

Healing Imager, P.C.

Larry Burk, MD, CEHP

President

Megan Davies, MD

9/15/15

N.C. Department of Health and Human Services

Chief, Epidemiology Section, Division of Public Health

Megan.Davies@dhhs.nc.gov

Dear Dr. Davies,

As a radiologist specializing in MRI, I have made my living for 30 years reading scans produced by the non-thermal effects of short-term exposure of the human body to RF and EMF. These valuable pictures are generated from resonant interactions with the hydrogen protons at the cellular level below the thermal threshold. As a member of the National Safety Committee for MRI from 1987 to 1994, I began investigating potential health effects of these fields and determined that there is little evidence for hazard related to short-term exposures such as those experienced by patients in MRI.

However, I subsequently joined the Bioelectromagnetic Society and discovered there was an entire academic discipline devoted to studying the effects of long-term exposure to these fields which was largely unknown to most physicians and electrical engineers. These scientists, many of whom now participate in the IARC, found rigorous and repeatable evidence for non-thermal physiological effects and hazards including potential carcinogenicity. The initial data were limited to power lines and radar, but have now expanded exponentially to include cellphones, Wi-Fi, and smart meters.

The recent DHHS report reminds me of the early days of radiation safety when the short-term clinical use of X-rays for patients seemed to have no downside. It wasn't until the 1930s, 40 years after Roentgen's discovery, that radiologists started to report the long-term effects of chronic exposure. These early radiologists, feeling falsely reassured by the lack of apparent effects on patients, would focus the beam by putting their own hands in

2713 Winton Road
Durham, NC 27707

Phone: 919-599-3515
burk0001@yahoo.com

Healing Imager, P.C.

Larry Burk, MD, CEHP

President

it. When enough radiologists lost fingers due to radiation damage and developed leukemia and other blood diseases, radiation protection policies were implemented.

I'm afraid we are in serious danger of making a similar mistake with regard to RF/EMF long-term exposure safety issues. This analogy is particularly pertinent now that actual DNA damage has been documented by Dr. Henry Lai in the Bioinitiative 2012 report. As a former Associate Professor of Radiology at Duke, I am well versed in evaluating clinical research. For that reason the systematic review by Anke Huss et al. in 2007 showing that the studies funded by industry were far less likely to find evidence of hazard than those funded by public agencies or charities is particularly important.

North Carolina is no stranger to the concept of industry influence and bias with regard to research results, as the denial of tobacco health hazards is still a shameful legacy. It was made very clear that tobacco executives were quite aware of potential lethal risks due to their products and actively covered them up, and I think there is reason to believe that the same holds true for this industry. Let's make a more responsible choice here in our state this time and revise the DHHS report to provide an accurate and representative picture of the risks as detailed in the rebuttal by Andrew McAfee and Laura Combs.

Sincerely,

Larry Burk, MD, CEHP

Larry Burk, MD, CEHP

President, Healing Imager, PC

Durham, NC

www.nationalrad.com

Healing Imager, P.C.

Larry Burk, MD, CEHP

President

Anke Huss, et al., "Source of Funding and Results of Studies of Health Effects of Mobile Phone Use: Systematic Review of Experimental Studies," *Environmental Health Perspectives* 115 (2006): 1-4.