

**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. TORIL JELTER, MD., IN SUPPORT OF MOTION
FOR STAY**

1. My name is **DR. TORIL JELTER, MD.** I am a California-licensed pediatrician and general practitioner in Walnut Creek, California. I have over 40 years clinical experience. I was previously licensed in New Jersey and Norway. I am a member of the American Academy of Pediatrics and was trained at the University of Oslo Medical School in Norway, graduating with honors.
2. I completed my pediatric medical training at Columbia School of Physicians and Surgeons in Summit, New Jersey. I worked in a Public Health Mother-Child clinic and with children with cancer and with AIDS. I was on staff at Robert Wood Johnson University Hospital in New Jersey and received a Physician Recognition Award from the American Medical Association. I currently work with Mount

Diablo Integrated Wellness Center in Walnut Creek, CA, and recently became a retiree at John Muir Medical Center.

3. My interest in the health effects of electromagnetic radiation began in the 80's after fallout from the Chernobyl nuclear meltdown was carried to Scandinavia where I lived at the time. That was ionizing radiation. Nowadays, my area of expertise has shifted to the adverse health effects of non-ionizing radiation, including from wireless technologies. Non-ionizing radiation at non-thermal levels emitted by pulsed and modulated radiofrequency-based technologies ("wireless radiation"), like the radiation emitted by wireless devices and infrastructure, can cause and/or be a contributory factor to myriad detrimental health effects. I have given expert opinions on this issue.

4. In the past few years, I have been approached by a growing number of patients, adults and parents of children who are being adversely affected by exposure to wireless radiation. Many of these patients developed Radiation Sickness (also known as "Electromagnetic-Sensitivity" or "Microwave Sickness"). Wireless radiation also aggravates the symptoms of some of the children I see in my clinic who suffer from neurodevelopmental problems such as ADHD and Autism.

5. Those who develop Radiation Sickness, develop various symptoms, neurological, dermatological, and other when exposed to wireless radiation

emitting sources. Common symptoms in adults and children include severe headaches, cognitive and memory problems, heart palpitations, sleep problems, ringing in the ears, tingling, nausea, skin reactions, dizziness, and noise sensitivity.

6. Radiation Sickness is a spectrum condition. Some patients may be reacting but still functional, while for others it can be quite debilitating and render them unable to live and function in society. The condition can sometimes produce opposite responses even in the same person. This means that one exposure can cause a high blood pressure response, and another exposure can cause a low blood pressure response. Over time, chronic and increased exposure to wireless radiation usually causes the symptoms to worsen. Avoidance alleviates the symptoms.

7. The US Centers for Medicare and Medicaid and the World Health Organization recognize injuries from ionizing and non-ionizing radiation in a distinct set of diagnosis codes. "ICD-10" (T66) is for Radiation Sickness. ICD-10 (W90) recognizes harms from exposure to radio frequencies, and ICD-10 (L57) recognizes Skin Changes due to Chronic Exposure to Non-Ionizing Radiation.

8. One of my teenage patients, for example, suffers severe skin reactions from exposure to Wi-Fi. Whenever he is exposed, the skin on his hands begins to crack and bleed.

9. Radiation Sickness from wireless technology has been recognized by US government agencies. The Architectural and Transportation Barriers Compliance

Board, known as the "Access Board," recognized the condition in 2002.¹ In 2005, the National Institute of Building Sciences (NIBS) published a report with recommendations on how to accommodate people who suffer from the condition in buildings. The condition is also recognized by the Labor Department. Courts in the US and around the world have also acknowledged Microwave/Radiation Sickness as a legitimate medical condition and disability. I have written diagnosis letters for patients for the purpose of disability accommodations.

10. The prevalence of Radiation Sickness is rather high and likely underreported and misdiagnosed. Surveys conducted up to 2005 show a rate of about 10%. There is one study from the US done by the California Department of Public Health from 2002, showing a sickness rate of 3.2%.² Even if this rate is correct, that means 1.2 million people in California and 10.8 million in the US suffer from this condition. However, 2002 is before the intense proliferation of wireless technology, so likely, the rates are higher, and what I see in my clinic and what I hear from other doctors confirm this.

¹ <https://ecfsapi.fcc.gov/file/7520945308.pdf#page=3>.

² <https://ecfsapi.fcc.gov/file/109121913528616/Letter%20to%20the%20Editor-%20Will%20We%20All%20Become%20Electrosensitive-Hallberg%2C%20Oberfeld.pdf>.

