

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

Children’s Health Defense, Dr. Erica
Elliot, Ginger Kesler, Angela Tsiang,
Jonathan Mirin
Petitioners

USCA No. 21-1075

v.

Petition for Review of Order
by the Federal Communications
Commission
(FCC 21-10)

Federal Communications Commission
and United States of America,
Respondents

AFFIDAVIT OF DR. BEATRICE GOLOMB IN SUPPORT OF STANDING

1. My name is DR. BEATRICE GOLOMB. I am a Professor at the University of California San Diego School of Medicine. My *curriculum vitae* is contained in Golomb Attachment 1.
2. I received a BS in physics, summa cum laude from the University of Southern California. After graduating, I worked at the Jet Propulsion Laboratory as an engineer. I have a PhD in biology with an emphasis on neurobiology as well as an MD from the University of California, San Diego. I focused on neural networks (now called “machine learning”) in a post doctoral fellowship at the Salk Institute.
3. I served as a resident, and then Chief Resident in internal medicine, in the University of California Los Angeles (UCLA) medical system. I also received training in research methods as a Robert Wood Johnson Clinical Scholar (RAND/UCLA), and served as a Health Consultant at RAND for some years.

4. I was a primary care physician for a panel of veteran patients in San Diego commencing in 1996 and was appointed to the faculty at the Department of Medicine at UC San Diego in 1998 where I am now a Professor of Medicine. I have over 15 years' experience as a primary care provider. I also have an active research lab.

5. My work in various areas has led to changes in US (and other nations') military policy, and drug regulation/labeling (e.g., FDA, Health Canada and the European Medicines Agency). A number of my research efforts have been featured in news and media, including the New York Times, Wall Street Journal, The Economist, TIME, Newsweek, BBC, NPR, CBS, NBC, and ABC among numerous other venues.

6. My research lab focuses on conditions and exposures that are tied to "Oxidative Stress" (OS) and impaired "mitochondrial" function that inhibits energy production in cells. For the past eight years, this work has included research in injuries from exposure to pulsed and modulated radiofrequency ("RF") and Microwave ("MW") radiation used by wireless technology.

7. It was my work that originally determined that the "mystery illness" of US and Canadian diplomats in Cuba and China (and elsewhere) was, based on compelling evidence, caused by pulsed RF/MW. I was able to make this

connection in part based on my research on RF/MW induced illness in adults and children who became sick after exposure to pulsed RF from wireless technology.

8. The paper I published about the diplomats' sickness provides a detailed analysis of "Microwave Illness" (also known as "Radiation Sickness" or "Electrosensitivity"). It provides the physiological mechanisms that lead to the characteristic symptoms and demonstrates they are caused by exposure to RF/MW radiation. These debilitating symptoms are engendered by underlying injuries for which a sound physiological basis is documented by hundreds, if not thousands, of peer-reviewed studies. The paper is Golomb Attachment 1.

9. In an MRI study, brain injury was observed in persons with Microwave Illness. The authors of the study noted that "Over the years we have seen an increasing number of patients who had developed multi system complaints after long term repeated exposure to electromagnetic fields (EMFs). These complaints included headaches, intermittent cognitive and memory problems, intermittent disorientation, and also sensitivity to EMF exposure."

10. These experts conducted functional MRIs of ten adult patients with "electrohypersensitivity" (sometimes known as "Microwave Illness"). Each of the ten "scans were abnormal with abnormalities which were consistent and similar." Their 2017 paper, "Functional brain MRI in patients complaining of electrohypersensitivity after long term exposure to electromagnetic fields" was

published in Rev Environ Health 2017; 32(3): 291-299. It is contained in Golomb Attachment 2.

11. That study noted that brain imaging of individuals affected by Microwave Illness resembles traumatic brain injury, as was also reported for brain imaging studies of affected diplomats. The information and associated references are contained in my diplomat paper (Golomb Attachment 1).

12. Other studies also affirm impaired blood flow to regions of the brain in individuals with Microwave Illness. As my paper demonstrates, there are other physiological manifestations in persons with Microwave Illness that can include permeability of the Blood-Brain-Barrier, depressed levels of melatonin, oxidative stress and auto-immune responses.

13. I was invited to speak to the National Academies of Sciences, Engineering, and Medicine Committee that was tasked by the State Department to examine the health problems experienced by US Foreign Services Personnel in Cuba. The National Academies' report, published in December of 2020, came to the same conclusion that I had: the diplomats' problems were likely caused by exposure to pulsed RF/MW. The report is contained in Golomb Attachment 3.

