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5G

The Sierra Club, Mendocino Group has strong reservations about 5G technology and its proliferation. We stand in opposition to the placing of small cell tower facilities for 4G and 5G throughout Fort Bragg. Other cities in California have required studies for health, safety, devaluation of properties, aesthetics, impacts on the environment and excessive energy consumption before any such roll out occurs. Cities have held workshops and public meetings for discussion and education. They have resisted pressure from the federal government that wireless companies be the ones to determine the placement of the towers. The FCC has waived further environmental review which would identify what risks may be present. Sierra Club supports local control. We ask that Fort Bragg do the same and hold meetings to educate citizens and hear their wishes. FCC guidelines are 30 years old and do not take into consideration prolonged and continuous exposure. The potential impacts are serious enough that the City must do the investigation that gives weight to its citizens' opinions in the matter. Please respect and encourage public participation.

Sincerely, Sierra Club Mendocino Group Mary Walsh, Chair

From:	nampam <atma@mcn.org></atma@mcn.org>
Sent:	Tuesday, November 12, 2019 12:26 PM
То:	Lemos, June
Subject:	Public Agenda Item Today's Meeting
Attachments:	The Appeal - 5G Space Appeal.htm
Importance:	High

J Lemos;

Can you copy this for City Meeting tonight? If not, how late can I bring copies for City? (I apologize for the lateness: I just got this.)

This document changes upon emailing and has a petition signature: just click on read document to see text. Thanks. (you can also find this document at } <u>https://www.5gspaceappeal.org/the-appeal</u> Pam Morey 964-6532.



To the UN, WHO, EU, Council of Europe and governments of all nations,

We the undersigned scientists, doctors, environmental organizations and citizens from 204 countries and territories, urgently call for a halt to the deployment of the 5G (fifth generation) wireless network, including 5G from space satellites. 5G will massively increase exposure to radio frequency (RF) radiation on top of the 2G, 3G and 4G networks for telecommunications already in place. RF radiation has been proven harmful for humans and the environment. The deployment of 5G constitutes an experiment on humanity and the environment that is defined as a crime under international law.

Executive summary

Telecommunications companies worldwide, with the support of governments, are poised within the next two years to roll out the fifth-generation wireless network (5G). This is set to deliver what is acknowledged to be unprecedented societal change on a global scale. We will have "smart" homes, "smart" businesses, "smart" highways, "smart" cities and self-driving cars. Virtually everything we own and buy, from refrigerators and washing machines to milk cartons, hairbrushes and infants' diapers, will contain antennas and microchips and will be connected wirelessly to the Internet. Every person on Earth will have instant access to super-high-speed, low-latency wireless communications from any point on the planet, even in rainforests, mid-ocean and the Antarctic.

What is not widely acknowledged is that this will also result in unprecedented *environmental* change on a global scale. The planned density of radio frequency transmitters is impossible to envisage. In addition to millions of new 5G base stations on Earth and 20,000 new satellites in space, 200 billion transmitting objects, according to estimates, will be part of the Internet of Things by 2020, and one *trillion* objects a few years later. Commercial 5G at lower frequencies and slower speeds was deployed in Qatar, Finland and Estonia in mid-2018. The rollout of 5G at extremely high (millimetre wave) frequencies is planned to begin at the end of 2018.

Despite widespread denial, the evidence that radio frequency (RF) radiation is harmful to life is already overwhelming. The accumulated clinical evidence of sick and injured human beings, experimental evidence of damage to DNA, cells and organ systems in a wide variety of plants and animals, and epidemiological evidence that the major diseases of modern civilization—cancer, heart disease and diabetes—are in large part caused by electromagnetic pollution, forms a literature base of well over 10,000 peer-reviewed studies.

If the telecommunications industry's plans for 5G come to fruition, no person, no animal, no bird, no insect and no plant on Earth will be able to avoid exposure, 24 hours a day, 365 days a year, to levels of RF radiation that are tens to hundreds of times greater than what exists today, without any possibility of escape anywhere on the planet. These 5G plans threaten to provoke serious, irreversible effects on humans and permanent damage to all of the Earth's ecosystems.

Immediate measures must be taken to protect humanity and the environment, in accordance with ethical imperatives and international agreements.

(Note: References are provided as hyperlinks and endnotes.)

5G will result in a massive increase in inescapable, involuntary exposure to wireless radiation

Ground-based 5G

In order to transmit the enormous amounts of data required for the Internet of Things (IoT), 5G technology, when fully deployed, will use millimetre waves, which are poorly transmitted through solid material. This will require every carrier to install base stations <u>every 100 metres</u>¹ in every urban area in the world. Unlike previous generations of wireless technology, in which a single antenna broadcasts over a wide area, 5G base stations and 5G devices will have <u>multiple</u> <u>antennas arranged in "phased arrays</u>"^{2,3} that work together to emit focused, steerable, laser-like beams that track each other.

