Thank you for taking the time to listen to my story. It truly means a lot to me to have someone willing to listen, especially when I've felt unheard for so long.

I attest and affirm that the following statements are true, accurate, and within my personal knowledge.

I am a former US Department of the Interior researcher, as well as someone who has worked as a research scientist for a number of large companies. I also worked eight years as a medical assistant for a cardiovascular surgeon. I consider myself scientifically literate.

I worked doing presentations and speaking on stages internationally. It was my happy place. I loved traveling, speaking, and meeting new people. I can no longer do any of that because my body has been extremely impaired due to exposure to what you would consider normal everyday wireless radiation.

This letter will be divided into two parts: the science, and how radiofrequency radiation has impacted my life.

I will give more details about how this has impacted my health but first a little background. I understand the science. I have read a lot of the studies that don't make it into many mainstream journals. I have attended conferences and hearings. I have conducted and published scientific studies. I've edited studies pre publication in scientific journals.

I have attended rallies and protests and done everything in my power to ask for accountability and to be heard. I have been silenced. I have been shadow banned. I have been denied the ability to give my testimony at a hearing in my state senate. I truly believe the science has been manipulated or hidden to avoid accountability. I understand there is a "race" to be the first and best at technology and artificial intelligence. Shouldn't we first prove that something is safe before we blanket all of humanity with it? Or at least create safe spaces for those who are most severely impacted?

Summary of What the Science Says

The International EMF Scientist Appeal presented to the United Nations, first written in 2015, now has over 250 signatures from 41 nations representing the world's top doctors and scientists who study radiofrequency and non-ionizing radiation. They are in agreement that:

"Numerous recent scientific publications have shown that EMF affects living organisms <u>at levels well below</u> most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life.

These findings justify our appeal to the United Nations (UN) and, all member States in the world, to encourage the World Health Organization (WHO) to exert strong leadership in fostering the development of more protective EMF guidelines, encouraging precautionary measures, and educating the public about health risks, particularly risk to children and fetal development. By not taking action, the WHO is failing to fulfill its role as the preeminent international public health agency."
(https://emfscientist.org/index.php/emf-scientist-appeal)

As we saw in the appeal statement, there are many body systems affected and many disorders caused by non-ionizing radiation. Scientists have known about this and have been studying the dangers of radiowaves at non-thermal levels for decades.

In 1972, US Naval Medical Research Institute published a revised bibliography of over 2200 references documenting the biological effects of radiofrequency radiation. The majority of these studies relate to the effects of non-ionizing radiation on humans. They note about 130 different symptoms and disorders caused by microwave radiation. The studies found changes in physiology, the central nervous system, the autonomic nervous system, the peripheral nervous system, vascular system, and endocrine glands. They found this radiation caused psychological disorders, behavioral disorders, blood disorders, biochemical disorders, metabolic disorders, genetic and chromosomal damage, and mutations. (Glaser, 1972).

The BioInitiative Report first published in 2007 and updated in 2012 is a comprehensive list of several thousand published studies compiled by world experts in science, medicine, and public policy. It looks at the biological effects of exposure and is a clear and compelling case for our exposure guidelines being much too lenient. (BioInitiative Working Group, 2012).

The late Robert O. Becker, MD once said, “The greatest polluting element in the earth's environment is the proliferation of electromagnetic fields.” He was a man ahead of his time and was devoted to understanding the truth at all costs. He warned, “All life pulsates in time to the Earth and our artificial fields cause abnormal reactions in all organisms... Increasing electropollution could set in motion irreversible changes leading to our extinction.”

Frank Clegg, Canadians for Safe Technology and former head of Microsoft Canada states that no one can say that microwave radiofrequencies are safe. Safety standards only look at thermal effects. If tissue is not heated, it is considered not to cause harm. (https://www.theguardian.com/commentisfree/2016/feb/16/the-debate-about-mobile-phones-brain-cancer-and-artificial-electrosmog-its-complicated)

According to Professor Bruce Armstrong, cancer epidemiologist, International Agency for Research on Cancer, there is a 40% increase in gliomas, a type of brain cancer for the heaviest cell phone users defined as those who talk on their phone at least 30 minutes per day for a period of ten years. (JoAnne: I’m still looking for the video source – might delete.)

Dr. Devra Davis, PhD, MPH, epidemiologist and internationally renowned scientist who also was the founding director of the Board on Environmental Studies and Toxicology of the U.S. National Research Council, National Academy of Sciences, and president of Environmental Health Trust, says there is a growing body of evidence showing that prenatal exposure to cell phone radiation causes serious defects in the offspring. She states that you have the right to know that your mobile phone should not be kept near your testicles, ovaries, breasts, heart, or brain. (https://youtu.be/soii0UUUlwk).

