





#### Eileen O'Connor's story - Why am I here?

I had suffered for years with sleep problems, headaches, dizzy spells and vertigo only to be told by doctors that it was stress or a virus. If only I had known that I was suffering with electrosensitivity. By the age of 38 I was diagnosed with breast cancer. I then discovered that I was living in a cancer cluster in Wishaw, Sutton Coldfield. I had been living 100m from a phone mast and exposed to microwave radiation 24/7 for many years. I have no doubt that this radiation was responsible for damaging my health.

Wishaw is far from unique. There are many other people living in cancer clusters around phone masts throughout the world.



# Wishaw T-Mobile mast after 7 years 2001 the story unfolds

- Five ladies developed breast cancer
- One case of prostate cancer
- One bladder cancer
- One lung cancer
- Three cases of pre-cancer cervical cells
- One motor neurone disease, age 51, who also had massive spinal tumour
- People developed benign lumps
- Electro sensitivity
- Three cases of severe skin rashes
- Many villagers suffering with sleep problems, headaches, dizziness and low immune system problems
- Horse with blood problems

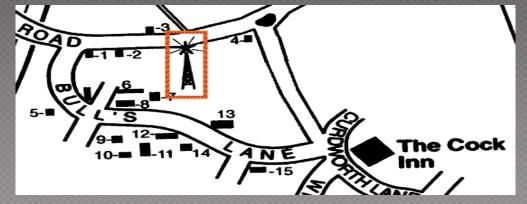


#### Removal of phone mast November, 2003

#### The T-Mobile Wishaw phone mast 1994-2003

 Many of the residents reported a restored feeling of well-being, improvement in sleep patterns and increased energy levels. Simple things like headaches and dizzy symptoms disappeared

Map of 18 houses in small village up to 500m surrounding the mast. It was calculated that 77% of residents suffered with symptoms associated with radiation from the mast.







#### Information from Grassroots Matters

Quote from Sir William Stewart at the RRT Conference, 2008

- Sir William is the retired Chairman for the UK Health Protection Agency now Public Health England. He was the Chief Scientist reporting directly to the Conservative and Labour Governments.
- Quote: "Since 2000 there has been a mass of publications, reports, observations, and views purporting at the very least to implicate phones/base stations as a cause of adverse health effects. At a time of uncertainty when more information is required, non-peer reviewed articles should not be ignored. Doing so is ridiculous. They may be right but unproven and/or offer pointers to be thought about and followed up."



## Hidden Truth: ECOLOG Study T-Mobile Germany 2000

The ECOLOG review of over 220 peer reviewed and published papers found evidence for:

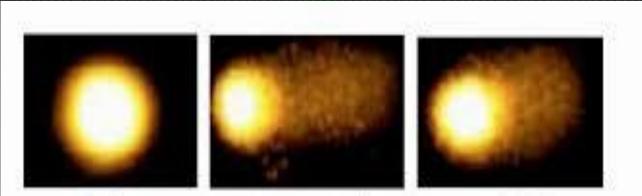
- Effects on central nervous system
- Cancer initiating and promoting effects
- Impairments of certain brian functions
- Loss of memory and cognitive function
- ECOLOG called for an immediate downward regulation for the ICNIRP guidelines

This study, profound in its conclusions of harm, was not circulated and remained "hidden" in German until discovered and translated by HESE UK many years later.



#### **Confirmed: Mobile Phones Break DNA**

The study involved 12 research groups in 7 European countries working from 2000 to 2004. It cost more than 3 million euros.



Control

Ionising gamma irradiation Non-ionising RF-EMF exposure 0.5Gy (equivalent to 1,600 24 hours mobile phone exposure cheat x-rays) 1,800 MHz at SAR = 1.3W/kg

The effects of ionising and non-ionising radiation on DNA from the European Commission's 2004 REFLEX Study