Each 5G phone will contain dozens of tiny antennas, all working together to track and aim a narrowly focused beam at the nearest cell tower. The US Federal Communications Commission (FCC) <u>has adopted rules</u>⁴ permitting the effective power of those beams to be as much as 20 watts, ten times more powerful than the levels permitted for current phones.

Each 5G base station will contain hundreds or thousands of antennas aiming multiple laserlike beams simultaneously at all cell phones and user devices in its service area. This technology is called "multiple input multiple output" or MIMO. FCC rules permit the effective radiated power of a 5G base station's <u>beams to be as much as 30,000 watts</u> per 100 MHz of spectrum,² or equivalently 300,000 watts per GHz of spectrum, tens to hundreds of times more powerful than the levels permitted for current base stations.

Space-based 5G

At least five companies⁵ are proposing to provide 5G from space from a combined 20,000 satellites in low- and medium-Earth orbit that will blanket the Earth with powerful, focused, steerable beams. Each satellite will emit millimetre waves with an effective radiated power of <u>up</u> to 5 million watts⁶ from thousands of antennas arranged in a phased array. Although the energy reaching the ground from satellites will be less than that from ground-based antennas, it will irradiate areas of the Earth not reached by other transmitters and will be additional to ground-based 5G transmissions from billions of IoT objects. Even more importantly, the satellites will be located in the Earth's magnetosphere, which exerts a significant influence over the electrical

properties of the atmosphere. *The alteration of the Earth's electromagnetic environment may be an even greater threat to life than the radiation from ground-based antennas (see below).*

Harmful effects of radio frequency radiation are already proven

Even before 5G was proposed, <u>dozens of petitions and appeals</u>⁷ by international scientists, including the <u>Freiburger Appeal</u> signed by over 3,000 physicians, called for a halt to the expansion of wireless technology and a moratorium on new base stations.⁸

In 2015, <u>215 scientists from 41 countries</u> communicated their alarm to the United Nations (UN) and World Health Organization (WHO).⁹ They stated that "numerous recent scientific publications have shown that EMF [electromagnetic fields] affects living organisms at levels well below most international and national guidelines". More than 10,000 peer-reviewed scientific studies demonstrate harm to human health from RF radiation.^{10,11} Effects include:

- <u>Alteration of heart rhythm</u>¹²
- <u>Altered gene expression</u>¹³
- <u>Altered metabolism</u>¹⁴
- <u>Altered stem cell development</u>¹⁵
- Cancers¹⁶
- <u>Cardiovascular disease</u>¹⁷
- Cognitive impairment¹⁸
- DNA damage¹⁹

- Impacts on general well-being²⁰
- Increased free radicals²¹
- Learning and memory deficits²²
- Impaired sperm function and quality²³
- <u>Miscarriage</u>²⁴
- Neurological damage²⁵
- Obesity and diabetes²⁶
- Oxidative stress²⁷

Effects in children include <u>autism</u>,²⁸ <u>attention deficit hyperactivity disorder (ADHD)</u>^{29,30} and <u>asthma</u>.³¹

Damage goes well beyond the human race, as there is abundant evidence of harm to diverse plant- and wildlife^{32,33} and laboratory animals, including:

- Ants³⁴
- Birds^{35,36}
- Forests³⁷
- Frogs³⁸
- Fruit flies³⁹
- Honey bees⁴⁰

- Insects⁴¹
- Mammals⁴²
- Mice^{43,4}
- Plants⁴
- Rats⁴⁶
- Trees⁴⁷

Negative <u>microbiological</u> effects⁴⁸ have also been recorded.

The WHO's International Agency for Research on Cancer (IARC) concluded in 2011 that RF radiation of frequencies 30 kHz - 300 GHz are possibly <u>carcinogenic to humans (Group 2B)</u>.⁴⁹ However, recent evidence, including the latest studies on cell phone use and brain cancer risks, indicate that <u>RF radiation is proven carcinogenic to humans</u>⁵⁰ and should now be classified as a "Group 1 carcinogen" along with tobacco smoke and asbestos.