Joel M. Moskowitz, Ph.D., Director, Center for Family and Community Health School of Public Health, University of California, Berkeley summarizes peer-reviewed research on health risks associated with wireless radiation. He recently posted a summary on The National Toxicology Program (NTP) final reports on the effects of two-years of exposure to 2G (GSM and CDMA) cell phone radiation on rats and mice at non-thermal levels, 19 years after the NTP was asked to conduct the study. The study found "clear evidence" of increased cancer risk in male rats, particularly heart schwarommas, a type of tumor, and found the potential to induce measurable DNA damage. (https://www.saferemr.com/2016/05/national-toxicology-progam-finds-cell.html).

The Ramazzini Institute in Italy performed a life-span study on rats to determine if RFR caused cancer. They found an increase in the incidence of tumors of the brain and heart in exposed rats. (Falcioni et al, 2018).

In 2011 IARC convened a Working Group to evaluate the scientific evidence concerning the carcinogenic hazard of RF EMF to humans (IARC 2013). This portion of the electromagnetic spectrum, ranging from 30 kHz to 300 GHz, is used in wireless telecommunication primarily but not exclusively in mobile phones. The epidemiologic evidence evaluated by the Working Group came from time-trend, cohort, and case-control studies of populations exposed in occupational settings, from sources in the general environment and from use of mobile and cordless phones, with the most informative studies (Interphone and studies from Sweden) focused on brain tumors associated with mobile phone use. The Working Group also evaluated experimental evidence from numerous animal cancer studies employing various frequencies, exposure modalities and durations, as well as studies of mechanistic end points potentially related to cancer including genotoxicity, immune function, cell signaling, oxidative stress and others.

Dr. Magda Havas, PhD, toxicologist and researcher, teaches courses about electromagnetic pollution at Trent University and says, "We are electromagnetic…we respond to external sources of electromagnetic frequencies in a variety of ways that can be either beneficial or harmful." In her research she has found that that radiation from a cordless phone causes heart arrhythmia, tachycardia (rapid heart rate), and alters the sympathetic and parasympathetic nervous system similar to a fight-or-flight stress response. She states, "We all need to make informed decisions on how to use modern electromagnetic technology effectively and safely." (http://magdahavas.com/).

According to Dr. Martin Pall, Professor Emeritus of Biochemistry and Basic Medical Sciences at Washington State University, EMFs act by activating the voltage gated calcium channels that are in the plasma membranes around our cells. Most biological effects are produced by excess calcium in the cells. (Pall, 2013). Non-thermal microwave exposure attacks our endocrine system and our nervous system, which leads to widespread neurological effects. He believes the current safety standards allow us to be exposed to levels of microwave radiation that are about 7 million times too high. (https://peaceinspace.blogs.com/files/5g-emf-hazards--dr-martin-l.-pall--eu-emf2018-6-11us3.pdf).

In the press release for the 2012 BioInitiative Report, Dr. David Carpenter, MD, Director, Institute for Health and the Environment, University at Albany and co-editor of the BioInitiative Report, states: "There is now much more evidence of risks to health affecting billions of people world-wide. The status quo is not acceptable in light of the evidence for harm." (http://www.bioinitiative.org/media/press-releases/).

Dr. Dietrich Klinghardt, MD, PhD, a practicing physician in the US and Germany specializing in chronic illness, states that man-made electromagnetic frequencies in the high frequency range are devastating to our health. These frequencies alter our brain proteins which affect virtually all cellular functions. In his medical practices, he sees a number of symptoms and illnesses related to radiofrequency exposure; these include: insomnia, depression, neurological symptoms such as tingling, numbness, and vibrations in the body, muscle aches, fatigue, headaches, learning disabilities, and autism. He has seen devastating consequences from smart meters and says they pose one of the most significant threats to our health. According to Dr. Klinghardt, this electromagnetic pollution is an emerging health risk and even those who are not sensitive or experiencing symptoms are being harmed. (https://www.youtube.com/watch?v=b_wxM6IAF1I).

In addition to all of this, RFR has been shown to increase blood-brain barrier permeability (Sirav, 2011). This is alarming because the blood-brain barrier prevents toxins, bacteria, and heavy metals from entering our brains.

Many scientists agree that EMR poses the single biggest threat to human health of the 21st Century. You can't see or feel how it is affecting you. It is an invisible threat that may be causing havoc in your body. It is affecting you physically, energetically, and probably emotionally. There have been thousands of studies raising concern about cell phones, Wi-Fi, baby monitors, and smart meters. Yet, industry denies any claims and reassures us that these devices are safe. Despite all the controversy, there is enough evidence of harm that we can't dismiss this.