# Epidemiological Evidence for a Health Risk from Mobile Phone Base Stations

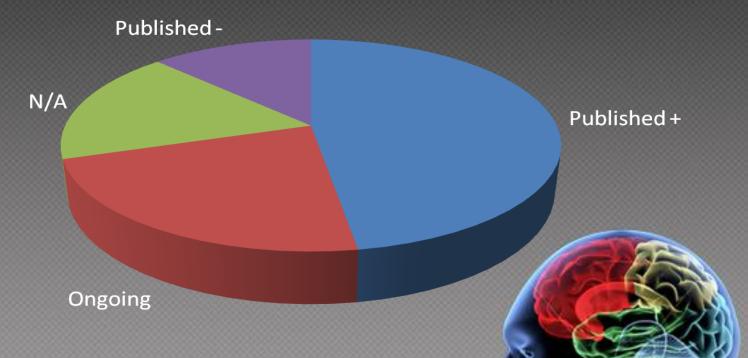
VINI G. KHURANA, LENNART HARDELL, JORIS EVERAERT, ALICJA BORTKIEWICZ, MICHAEL CARLBERG, MIKKO AHONEN published a paper in International Journal of Occupational and Environmental Health 2010;16:263–267

A review of 10 epidemiological studies assessed health effects associated with mobile phone base stations. Eight of the 10 studies reported increased prevalence of adverse neurobehavioral symptoms or cancer in populations living at distance 500 meters from base stations.



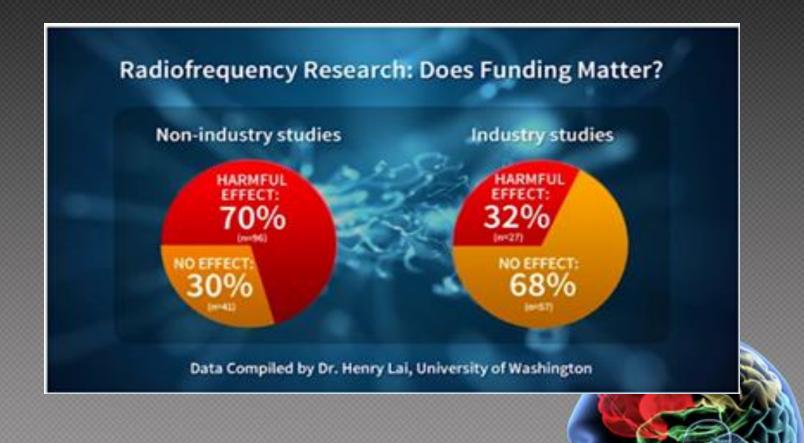


WHO EMF Project database and Epidemiological studies on mobile communication base stations 80% research find increases in epidemiological studies on Mobile masts. Highlighted at the 3RD Mobile Communications Seminar "Health, Environment & Society in Brussels, on Nov. 20 and 21, 2006





### SCIENCE FOR SALE





#### Working with Media

Worked closely with national and international TV and radio including local and national news reports such as Sutton Coldfield News and Sutton Coldfield Observer, Birmingham Mail and Birmingham Post, Champion newspaper, Formby Times, Champion newsLiverpool Echo, Telegraph, Guardian, Daily Mail, magazines and appearing on Sky news, GMTV, This Morning, Irish TV, RussianTV, local TV and radio. Successfully completed a political reality ITV show called "Vote for Me."





## Political Lobbying

Worked with cross party members of the UK and European • parliaments offering help to provide advice and information for parliamentary questions and reports, also presented written and verbal evidence at local and national Government level in the UK, European Parliament and EU Commission. Involved with numerous international presentations & government led debates. Provided support and information for the Sefton and Birmingham and Liverpool fire-fighters and Liverpool deaf school. Invited to give evidence on phone masts to Sefton Scrutiny and Review Committee at the Health and Social Care inquiry and also presented at the Birmingham Scrutiny Committee on the policy on the siting of phone masts on council land and premises. Attended meetings with European Director Generals in Luxembourg and Directors at WHO Geneva.



#### Swiss Re SONAR Emerging risk insights Report - June 2013

Unforeseen consequences of electromagnetic fields **Potential impact** rated as **HIGH** and likely to hit the casualty area of insurance business.

Concerns about potential implications for human health, in particular with regard to the use of mobile phones, power lines or antennas for broadcasting. Over the last decade, the spread of wireless devices has accelerated enormously. The convergence of mobile phones with computer technology has led to the proliferation of new and emerging technologies. This development has increased exposure to electromagnetic fields, the health impacts of which remain unknown. Liability rates likely to rise in next 10 years!



#### WHO Is Responsible?

Paolo Vecchia, Chairman for ICNIRP presented at the RRT conference in September, 2008

- In his presentation, he made it very clear that: "the ICNIRP guidelines are neither mandatory prescriptions for safety, the "last word" on the issue nor are they defensive walls for Industry or others."
- This statement makes it clear that the decision to adopt these guidelines into national legislation as "sufficient to protect public health" is political.