Most contemporary wireless signals are pulse-modulated. Harm is caused by both the high-frequency carrier wave and the low-frequency pulsations.⁵¹

The deployment of 5G satellites must be prohibited

The Earth, the ionosphere and the lower atmosphere form the global electric circuit⁵² in which we live. It is well established that <u>biological rhythms</u>—of humans,^{53,54} birds,⁵⁵ hamsters,⁵⁶ and spiders^{57,58}—are controlled by the Earth's natural electromagnetic environment and that the well-being of all organisms depends on the stability of this environment, including the <u>electrical properties of the atmosphere</u>.^{59,60,61,62} Cherry, in a groundbreaking paper,⁶³ explained the importance of the <u>Schumann resonances</u>⁶⁴ and why ionospheric disturbances can alter blood pressure and melatonin and cause "cancer, reproductive, cardiac and neurological disease and death".

These elements of our electromagnetic environment have already been altered by radiation from power lines. <u>Power line harmonic radiation</u>⁶⁵ reaches the Earth's ionosphere and magnetosphere, where it is amplified by <u>wave-particle interactions</u>.^{66,67} In 1985, Dr. Robert O. Becker warned that power line harmonic radiation had already changed the structure of the magnetosphere, and that the continued expansion of this effect "threatens the viability of all life on Earth".⁶⁸ The placement of tens of thousands of satellites directly in both the ionosphere and magnetosphere, emitting modulated signals at millions of watts and millions of frequencies, is likely to alter our electromagnetic environment beyond our ability to adapt.⁶⁹

Informal monitoring has already provided evidence indicating serious effects on humans and animals from the approximately 100 satellites that have provided 2G and 3G phone service from low orbit since 1998. Such effects cannot be understood only from consideration of the low levels of radiation on the ground. Knowledge from other relevant scientific disciplines must be taken into account, including the fields of atmospheric physics and acupuncture.^{70,71,72,73} Adding 20,000 5G satellites will further pollute the global electric circuit^{74,75} and could alter the Schumann resonances,⁷⁶ with which all life on Earth has evolved. The effects will be universal and may be profoundly damaging.

5G is qualitatively and quantitatively different from 4G

The idea that we will tolerate <u>tens to hundreds of times more radiation</u> at millimetre wavelengths is based on faulty modelling of the human body as a <u>shell filled with a homogeneous</u> liquid.^{77,78} The assumption that millimetre waves do not penetrate beyond the skin completely ignores nerves,⁷⁹ blood vessels^{80,81} and other electrically conducting structures that can carry radiation-induced currents deep into the body.^{82,83,84} Another, potentially more serious error is that phased arrays are not ordinary antennas. When an ordinary electromagnetic field enters the body, it causes charges to move and currents to flow. But when extremely short electromagnetic pulses enter the body, something else happens: the moving charges themselves become little antennas that reradiate the electromagnetic field and send it deeper into the body. These reradiated waves are called <u>Brillouin precursors</u>.⁸⁵ They become significant when either the power or the phase of the waves <u>changes rapidly enough</u>.⁸⁶ 5G will probably satisfy both criteria.

In addition, shallow penetration in itself poses a unique danger to eyes and to the largest organ of the body, the skin, as well as to very small creatures. Peer-reviewed studies have recently been published, predicting <u>thermal skin burns</u>⁸⁷ in humans from 5G radiation and <u>resonant</u> <u>absorption by insects</u>, ⁸⁸ which absorb up to 100 times as much radiation at millimetre

wavelengths as they do at wavelengths presently in use. Since <u>populations of flying insects have</u> <u>declined by 75-80 per cent</u> since 1989 even in protected nature areas,⁸⁹ 5G radiation could have catastrophic effects on insect populations worldwide. A <u>1986 study by Om Gandhi</u> warned that millimetre waves are strongly absorbed by the cornea of the eye, and that ordinary clothing, being of millimetre-size thickness, increases the absorption of energy by the skin by a resonance-type effect.⁹⁰ <u>Russell (2018)</u> reviews the known effects of millimetre waves on skin, eyes (including cataracts), heart rate, immune system and DNA.⁹¹

Regulators have deliberately excluded the scientific evidence of harm

Stakeholders thus far in the development of 5G have been industry and governments, while renowned international EMF scientists who have documented biological effects on humans, animals, insects and plants, and alarming effects on health and the environment in thousands of peer-reviewed studies have been excluded. The reason for the current inadequate safety guidelines is that <u>conflicts of interest</u> of standard-setting bodies "due to their relationships with telecommunications or electric companies undermine the impartiality that should govern the regulation of Public Exposure Standards for non-ionizing radiation".⁹² Professor Emeritus Martin L. Pall lays out the conflicts of interest in detail, and the lists of important studies that have been excluded, in his <u>literature review</u>.⁹³