11. Various International organizations such as the European Parliament and the Council of Europe³ and medical associations in the US and around the world have published statements about the increased incidence of illness caused by wireless radiation.⁴

12. There are peer-reviewed scientific guidelines that US doctors employ to diagnose EMF-related illnesses including Radiation Sickness. For example, The European Academy for Environmental Medicine (EUROPAEM) EMF working group - “EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses.”⁵

13. The diagnosis of Radiation Sickness is to a large degree a clinical diagnosis. A clinical diagnosis is based on identifying the underlying disease or underlying cause of the patient’s complaints based on signs, symptoms, and medical history rather than on laboratory examination or medical imaging. Not all ailments have classic signs or blood tests or imaging studies, and in lieu of these, a physician

³<https://ecfsapi.fcc.gov/file/10908218268552/Council%20of%20Europe.%20Parliamentary%20Assembly.%20The%20potential%20dangers%20of%20electromagnetic%20fields%20and%20their%20effect%20on%20the%20environment.%20Doc.pdf>.

⁴<https://ecfsapi.fcc.gov/file/10052270428147/AAEM%20letter%20to%20FCC%2009-30-13.pdf>.

⁵<https://ecfsapi.fcc.gov/file/10052040910188/EUROPAEM%20EMF%20Guideline%202015-Belyaev%20et%20al%202015.pdf>.

must use clinical judgment to draw a reasonable and sensible conclusion. It relies largely on the medical history given by a credible historian. I also try to identify single- or double-blinded exposure tests in the medical history, to see if symptoms associated with wireless radiation occur after or during an exposure to wireless devices even when the affected patient is unaware of the exposure.

14. I use some lab tests for biomarkers that have been found to be associated with exposure to Electro Magnetic Radiation (EMR) to support the clinical diagnosis--for example, tests for free radicals that indicate Oxidative Stress damage. Oxidative Stress is a well-recognized causal mechanism of harm from wireless radiation.⁶

15. To date, I have had about one hundred (100) patients in my clinic who suffer from Radiation Sickness or from wireless radiation related health problems. About twenty (20) of them are children.

⁶<https://ecfsapi.fcc.gov/file/10912004686552/Reliable%20Disease%20Biomarkers%20Characterizing%20and%20Identifying%20EHS%20%26%20Multiple%20Chemical%20Sensitivity%20as%202%20Etiopathogenic%20Aspects%20of%20a%20Unique%20Pathological%20Disord.pdf>.

16. Wireless Radiation has also been shown to contribute to pre-natal⁷ and post-natal⁸ neurodevelopmental conditions such as ADHD and behavioral issues.⁹ Here are a few of the cases I have encountered in my practice of the neurological impact on children. All these cases are real patients. Minor details have been omitted or changed to ensure privacy.

A. Patient One: A four-year-old child with difficulty sleeping and a Pervasive Developmental Disorder (P.D.D.).

A couple brought their 4-year-old son who had sleep difficulties to see me. They informed me that their son's difficulty sleeping had been going on for two years. Every night he joined his parents in their bed because he couldn't sleep and therefore his parents also slept poorly. At night the son wanted to play, eat, sing and be active instead of sleeping. His parents were exhausted.

They gave him a melatonin supplement the evening before they came to see me and thought it might have helped a little bit.

⁷<https://ecfsapi.fcc.gov/file/109152869421632/Fetal%20Radiofrequency%20Radiation%20Exposure%20From%20800-1900%20Mhz-Rated%20Cellular%20Telephones%20affect%20neurodevelopment%20and%20behavior%20in%20mice-Aldad2012.pdf>.

⁸<https://ecfsapi.fcc.gov/file/10911303968358/Cell%20phone%20use%20and%20behavioural%20problems%20in-young%20children-Divan-2010-UCLA%20Study.pdf>.

⁹<https://ecfsapi.fcc.gov/file/1090984291389/Prenatal%20and%20Postnatal%20Exposure%20to%20Cell%20Phone%20Use%20and%20Behavioral%20Problems%20in%20Children.pdf>.

Peer-reviewed scientific literature has shown that EMFs decrease melatonin production, the sleep hormone in the body. I therefore asked the parents to decrease their son's exposure to radiation from wireless devices by turning off their Wi-Fi router and cell phones and unplugging the cordless phones. I recommended they do this as a clinical trial for two weeks and then tell me if they noticed any difference. Within a few days both the parents and the son were sleeping well at night and the son was able to sleep in his own bed, without a melatonin supplement.