The government's misuse of the guidelines is the primary issue



# From small village battle against a phone mast to International Campaign

- Co –Founder/Chairman SCRAM (Seriously Concerned Residents Against Masts) - Wishaw, UK
- Co-Founder/Director for the Radiation Research Trust (RRT)
- Co-Founder board member for the International EMF Alliance: <a href="http://www.iemfa.org">http://www.iemfa.org</a> - Global
- Member of the UK Health Protection Agency, EMF Discussion Group
- Member of EU Commission Stakeholder Dialogue Group on EMF: <u>http://ec.europa.eu/health/electromagnetic\_fields/eu\_actions/stake</u> <u>holder\_dialogue\_group/index\_en.htm</u> - Europe





#### Susan Foster, M.S.W. - Why am I Here?

I am a medical writer and the organizer of a brain study of six California firefighters exposed to RF radiation from a cell tower adjacent to their fire station for over 5 years.

The study was conducted by Gunnar Heuser, M.D., PhD of California and Washington. As a result of the study, I wrote Resolution 15 which was introduced to the International Association of Firefighters [covering the US and Canada]. Res 15 called for a one million dollar study of firefighters throughout the US and Canada based upon our pilot study.

At the IAFF convention held in Boston in August 2004, Res 15 was passed by an 80% margin and received a standing ovation. On the convention floor, there was a call for and immediate moratorium on the placement of cell towers on stations.



#### Symptoms Reported by the Firefighters

The California firefighters we studied worked up to ninety (90) hours per week in fire stations with cell towers in close proximity to the two (2) stations where the firefighters work, eat, and sleep. The men were experiencing profound neurological symptoms following activation of the towers in 1999.

The symptoms experienced by the firefighters, all of whom had passed rigorous physical and cognitive exams prior to being hired by the fire department, included but were not limited to the following:





- Headaches
- Extreme fatigue
- Sleep disruption
- Anesthesia-like sleep where the men woke up for 911 calls "as if they were drugged"
- Inability to sleep
- Depression
- Anxiety
- Unexplained anger
- Tinnitus
- Getting lost on 911 calls in the town they grew up in
- A 20 year medic forgetting basic CPR in the midst of resuscitating a coronary victim
- Immune-suppression manifest in frequent colds and flu



### **Daunting Neurological Results**

The neurological testing and SPECT scans [single-photon emission computed tomography] of the brain were conducted by Gunnar Heuser, MD, PhD. All six (6) firefighters were found to have brain abnormalities on SPECT scan.

We found a pervasive, hyper-excitability of the neurons which suggested the exposure to RF (microwave) radiation was causing the neurons to continually fire, without rest. RF radiation appeared to act as a constant stimulant even when the men were away from the station. We now know, 10 years later, we were seeing cell death and brain damage consistent with a pre-Alzheimer's condition.



### T.O.V.A. Testing and Implications for All

Cognitive function, reaction time, and impulse control were measured objectively using T.O.V.A. testing [Test of Variables of Attention]. In all six (6) firefighters, impairment was found with cognitive function, reaction time and impulse control. Three (3) of the six (6) firefighters were captains. The captain on each shift is in charge of making life altering decisions for all firefighters and potential victims. They order firefighters into a burning building, and conversely, they order them out before a roof may collapse, for example. Impairment of all three critical functions could cost firefighters and the community they serve either life or limb.





## Follow Up and Implications

I have followed up with the firefighters who report continued symptoms. All firefighters report profound memory loss.

Two of the firefighters, men we did not test in the pilot study but men who were exposed to RF radiation from the cell tower have gone out on psychiatric disability. This is almost unheard of among firefighters. The diagnosis was Post Traumatic Stress Disorder for one firefighter; he went out on an emergency run, and simply stopped talking after he returned to the station.





The second firefighter suffered an apparent break with reality. This occurred in the fire station after a month away for a knee injury.

This break with reality was followed by an abrupt collapse and loss of consciousness.

The psychiatric diagnoses of these two men is questioned by Dr. Heuser and myself. Why?...

Two women have suffered strokes while in the fire station with the towers fully activated. Vascular Spasm Stroke (VSS) is suspected as a possible cause by Dr. Heuser and myself of having caused not only the strokes, but it is suspected in the potentially inaccurate diagnoses of the two (2) "psychiatric" cases among the firefighters.