14. The predominant theory is that the RF/MW source that led to the diplomats' afflictions was an RF/MW weapon; such weapons are sometimes termed

“neuroweapons.” But it is clear the exposures to pulsed RF radiation lead to the same condition and injuries I, Dr. Heuser, Dr. Belpomme and many others have identified in many other individuals. Microwave Illness may occur as the byproduct of an intentional assault through a neuroweapon or simply through supposedly benign longer-term exposure to ambient RF/MW falling at or below FCC-authorized levels.

15. The fact is, some individuals at some point become intolerant to allowable levels of RF/MW. The intolerance can be minor at first. However, unless problematic exposure can be avoided, the condition then often worsens and, in many cases, devastating life consequences follow.

16. There is wide variation in both exposure type and response. Response can depend on factors like the RF/MW type or frequency, exposure to multiple frequencies of sources, on-off pulsation, sharp peaks and valleys, the modulation used, and/or chronic or long-term exposure.

17. Although it is a subset of the population that is or will become electrosensitive, the number of people affected is growing as the evolutionarily unprecedented exposure levels continue to rise. Once affected, many individuals lose the ability to tolerate sources and levels of radiation which previously posed no problem to them. This was true for some of the affected diplomats, who now report they are unable to use a computer for more than a couple of hours a day.

These diplomats and civilians, who suffer from the same condition, feel abandoned by the system whose responsibility they believed it was to protect them. They report frustration and indeed are shocked by an apparent policy of feigned ignorance, dismissal, and denial of the problem. One Foreign Services person (a senior CIA operative who had previously been shot at, several times) affected by a presumed RF/MW attack, stated about the devastating injury “I had rather been shot.”¹ Like many with RF/MW related illness, he described the distress from being disbelieved.

18. I have communicated with scores or hundreds of affected individuals. The suffering and anguish they experience is heart-wrenching. Like the Foreign Services person, they perceive they are under attack, and many describe the pain as torture.

19. In all cases the only reliable “treatment” is exposure avoidance. Any other treatment is merely palliative. Avoidance reduces and, in some cases, may resolve the symptoms. But the condition is generally progressive. For many, re-exposure to a problematic source causes the symptoms to return. They may quickly regain their

¹ <https://www.archyde.com/a-secret-microwave-weapon-is-behind-the-attacks-on-cia-agents/>.

prior symptom severity, then continue to progress with potentially catastrophic or even deadly results.

20. We conducted a survey and found that half of those who were employed when they became affected lost or were forced to leave their jobs. Some spend months living in their car, no longer able to stay in their home, hunting for a safe place. Many are unable to work and exhaust all financial resources. They cannot find a home, have no recreation, social or family life, and cannot attend public events or religious gatherings. They must conduct a constant, increasingly difficult search for refuge that, even if found, is often soon taken away with the intrusion of some fresh emissions source. Thus, many live in dread that a new RF source will compel them to quickly flee again and begin their search anew, with all the consequent upheaval, uncertainties, burdens, and costs.

21. This lifestyle poses significant risks in other ways. Often there are no basic amenities like heating, clean water, or restrooms for affected persons, living in their car or in the “wild”; and such individuals may be at risk from dishonorable or predatory persons. For good reasons, these sufferers can descend into hopelessness and despair.

22. Some have chosen suicide, not due to traditional depression, but on account of their anguishing pain and debility, coupled with hopelessness about their plight.

23. A number of the patients we have studied in our lab, including those with Gulf War illness or suffering side effects of fluoroquinolone antibiotics that produce chronic multi-symptom health problems in a vulnerable subset, have shared similar problems with disbelief and denial. A tragic difference in the case of RF-related illness is that affected individuals are subjected, without choice or recourse, to continued exposure to the inciting cause without meaningful ability to escape.

24. There is a surprisingly large and growing group of affected individuals with this condition. It appears this group includes the Petitioners, as well as individuals (or family members of individuals) who submitted affidavits. Their condition is not due to any personal fault or inadequacy. They must no longer be ignored, ridiculed, or rendered invisible or irrelevant. There must be some means to accommodate their situation and needs, to permit some place of refuge and grant them a measure of dignity. At minimum, they must be allowed to live in their own homes--for many, their sole sanctuary--without being violated and driven out by some new, potentially unknown, and undisclosed emissions source. They need, and deserve, some place of refuge that does not itself become yet another place of torment.

25. This concludes my Affidavit.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on June 16, 2021

A handwritten signature in purple ink, appearing to read "Beat GM", followed by a horizontal line that ends in a vertical bar on the right side.

Dr. Beatrice Golomb, MD, PhD

GOLOMB Attachment 1

GOLOMB Attachment 2

GOLOMB Attachment 3

GOLOMB Attachment 4