The boy also had developmental delay. He had been diagnosed with Pervasive Developmental Disorder (P.D.D.). A few months after he entered kindergarten his parents were asked to attend a school meeting with all his teachers. The parents were concerned he might have done something wrong and were wondering why the meeting had been requested. A large team was present--about 10 school staff members. The staff told the parents that they had noticed a significant improvement in their son's cognitive abilities, and they wanted to know what the parents were doing to achieve this outcome. The parents informed the school staff that they had decreased exposure to radiation from wireless devices in their home. The school staff were baffled and said they thought he had started on a new medication because his cognitive abilities had improved by 2 years in just 2 months.

Later that same year in October, the son started doing poorly at school again and his sleep difficulties returned. His mother thought maybe the cause was too much sugar from Halloween. It turns out that the older sister had turned the Wi-Fi router back on without telling anyone. Once it was turned off again and they installed hard-wired ethernet cable for

internet access, the son was once again sleeping well and functioning at grade level in school. This was in fact a double-blinded study as the mother and son did not know that the sister had turned the Wi-Fi router back on.

B. Patient Two: A five-year-old boy with developmental delay and arm flapping.

A mother came to me regarding her son who was diagnosed with a developmental disorder. One of the more disturbing symptoms was flapping. He would lift his arms up wide and flap them like a bird. The mother came to me because she had doubts about the flapping being part of a developmental delay condition. She informed me that when she took her son to see his grandma in rural Tennessee (an area with no cell phone reception), the flapping gradually stopped over a period of 4 weeks. When they returned to the San Francisco Bay Area, the flapping returned. This child is mislabeled as having developmental delay and with an impaired ability to learn, when in fact he is fine so long as wireless radiation sources are removed.

C. Patient Three: A four-year-old boy with developmental delay whose condition changes dramatically with a change in location.

A mother questioned a diagnosis of developmental delay in her son because his ability to function normally for his age varies dramatically from one location to the other. She and her 4-year-old son live in a San Francisco suburb. He has high-pitched screaming day and night. He also repeatedly bangs his head against things. He is unable to play interactively with other children his age. But whenever they visit a relative in rural Oregon, in an area with no cell phone reception, he

becomes 'normal' within 24 hours. He stops the head banging and high-pitched screaming; he is able to sleep at night and plays appropriately with other children his age.

When this family drives back to the San Francisco Bay Area, the high-pitched screaming starts again when they reach Sacramento. By the time they get to the San Francisco suburb where they live, the head banging has resumed.

Numerous studies have confirmed that wireless radiation can adversely affect children's brains.¹⁰ The Austrian Medical Association Guidelines emphasize that if symptoms change significantly with time or location you need to consider environmental factor(s) in the differential diagnosis, such as wireless radiation.¹¹

D. Patient Four: An 8-year-old boy with sleep difficulties that vary with location in the home.

A mother reported to me that her 8-year-old son has sleep difficulties in bed but not in the living room. She reads him a bedtime story and when he gets tired, she walks with him to his bedroom and he gets wired and more awake, can't sleep and becomes anxious. I asked them if there is any exposure to wireless devices and radiation. She said "No." So I

¹⁰<https://ecfsapi.fcc.gov/file/1090832718827/ProspectiveCohortStudyofAdolescents%E2%80%99Memory%20PerformanceandIndividual%20Brain%20DoseofMicrowaveRadiationFromWirelessCommunication.pdf>.

¹¹[https://ecfsapi.fcc.gov/file/1091546800918/Guideline%20of%20the%20Austrian%20Medical%20Association%20for%20the%20diagnosis%20and%20treatment%20of%20EMF%20related%20health%20problems%20and%20illnesses%20\(EMF%20syndrome\).pdf](https://ecfsapi.fcc.gov/file/1091546800918/Guideline%20of%20the%20Austrian%20Medical%20Association%20for%20the%20diagnosis%20and%20treatment%20of%20EMF%20related%20health%20problems%20and%20illnesses%20(EMF%20syndrome).pdf).

asked, "Even on the outside of his bedroom wall?" She went to look and found a wireless electric utility "Smart" Meter installed on the outside of his bedroom wall. After opting out of a smart meter and securing a replacement mechanical analog meter, this child was able to sleep and his anxiety resolved.