Electrohypersensitivity (EHS), electro-sensitivity (ES), microwave sickness, and radiowave sickness are terms which describe a condition where the body has strong adverse physical reactions to the electromagnetic radiation of common technological devices. The condition is marked by the awareness that radiation is causing the problem.

The fact that RFs at non-thermal levels cause harm cannot be denied. Most of the advanced nations of the world have been studying radiowaves as military weapons for over fifty years. RFs can be directed at an individual or a crowd to break up riots, protestors, or to disable a perpetrator. They have also been used intentionally to make people sick. During the Cold War, in a case referred to as the Moscow Signal, Soviets were directing microwaves at frequencies similar to Wi-Fi routers and cell phones at employees of the United States Embassy in Moscow for roughly twenty years. Many of the Embassy employees complained of varying health effects ranging from ringing in the ears and headaches to infertility and cancers. (Elwood, 2012). More recently it has been determined that the health effects experienced by US and Canadian diplomats at the Embassy in Cuba are consistent with those exposed to pulsed radiofrequency radiation. (Golomb, 2018). While the investigation is ongoing, it should be alarming to us that some of the same frequencies used as military weapons to attack people are being generated by common devices in our homes. The health effects of these weapons has been studied and well documented for decades.

The US government recognizes that people with electromagnetic sensitivity experience debilitating reactions from exposure to electromagnetic fields. Millions of people worldwide are suffering. I became extremely ill with electro-sensitivity after a smart meter was installed on my house by ComEd in 2015. At the time, I was unaware of the high peaks of pulse-modulated radio frequency radiation these meters emit.

My Journey with Electromagnetic Sensitivity

It took me two years to figure out the cause of my debilitating health crisis. It was after four months in bed without being able to function that I discovered that the microwave radiation levels in my home were extremely high. The repeated pulsing that I measured from the smart electric meter was maxing out my RF (radiofrequency radiation) meters several times per minute!

After the smart meter was installed on my home in 2015, I spent the first couple of years with insomnia. My labs were all out of range, but nothing jumped out as the specific cause of these issues. Another doctor suggested hyperthyroidism, which matched my symptoms. Another specialist said my thyroid was switching between hypoactive and hyperactive, but did not feel my thyroid was "bad" enough to treat.

Over the course of several months I developed a large painful lymphatic tumor and some swollen lymph nodes. My lymphocytes were three times the normal level. My thyroid became enlarged. I developed high fevers at night with chills, sweating, and violent shivering for six weeks.

Some of the debilitating symptoms I experienced were brain fog, fast resting pulse, heart palpitations, erratic spikes in blood pressure, extreme fatigue, insomnia, dizziness, anxiety, tumors, nausea, fevers, unexplained bleeding from nose, ears, and in urine, twitching throughout my body, tremors in my hands

and jaw, high liver enzymes, high lymphocytes, abnormal brain waves in EEGs, and eventually heart arrhythmias and seizures.

My life has been profoundly restricted. I am now reacting to all forms of microwave radiation. My life has been turned upside down. I can no longer use a cell phone, cordless phone, or have Wi-Fi in my home. In today's society, imagine trying to navigate with no GPS, no text chats with friends and family, no scanning QR codes, and not being able to function around people who are using all of these conveniences. I must keep my key fob in a faraday bag. I drive a 2007 car because I can't handle being in a newer model. I put my friend's phones and fobs in a faraday bag when I drive because most emit radiation even when they are in airplane mode or even switched off.

My family cannot have any wireless devices in my home. I have been required to pay an opt out "fine"of almost $22/month for almost 10 years now to keep the smart meter off my house, and I have my neighbor's meters shielded just so I can continue to live in my townhome. I can't use the bedrooms my townhome because the upstairs gets too much radiation from a cell tower several blocks away. My natural gas provider will not allow an opt out on their smart meter on the basis of health effects and I suffer greatly because of it. My heart seems to suffer most now. I get dangerous blood pressure spikes and palpitations. I can't go to the hospital with chest pain because I know it will be even worse there. There have been times I have slept in a chair next to my hard wired landline phone waiting to call 911 fearing I was having a heart attack but afraid to call because I know I need to wait it out, whatever the outcome. My doctor told me NOT to go the the hospital because he understood the danger for me with all of the wireless devices there. There have been many nights where I am roaming around my house with my meters trying to find a place with less radiation so I can sleep. It is not uncommon for me to have to sleep on the bathroom floor! I'm in my 60s. Imagine having a nice bed that you can't use because of technology outside of your home and having to sleep on the tile floor.