This may be a case of misdiagnosis by treating physicians who were unfamiliar with the potential of cell towers to create thermal effects well under the guidelines, thus heating blood in the brain and inducing VSS.



#### From Cradle to Grave

Based on the neurological abnormalities Dr. Heuser and I found in the firefighters, including hyper-excitability of the neurons which can results in cell death and consequent neuro-degenerative diseases such as Alzheimer's, Parkinson's Disease and ALS. I believe we are facing an epidemic of Alzheimer's.

The firefighters tested were in their 30's, 40's and 50's. These men are amongst the healthiest in the USA. The implications for children an young adults are of grave concern. Children's cells divide more rapidly and their skulls are thinner providing less protection against radiation for their rapidly developing brains. Children today will have a longer exposure to this form of radiation than ever before. This is the first generation to be exposed from cradle to grave.



## WHY? Untested and unregulated technology

#### **Cell Phone Radiation Penetrating Skull**







ADULT Head

CHILD - 10 Years Old

CHILD - 5 Years Old

Study by Gandi et al. University of Utah, 1996.

- 1. Children absorb more energy than adults from the same phone.
- 2. Tumors in mid brain are more deadly than those in temporal lobe.
- 3. Children's cells are reproducing more quickly than adults.
- 4. Children's immune system is not as well developed as adults.
- 5. Longer potential for life-time exposure for children than adults.





#### IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

Lyon, France, May 31, 2011 -- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as **possibly carcinogenic to humans (Group 2B)**, based on an increased risk for **glioma**, a malignant type of brain cancer, associated with wireless phone use.





#### WHO Knew: The Elephant in the Room Report by author and RRT advisor Susan Foster on 3/2/2014

Prof. Bernard Stewart, University of New South Wales and Christopher Wild, PhD, Director of the WHO's International Agency for Research on Cancer (IARC) announced to the world at the Royal Society, London that there are 14 million new cancer cases diagnosed per year and

expected to almost double in the next two decades. Both doctors called for more commitment towards prevention.

We are on the verge of a cancer Tsunami and yet they failed to mention the Elephant in the Room!







#### THE WAY FORWARD We Need to Find Biologically Friendly Frequencies

A study published in the Journal of Exposure Analysis and Environmental Epidemiology on GSM phones showing that the amount of radiation emitted by GSM phones is 28 times higher than radiation emitted from phones using the Code Division Multiple Access (CDMA) technology. GSM also emits pulses which may increase biological reactivity. We are profoundly concerned about both technologies, but the study offers a clue which may lead a "Dream Team" towards finding biologically friendly frequencies. We realise this technology is not going away.

http://www.ncbi.nlm.nih.gov/pubmed/20551994

Funding should be released to support a Dream Team of the independent experts who are top in their field as a matter of urgency.



#### Urgent guidance needed to protect public health

- The rapid growth rate of mobile phones, phone masts, Wi-Fi, smart meters, tetra and wireless communication systems, alongside various reports of adverse effects on health, has caused increased concern around the world over the potential effect of electromagnetic pollution on health and the environment
- Long term health effects are largely untested. Studies indicate that mobile phone use may be linked with brain cancers and other serious illnesses. Children are the most vulnerable.
- At present the technology is being increasingly used with no precautionary guidance to the public.





**Over 200 International Scientists Appeal to U.N. to Protect Humans and Wildlife from Electromagnetic Fields and Wireless Technology** 

Martin Blank, PhD of Columbia University, represented over 200 international scientists in an Appeal to the UN, UN Member States and the WHO on the risks of electromagnetic fields emitted by telecommunications and utility technologies. Dr. Blank offered caution in the strongest possible terms: "The time to deal with the harmful biological and health effects is long overdue. To protect our children, ourselves and our ecosystem, we must reduce exposure by establishing more protective guidelines."

http://www.businesswire.com/news/home/20150511005200/en/Intern ational-Scientists-Appeal-U.N.-Protect-Humans-Wildlife#\_vabfoWnbLVI





## Thank you for listening

This radiation knows no boundaries.

Our greatest fear is for our children and their future as no one knows what the long-term effects are and they are the most vulnerable group of people.

Who wants to be remembered in history for gambling with the lives of our sons, our daughters, our mothers, our fathers, our brothers, our sisters and our friends?

Is it worth the gamble?