E. Patient Five: A 10-year-old boy with aggressive behavior and non-verbal Autism.

A couple brought their 10-year-old son to see me. Their primary concern was aggressive behavior. He had also been diagnosed with Autism and was non-verbal, i.e., he has never said a word in his life. The parents were particularly concerned because he was getting bigger and more violent, and the mother who served as his primary caretaker was petite. He sometimes threw lamps against the wall and broke them. His parents feared they would have to institutionalize him. They came seeking some potential medication for his aggression. Since wireless radiation can trigger and worsen aggression, I asked them to hold off on medication (which often has side-effects) and instead, do a two-week clinical trial by having no or only low exposure to radiation from wireless devices. They were to observe for possible improvements. After merely three days with lower exposure to wireless radiation (i.e. of turning off the Wi-Fi router, cell phones and unplugging cordless phones), this ten-year-old boy who had never said a word, said a full sentence. His aggressive behavior subsided, and there was no need to institutionalize him.

Another benefit was that the mother's seizure disorder decreased in severity and frequency, so she was better able to cope with her son's

challenges. There is scientific evidence that wireless radiation can cause or worsen seizures.

17. I was not surprised when Patient Five's mother obtained relief from her seizure disorder after avoiding wireless radiation. Following the introduction of radar which just like many uses non-thermal radio frequency emissions, sailors reported symptoms, including seizures. The US Navy decided to investigate and assigned Dr. Zori Glaser to collect studies on the biological effects of Radio and Microwave frequencies. In 1971 the Navy published a report which referenced 2,311 studies showing harms. Pages 7-12 of the report elaborate various adverse health effects established in those studies. Seizures are mentioned on page 8.¹² A 2016 study showed chronic exposure to wireless radiation can increase the risk of seizures.¹³

18. The massive increase in environmental exposures to wireless radiation is posing a challenge to me as a physician. The treatment approach for environmentally induced sicknesses is to reduce exposure. But when it comes to those who suffer from Radiation Sickness, reducing exposure is becoming

¹²<https://ecfsapi.fcc.gov/file/10914872405454/Naval%20Medical%20Research%20InstituteBibliography%20of%20reported%20biological%20effects...%201972%20Partial%20Report-Symptom%20List.pdf>.

¹³<https://ecfsapi.fcc.gov/file/10908715124808/Neurological%20effects%20of%20nonionizing%20electromagnetic%20fields-Henry%20Lai%202017.pdf>. See pages 32, 86, 178, 238.

increasingly difficult even in rural environments. The level of exposure to microwave RF in our environment has grown by a few orders of magnitude in the past 20 years. It is approximately 10^{18} times higher than the natural environment.¹⁴

19. The impacts on those who develop this condition or who are affected, like families with children with neuro-developmental issues, are devastating.

20. The children I work with who suffer developmental problems cannot participate in special needs programs because most programs use wireless devices like iPads. This means the parents need to attend to these children 24/7 and that the only place their children are safe is their home, and sometimes even that will not suffice. As my Affidavit indicates, some of these children become violent or aggressive when exposed to wireless radiation. With the OTARD amended rule those parents will be unable to control the radiation in their home and their children may be unmanageable.

21. The ubiquity of wireless radiation in the workplace means that many of my patients are disabled from working. For many this is financially ruinous, and they do not have the means to improve their situation. Shielding is expensive, and many cannot afford it. Many those who are affected are forced out of their homes trying to find a safer environment. Some live in their cars.

¹⁴ [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(18\)30221-3/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(18)30221-3/fulltext).

22. The growing exposure and the FCC's continuous push to deregulate the deployment of wireless, causes people to be anxious, live in constant fear for their lives and experience hopelessness and desperation on top of their increased physical torment. The government is ignoring them. Their situation is many times too difficult for their families to handle.

23. With every generation of wireless and with any new product their lives are made more challenging. The world is closing on them and they are literally already with their backs against the wall. For many their homes are no longer an option after a small cell is installed nearby. Shielding is expensive but it is also only a partial solution as the shielding only attenuates radiation, rather than blocking it. Rural areas are becoming increasingly intolerable.

24. People with Radiation Sickness have a very hard time finding a safe place to live where they can be symptom free. They must deal with this outrageous situation while they are sick and suffer tormenting pain and impaired cognition.