The thermal hypothesis is obsolete - new safety standards are needed

Current safety guidelines are based on the <u>obsolete hypothesis</u> that heating is the only harmful effect of EMFs. As Markov and Grigoriev <u>have stated</u>, "Today standards do not consider the real pollution of the environment with nonionizing radiation".⁹⁴ Hundreds of scientists, including many signatories to this appeal, have proven that many different kinds of acute and chronic illnesses and injuries are <u>caused without heating</u> ("non-thermal effect") from radiation levels far below international guidelines.⁹ Biological effects occur even at near-zero power levels. Effects that have been found at 0.02 picowatts (trillionths of a watt) per square centimetre or less include <u>altered genetic structure in E. coli</u>⁹⁵ and <u>in rats</u>, ⁹⁶ <u>altered EEG</u> in humans, ⁹⁷ growth stimulation in bean plants, ⁹⁸ and <u>stimulation of ovulation</u> in chickens.⁹⁹

To protect against non-thermal effects, duration of exposure must be considered. 5G will expose everyone to many more transmissions simultaneously and continuously, day and night without cessation. New safety standards are needed and should be based on *cumulative exposure* and *not only on power levels* but also on frequency, bandwidth, modulation, waveform, pulse width and other properties that are biologically important. Antennas must be confined to specific, publicly identified locations. To protect humans, antennas must be located far from where people live and work, and excluded from the public rights-of-way where people walk. To protect wildlife, they must be excluded from wilderness sanctuaries and strictly minimized in remote areas of the Earth. To protect all life, commercial communications satellites must be limited in number and prohibited in low- and medium-Earth orbits. Phased arrays must be prohibited on Earth and in space.

RF radiation has both acute and chronic effects

RF radiation has both immediate and long-term effects. Cancer and heart disease are examples of long-term effects. Alteration of heart rhythm¹⁰⁰ and changes in brain function (EEG)¹⁰¹ are examples of immediate effects. A syndrome that was called <u>radiowave sickness¹⁰²</u> in the former Soviet Union and is called <u>electromagnetic hypersensitivity</u> (EHS) around the world today¹⁰³ can be either acute or chronic. Professor Dr. Karl Hecht has published a <u>detailed history</u> of these syndromes, compiled from a review of more than 1,500 Russian scientific papers and the clinical histories of more than 1,000 of his own patients in Germany. Objective findings include sleep disorders, abnormal blood pressure and heart rate, digestive disorders, hair loss, tinnitus and skin rash. Subjective symptoms include dizziness, nausea, headache, memory loss, inability to concentrate, fatigue, flu-like symptoms and cardiac pain.¹⁰⁴

The <u>EUROPAEM EMF Guideline 2016</u> states that EHS develops when people are "continuously exposed in their daily life" to increasing levels of EMFs, and that "reduction and prevention of EMF exposure" is necessary to restore these patients to health.¹⁰⁵ EHS should no longer be considered a disease, but an injury by a toxic environment that affects an increasingly large portion of the population, estimated already at 100 million people worldwide,^{106,107} and that <u>may soon affect everyone</u>¹⁰⁸ if the worldwide rollout of 5G is permitted.

The International Scientific Declaration on EHS and multiple chemical sensitivity (MCS), Brussels, declared in 2015 that "[*i*]naction is a cost to society and is not an option any more ... [W]e unanimously acknowledge this serious hazard to public health ... [urgently requiring] that major primary prevention measures are adopted and prioritized, to face this worldwide pan-epidemic in perspective" (emphasis added).¹⁰⁹

World governments are failing in their duty of care to the populations they govern

In their haste to implement 5G and to encourage the unconstrained use of outer space, the European Union, United States and national governments worldwide are taking steps to ensure a "barrier-free" regulatory environment.¹¹⁰ They are <u>prohibiting local authorities from enforcing</u> <u>environmental laws</u>,¹¹¹ and "in the interest of speedy and cost-effective deployment", removing "unnecessary burdens … such as local planning procedures [and] the variety of specific limits on electromagnetic field (EMF) emissions and of the methods required to aggregate them".¹¹²

Governments are also <u>enacting laws</u> to make wireless facilities a permitted use in all public rights-of-way.¹¹³ To date, most wireless facilities have been located on private property at some distance from homes and businesses. In order for them to be spaced less than 100 metres apart as required by 5G, however, they will now be located on the sidewalk *directly in front of* homes and businesses and close above the heads of pedestrians, including mothers with babies.

