From: Victor Leach <victor.leach@orsaa.org>
Date: November 22, 2022
Subject: Call for IARC EMF experts

Hi All,

In the latest IARC newsletter, there is a call for experts. **https://monographs.iarc.who.int/wp-content/uploads/2022/11/Newsletter-IssueNo4-final.pdf**

I guess it is no surprise that thermal effects-only supporters hold an ANSES workshop; see attached. The header has the WHO/ IARC logo, and the IARC Director, Elisabete Weiderpass, will attend the opening. Dr Elisabete Weiderpass has been involved with only **one single ELF study in 2018**. During this study, she was with the School of Health Sciences, University of Tampere, Finland, in 2018 and moved into the IARC role in January 2019. **Dr Elisabete Weiderpass, MD, MSc, PhD, is a Brazilian cancer researcher.**

I did a quick review of the workshop author's publication history (relevant to EMR/EMF research) using the ORSAA Database of EMF Bioeffects (ODEB). The results are shown in the attached summary worksheet. I included some of the more published author's analyses if you want to review them. It's clear from the spreadsheet that this is **not** a workshop of experts with different viewpoints but is a group from the **ICNIRP club** of experts. This is a well-funded workshop with government and telecommunication companies' monies, while groups like ORSAA have to rely on donations and subscription fees and are not well-resourced. This is not a level playing field.

Despite all this research which uses existing GSM modulations, there is not one single research animal or cell study using the new proposed 5G frequency modulations, which are called Orthogonal Frequency-Division Multiplexing (OFDM).

Real-world 5G signals are complex and variable. For example, many 4G/ 5G technologies use OFDM to send multiple signals simultaneously, which requires extremely high peak amplitudes. These, as well as the **low-frequency control, pilot, synchronization pulses (50 Hz,200 Hz, 500 Hz)** and modulations being carried on the high-frequency 5G carrier waves,

create complexities that cannot be fully replicated in laboratory experiments that use simulated signals. However, **complex signals are more bioactive** and are thus more likely to show bioeffects. Therefore, experiments must use real-world rather than simulated signals to capture these effects. In particular, there are several categories where the long-term trend for effects has concerning implications for public health, i.e., cellular oxidative stress, changes in immune function, genotoxicity, brain/neuronal changes and cell membrane permeability.

Regards

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(ORSAA Secretary)