25. Even though I am a pediatrician, adults who develop Radiation Sickness also contact me because while doctors' awareness is growing many practitioners are unaware of the problem. Almost 200 doctors attended a recent medical conference (January 2021) about the effects of electromagnetic fields with a focus on wireless radiation.

26. Some of my patients have been referred to me by Dafna Tachover, as she and the Children's Health Defense are well-known resource for parents and the injured. In order to support my patients and others who have been injured, I have been supporting their work and efforts, including attending meetings and giving presentations to educate public officials regarding Radation Sickness and the suffering adults and children are experiencing.

27. My patients' experiences are heart-wrenching and inhumane. One such patient was a phenomenal teacher at a local high school. She started noticing brain fog when she entered her classroom. She was unable to think straight. She got numbness and tingling and had a burning sensation on her face and tongue. Eventually she realized she was standing under a Wi-Fi router in her classroom while wearing a metal hairpiece. Metal on one's body can work like an antenna and worsen radiation effects. She became so sick that she started reacting to wireless radiation both in her classroom and in her apartment.

28. Eventually she had to leave her job and her home. She has spent the past six years driving from one rural campground to another trying to get relief from her symptoms. She often ends up sleeping in her car if there is bad weather. She has been looking for land in an area with low levels of wireless radiation that she can afford without income where she can lay down her weary body to rest. Yet she

does so with the knowledge that the day after she purchases the land a stealth tower could be installed next door making her land uninhabitable.

29. One morning she found a corpse of a woman rolled up in a carpet dropped at the campsite next to hers. Is this how we treat our phenomenal teachers? She loves to teach. She's an excellent teacher. Today she reads poetry to tourists in low-EMF areas for free to feel that she still has something to give and some role in this world. She is not the only teacher I know who suffers from Radiation Sickness.

30. The innocent victims must be able to be allowed to be safe in their home without the constant threat of an antenna that could be installed without their consent and without accommodating their needs. I am deeply disturbed by their situation and the way they are treated or, more accurately, ignored.

31. With constant ambient exposure millions of times higher than what our body evolved to tolerate, radiation sickness is becoming irreversible more frequently. The symptoms are reduced when exposure is removed. but with renewed exposure symptoms immediately resume. These people have no chance, really, of being able to go back to society. The only thing they can hope for is not to suffer in their homes, but even that basic need and right is being denied. Their treatment is nothing short of cruelty.

32. People that suffer from a severe form of Radiation Sickness have very difficult time socializing, maintaining or finding a job, and it is hard for many to

find a place to live. Who is responsible when a person's home is made uninhabitable for them because of an uninvited, invisible toxin penetrating into their home? Even though this toxin is invisible, it is measurable.

33. These people cannot have a job, they do not have a place to live, it is difficult and even impossible for them to meet with friends or family and they are constantly searching for a place to go that may or may not offer relief from their many symptoms. They know that even if a place is good for them today, it may not offer relief tomorrow. The only place one patient could find relief was in her bathtub. Another had to live in a freight container for two months and have others bring her food, and a third had to spend hours daily in crevices in the earth's surface. This is inhumane. Someone needs to take responsibility for this atrocity toward human beings.

34. As a physician and pediatrician caring for children, I have ethical and professional obligations. The Hippocratic Oath states: "I will prevent disease whenever I can, for prevention is preferable to cure." But my hands are tied. Considering the only effective treatment is avoidance, with the constant increase in public exposure to wireless radiation, it is increasingly impossible for me to alleviate their suffering, and my ability to care for my patients and alleviate their suffering is impeded.

35. The Hippocratic Oath requires that I keep my patients from harm and injustice. The OTARD rule amendment will cause and allow widespread injustice towards our most vulnerable populations--the chronically ill and children. My patients have been harmed by wireless radiation, and the amended OTARD rule exacerbates the barriers and suffering they face every day as a result of constant exposure to radiation, which is harmful and life threatening to them. This rule will perpetuate their torturous suffering, even in their home, their last refuge. It will cause more sickness and death, and in some cases lead to such desperation that the some possibly commit suicide.

36. Those who have become sick MUST be protected. As a doctor and as a person I am appalled by the disregard to the injured and the preemption of their most basic civil and constitutional rights, including their disability rights. And for what? For people to have another alternative provider for broadband internet? Is the desire to speak to anyone, anywhere 24/7 more important than a child's need to speak at all?

37. This concludes my Affidavit.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 14th, 2021


DR. TORIL JELTER