Public notice requirements and public hearings are being eliminated. Even if there were a hearing and 100 scientific experts were to testify against 5G, <u>laws have been passed making it</u> <u>illegal</u> for local authorities to take their testimony into consideration. US law, for example, prohibits local governments from regulating wireless technology "on the basis of the environmental effects of radio frequency radiation", ¹¹⁴ and courts have reversed regulatory

decisions about cell tower placement simply because most of the public testimony was about health.¹¹⁵ Insurers will not provide coverage against EMF risks,¹¹⁶ and there is zero clarity as to what entity will bear legal responsibility for damage to life, limb and property arising from exposure to 5G, whether ground- or space-based.¹¹⁷

In the absence of an agreed comprehensive legal regime governing activities in outer space, legal liability for those activities is non-existent, despite the prospect of whole continents, the atmosphere and the oceans being put at risk by them.

International agreements are being violated

Children and duty of care

The United Nations <u>Convention on the Rights of the Child</u>: States shall "undertake to ensure the child such protection and care as is necessary for his or her well-being" (art. 3), "ensure ... the survival and development of the child" (art. 6) and "take appropriate measures to combat disease ... taking into consideration the dangers and risks of environmental pollution" (art. 24(c)).

<u>The Nuremberg Code (1947)</u> applies to all experiments on humans, thus including the deployment of 5G with new, higher RF radiation exposure that has not been pre-market tested for safety. "The voluntary consent of the human subject is absolutely essential" (art. 1). Exposure to 5G will be involuntary. "No experiment should be conducted, where there is an a priori reason to believe that death or disabling injury will occur" (art. 5). The findings of over 10,000 scientific studies and the voices of <u>hundreds of international organizations</u> representing hundreds of thousands of members who have suffered disabling injury and been displaced from their homes by already-existing wireless telecommunications facilities, are "a priori reasons to believe that death or disabling injury will occur".

Duty to inform and EMFs

The <u>World Telecommunication Standardization Assembly (2012)</u> of the International Telecommunication Union (ITU) stated that "[t]here is a need to inform the public of the potential effects of exposure to electromagnetic fields (EMFs)" and invited Member States "to adopt suitable measures in order to ensure compliance with relevant international recommendations to protect health against the adverse effect of EMF".

The <u>Mid-term review of the European Environment and Health Action Plan 2004-2010</u> (2008): "The European Parliament ... [n]otes that the limits on exposure to electromagnetic fields which have been set for the general public are obsolete, ... obviously take no account of developments in information and communication technologies, of the recommendations issued by the European Environment Agency or of the stricter emission standards adopted, for example, by Belgium, Italy and Austria, and do not address the issue of vulnerable groups, such as pregnant women, newborn babies and children."

<u>Resolution 1815 (Council of Europe, 2011)</u>: "Take all reasonable measures to reduce exposure to electromagnetic fields, especially to radio frequencies from mobile phones, and particularly the exposure to children and young people."

Environment

The <u>Declaration of the United Nations Conference on the Human Environment</u> (1972): "The discharge of toxic substances ... in such quantities or concentrations as to exceed the capacity of the environment to render them harmless, must be halted in order to ensure that serious or irreversible damage is not inflicted upon ecosystems" (principle 6).

The <u>World Charter for Nature</u> (1982): "Activities which are likely to cause irreversible damage to nature shall be avoided ... [W]here potential adverse effects are not fully understood, the activities should not proceed" (art. 11).

The <u>Rio Declaration on Environment and Development</u> (1992): "States have ... the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction" (principle 2).

The United Nations <u>World Summit on Sustainable Development</u> (2002): "There is an urgent need to ... create more effective national and regional policy responses to environmental threats to human health" (para. 54(k)).

The <u>African Convention on the Conservation of Nature and Natural Resources</u> (2017): "The Parties shall ... take all appropriate measures to prevent, mitigate and eliminate to the maximum extent possible, detrimental effects on the environment, in particular from radioactive, toxic, and other hazardous substances and wastes" (art. 13).

Health and human rights

The <u>Universal Declaration of Human Rights</u>: "Everyone has the right to life, liberty and security of person" (art. 3).

The United Nations <u>Global Strategy for Women's, Children's and Adolescents' Health</u> (2016-2030) has as objectives and targets to "transform", by expanding enabling environments; to "survive", by reducing maternal and newborn mortality; and to "thrive" by ensuring health and well-being and reducing pollution-related deaths and illnesses.

Space

The <u>Outer Space Treaty</u> (1967) requires that the use of outer space be conducted "so as to avoid [its] harmful contamination and also adverse changes in the environment of the Earth" (art. IX).

The <u>United Nations Guidelines for The Long-Term Sustainability of Outer Space Activities</u> (2018): "States and international intergovernmental organizations should address ... risks to people, property, public health and the environment associated with the launch, in-orbit operation and re-entry of space objects" (guideline 2.2(c)).