I can no longer enjoy concerts, plays, sports events, long dinners or chats in a coffee shop with friends, I can no longer travel wherever I want, work in the capacity that I want to, or live a normal life. Just driving past 5G transmitters, I experience serious negative reactions. I can no longer go to the mall and shop. I can only go out in short increments and run into stores, grab what I need, and get out. I cannot go to Washington, DC to tell my story. My city hall sits under three cell tower masts. I jeopardize my health going into these environments to tell my story. My life has to be carefully planned out to avoid people with cell phones, or places near cell towers, etc. I attribute all of this to the pulse-modulated microwave radiation exposure. I must plan out everything I do now. I can't just exist in society as I once did. I am overall not a fan of allopathic medicine and do not agree with taking medication on a long term basis. I am now taking 10 cardiac pills per day just to keep my heart in rhythm.

I intentionally spend days alone in the woods just trying to get my brain function back. I feel fantastic there. I get better when I take precautions, or when I spend days in my carefully shielded home. I am a social person with a lot of work I want to do in the world. I loved my jobs and my work speaking internationally. The last two times I have taken flights, I had seizures in the airport. I am no longer able to safely function in those environments. I basically need a babysitter when I know I will be in an environment where I will be overexposed. I realize that this world is no longer a place where I can survive. I am not alone. This can happen to anyone at any time.

This exposure to infrastructural radiation puts all living things at risk and has taken away my freedom to participate in society. I don't have a place to move where I can be free from cell tower infrastructure, satellite Wi-Fi, and smart devices, and where I can be assured of safety. Previous generations of wireless technology (2G, 3G, and 4G) have proven to be harmful. These are all forms of pulsed microwave radiation. 5G and 6G vastly increases our exposure to millimeter waves and is nearly impossible to avoid.

I spent two years researching peer-reviewed scientific studies on radio frequency radiation, taking hundreds of measurements, and interviewing dozens of people who have gotten sick from wireless radiation before writing our book. I took what I learned during what I had expected to be the last year of my life to write a book, *Tormented by Technology*, to tell my story. My family helped write it because I was not sure I could finish it due to my declining health. Our book is a voice for those of us already suffering and serves as a wake-up call for others. I would be happy to provide a copy if you would like.

I can assure you this exposure to infrastructural radiation puts all living things at risk. There are many people who are sick, who live their lives as I do, carefully limiting their exposure, and in some cases having to live completely off-grid just to survive. Some of the people I interviewed live in their car or have built a faraday cage in a small area of their home that is literally lined in aluminum foil, copper or silver fabric. Some are willing to publicly tell their stories, but many suffer in silence. Many have reported to me that they are ashamed or embarrassed to talk about this publicly. In Sweden alone, this condition is classified as a functional impairment, and over 250,000 are receiving benefits because they are no longer able to earn a living due to their environmentally induced illness. There are millions of people suffering worldwide. This is real. We need help. Children are even more vulnerable and are at greater risk because they are growing up with cell phones and Wi-Fi in their schools and homes and are surrounded by infrastructural radiation. Their skulls are thinner than adults and their brains have more fluid and absorb more radiation. This is backed by science. We have a duty to protect them. This website has information and provides links to scientific studies posted by medical physicians: https://mdsafetech.org/.

The average person is completely unaware of the dangers we are facing. While I do not know how to undo the damage at this time, I will continue to work on exploring anything that feels feasible to me. It is unacceptable to me that I have been damaged by this technology and may not be able to regain my health and brain capacity.

Please stop the wireless build out and provide public fiber-optics to the premises (FTTP) and wired connections where possible. This will give people faster, safer, more reliable and secure communications. Every state should have wireless free zones for people who are suffering like myself. Right now there are only two safe zones that I know of that are in the United States. They are far from me and I am unable to travel that far or live that far away. Please, I beg you to do something for those of us who are suffering.

There is no longer a question of if the wireless radiation we are all exposed to on a daily basis is harming us. It is. There is plenty of science over more than a fifty year period to prove that. The truth is that we are constantly being exposed to more and more and the studies can't keep up. This raises questions that warrant continued research, transparent scientific review, public discussion, and ACTION.

There are brilliant scientists, engineers, and innovators capable of developing and implementing safe technologies. I am not against technology. I want safe technology. I want accountability. I don't want the population to be exposed to any level of radiation that has not been proven safe. If we don't act on this now, there is a good possibility that each of us will personally suffer the consequences with physical issues or with the emotional pain of watching others suffer.

I do not want to look back at the end of my life and ask, "*Why didn't I do more?*"

What can you do to help us?