World governments are playing dice with life on Earth

Albert Einstein famously asserted that "God does not play dice".¹¹⁸ Yet by pursuing the broadcast on Earth and from space of 5G, an unprecedented technology of millimetre waves

previously used as an energy weapon in <u>military operations and crowd control</u>,¹¹⁹ world governments are recklessly playing dice with the future of life on Earth.

To refuse to accept and apply relevant and valid scientific knowledge is ethically unacceptable. Existing research shows that 5G—and especially space-based 5G—contravenes principles enshrined in a host of international agreements.

We call upon the UN, WHO, EU, Council of Europe and governments of all nations,

(a) *To take* immediate measures to halt the deployment of 5G on Earth and in space in order to protect all humankind, especially the unborn, infants, children, adolescents and pregnant women, as well as the environment;

(b) To follow the <u>United Nations Convention on the Rights of the Child</u> and <u>Council of</u> <u>Europe Resolution 1815</u> by informing citizens, including teachers and physicians, about the health risks (to adults and children) from RF radiation, and *why they should* and *how they can* avoid wireless communication and base stations, particularly in or near day-care centres, schools, hospitals, homes and workplaces;

(c) To favour and implement wired telecommunications instead of wireless;

(d) *To prohibit* the wireless/telecommunications industry <u>through its lobbying organiza-</u> <u>tions</u> from <u>persuading officials</u> to make decisions permitting further expansion of RF radiation, including ground- and space-based 5G;

(e) *To appoint* immediately—without industry influence—international groups of independent, truly impartial EMF and health scientists with no conflicts of interest,¹²⁰ for the purpose of establishing new international safety standards for RF radiation that are not based only on power levels, that consider cumulative exposure, and that protect against *all* health and environmental effects, not just thermal effects and not just effects on humans;

(f) *To appoint* immediately—without industry influence—international groups of scientists with expertise in EMFs, health, biology and atmospheric physics, for the purpose of developing a comprehensive regulatory framework that will ensure that the uses of outer space are safe for humans and the environment, taking into account RF radiation, rocket exhaust gases, black soot, and space debris and their impacts on <u>ozone</u>,¹²¹ global warming,¹²² the atmosphere and the preservation of life on Earth. Not only ground-based but also space-based technology must be sustainable¹²³ for adults and children, animals and plants.

Please respond to the Appeal Administrator listed below

detailing the measures you intend to take to protect the global population against RF radiation exposure, especially 5G radiation.

This appeal and your response will be publicly available on <u>www.5qSpaceAppeal.orq</u>.

Respectfully submitted,

Arthur Firstenberg, Appeal Administrator, info@5gSpaceAppeal.org

Initial Signatories

AFRICA

Lauraine Margaret Helen Vivian, PhD, Anthropology and Psychiatry; Honorary Research Associate, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark. Signatory for South Africa

ASIA

Girish Kumar, PhD, Professor, Electrical Engineering Department, Indian Institute of Technology Bombay, Powai, Mumbai, India

AUSTRALIA

Don Maisch, PhD, Independent researcher, author of "The Procrustean Approach", Lindisfarne, Tasmania, **Australia**

EUROPE

Alfonso Balmori, BSc, Master in Environmental Education, Biologist. Valladolid, Spain

- Klaus Buchner, Dr. rer. nat., Professor, MEP Member of the European Parliament, Kompetenzinitiative zum Schutz von Mensch, Umwelt und Demokratie e.V., München, Germany
- *Daniel Favre*, Dr. phil. nat., Biologist, A.R.A. (Association Romande Alerte aux Ondes Electromagnétiques), **Switzerland**
- Annie Sasco, MD, DrPH, SM, HDR, former Chief of Research Unit of Epidemiology for Cancer Prevention at the International Agency for Research on Cancer (IARC), Lyon; former Acting Chief, Programme for Cancer Control of the World Health Organization (WHO); former Director of Research at the Institut National de la Santé et de la Recherche Médicale (INSERM); France

NORTH AMERICA

- *Martin Pall*, Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University, residing in Portland, Oregon, **USA**
- *Kate B. Showers*, PhD, Soil Science, Senior Research Fellow, Centre for World Environmental History, University of Sussex, Falmer, Brighton, UK, residing in Bolton-Est, Québec, **Canada**

SOUTH AMERICA

Carlos Sosa, MD, University of Antioquia, Medellín, Colombia

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⁹ International appeal: scientists call for protection from non-ionizing electromagnetic field exposure. International EMF Scientist Appeal website. <u>https://emfscientist.org/index.php/emf-scientist-appeal</u>. Published May 11, 2015. Accessed June 10, 2018. As of March 2018, 237 EMF scientists from 41 nations had signed the Appeal.

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<u>content/uploads/2018/06/Zory-Glasers-index.pdf</u>. Accessed June 26, 2018. Report and 9 supplements issued by Naval Medical Research Institute, Bethesda, MD; Research Division, Bureau of Medicine & Surgery, Dept. of the Navy, Washington, DC; Electromagnetic Radiation Project Office, Naval Medical Research & Development Command, Bethesda, MD; Naval Surface Weapons Center, Dahlgren, VA; and National Institute for Occupational Safety and Health, Rockville, MD. Index by Julie Moore and Associates, Riverside, CA, 1984. Lt. Zorach Glaser, PhD, catalogued 5,083 studies, books and conference reports for the US Navy through 1981.

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content/uploads/Advocacy_Docs/PCIA_Model_Zoning_Ordinance_June_2012.pdf. Accessed June 29, 2018. ¹¹⁴ Mobile services, 47 U.S.C. § 332(c)(7)(B)(iv). www.gpo.gov/fdsys/pkg/USCODE-2016-

<u>title47/pdf/USCODE-2016-title47-chap5-subchapIII-partI-sec332.pdf</u>: "No state or local government or instrumentality thereof may regulate personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [Federal Communications] Commission's regulations concerning such emissions." Courts have reversed regulatory decisions about cell tower placement simply because most of the public testimony was about health. ¹¹⁵ *Cellular Telephone Company v. Town of Oyster Bay*, 166 F.3d 490, 495 (2nd Cir. 1999).

https://openjurist.org/166/f3d/490/cellular-telephone-company-at-v-town-of-oyster-bay. Accessed June 10, 2018.; *T-Mobile Northeast LLC v. Loudoun County Bd. of Sup'rs*, 903 F.Supp.2d 385, 407 (E.D.Va. 2012). https://caselaw.findlaw.com/us-4th-circuit/1662394.html. Accessed June 10, 2018.

¹¹⁶ Vogel G. A Coming Storm For Wireless? *TalkMarkets*. July 2017. <u>www.talkmarkets.com/content/stocks--</u> <u>equities/a-coming-storm-for-wireless?post=143501&page=2</u>. Accessed September 13, 2018.

¹¹⁷ Swiss Re: SONAR - New emerging risk insights. July 2014:22. <u>http://media.swissre.com/documents/</u> <u>SONAR_2014.pdf</u>. Accessed June 10, 2018. "[A]n increasing level of interconnectivity and the growing prevalence of digital steering and feedback systems also give rise to new vulnerabilities. These could involve cascading effects with multiple damages as well as long-lasting interruptions if the problems turned

out to be complex and/or difficult to repair. Interconnectivity and permanent data generation give rise to concerns about data privacy, and exposure to electromagnetic fields may also increase." ¹¹⁸ Albert Einstein, letter to Max Born, Dec. 4, 1926.

¹¹⁹ Active Denial Technology. Non-Lethal Weapons Program. <u>https://jnlwp.defense.gov/Press-Room/Fact-Sheets/Article-View-Fact-sheets/Article/577989/active-denial-technology/</u>. Published May 11, 2016. Accessed June 10, 2018.

¹²⁰ Conflicts of interest have frequently arisen in the past. For example, the <u>EU Commission (2008/721/EC)</u> appointed <u>industry-supportive members for SCENIHR</u> who submitted to the EU <u>a misleading SCENIHR</u> report on health risks, which gave the telecommunications industry carte blanche to irradiate EU citizens.

The report is now quoted by radiation safety agencies in the EU. Another example is the US National Toxicology Program contracting with the IT'IS Foundation, which is <u>funded by the entire telecommuni-</u><u>cations industry</u>, to design, build and monitor the exposure facility for a two-year, 25-million-US-dollar study of cell phones. It subsequently produced a <u>misleading report</u> that is now quoted by industry officials in the US.

¹²¹ Ross M, Mills M, Toohey D. Potential climate impact of black carbon emitted by rockets. *Geophys Res Lett.* 2010;37:L24810. <u>https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2010GL044548</u>. Accessed June 17, 2018.

¹²² Ross MN, Schaeffer PM. Radiative forcing caused by rocket engine emissions. *Earth's Future*.
 2014;2:177-196. <u>https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2013EF000160</u>. Accessed June

17, 2018.

¹²³ Callicott JB, Mumford K. Ecological sustainability as a conservation concept. *Conservation Biology*.
 1997;11(1):32-40. <u>https://www.sierraforestlegacy.org/Resources/Community/Sustainability/</u>
 <u>SY_CallicottMumford1997.pdf</u>. Accessed June 20, 2018.

 $\int 0 5G$

Daney Dawson PO Box 1373 Mendocino, Ca. 95460 daneyd@mcn.org

November 10, 2019

Members of Fort Bragg City Council;

Boris Johnson, PM of Britain, recently stated that (I paraphrase) "technology can be used to keep every citizen under around the clock surveillance...transmitting your every detail...more oppressively over the human race, like a black thundercloud, an indelible spore in the ether...click by click we are becoming a resource ourselves. Digital data is the new "oil". Can algorhythms decide our future? Real time censorship is happening in real time. Digital authoritarianism is an emerging reality with far reaching, unintended consequences including on human psychology" He should know, for Britain is one of the most surveyed countries on earth. He also stated that "Whatever science we've advanced has been punished by the Gods."

When I think about 5G, the first question that comes into my mind is "Why?" Don't we have a functioning communication system, without ramping up to an insane level of microwave exposure to the public? Wireless and microwave are not only a social/psychological threat, they are a serious human health threat.

Dr. Devra Davis is a Professor of Medicine, among other things, whose work I have recently become aware of. She is only one of a huge number of health professionals who are exposing the dangers of microwave and wireless to human health. I am listing her credentials to establish the legitimacy of her message:

Professor of Medicine, Israel and Turkey

PhD in Science, MS in Public Health from John Hopkins U., MA in Sociology, BA in Psychology
Expert on electromagnetic radiation and wireless transmitting devices
Founder of Center for Environmental Oncology at U. of Pittsburg Cancer
Institute
Founder of Environmental Health Trust for research on environmental
impacts on human health
Pres. Clinton's appointee to the Chemical Safety and Hazard
Investigation Board, 1994-99
Senior Advisor to Ass't. Secretary of US Health & Human Services Dept.
Over 200 articles published including Lancet and JAMA

I will attempt to summarize her research findings about the hazards of wireless and microwave radiation, but I suggest that you watch this video and educate yourselves:

https://www.youtube.com/watch?v=BwyDCHf5iCY

The Federal Communications Commission adopted the Telecommunications Act of 1995, which was written by lobbyists for the industry, with no congressional oversight. The Harvard Law Department has called the FCC a "Captured Agency", in other words, co-opted by industry.

The original research establishing the standards for "safe" exposure to microwave radiation was done already over 25 years ago, on a 220 pound man with a 12 pound head. The holster holding the phone was 12" from his head. The exposure was for 6 minutes. Far from the reality of young children, with soft skull tissue and developing brains, having a wireless devise pinned to their heads for up to hours a day. Most phones, when tested, are shown to exceed standards by a factor of 5.

Wireless transmission depends on pulsed energy. The current generation of of so-called smart phones transmit at speeds up to 2.4 billion cycles per second. 5G devices will transmit at speeds from 5 billion to 100 billion cycles per second. When a call comes into a cell phone, it boosts to maximum power for the duration of the call, while the device is held against the head. This will be irregularly PULSED energy, playing havoc with ours body's natural electromagnetic fields.

5G emissions cannot go around or get through anything, so would require a multiplex of antennas 100-200 yards apart, meaning that they would be on every street corner. There would be no escaping their emissions, and by law we would be required to live with them.

Several hundred European scientists have signed a petition to the UN asking for restraint. 5G has NOT BEEN TESTED. It will, however, be tested on US, you and me, our children and grandchildren. However, by the time the affects are known, it will be too late.

All of our bodily systems resonate at natural frequencies. This is how our body systems and indeed all of our cells communicate with each other. Disrupt these cycles, and disease and damage is the result. Natural DNA repair is disrupted. 5G frequencies resonate with our skin, our largest organ and one responsible for eliminating toxins from our bodies. The skin is full of sense receptors, and experiments have shown the emissions to cause the sensation of the skin being on fire. (weaponizaion?)

There are documented, confirmed cases of firemen living under a 5G installation who had brain damage. Russian studies show that there is damage to the eyes. This is not something that can be modeled in the laboratory, so testing for RF safety is problematic and HAS NEVER BEEN DONE.

There is also a real psychological/social threat from wireless technology. Cell phone radiation causes dopamine to be released in the brain. Dopamine in the brain chemical associated with addiction. So most of our population, INCLUDING INFANTS AND CHILDREN, are becoming addicted to this technology. As a result, they are failing to make personal bonds with other humans, or learning to relate, which is extremely important to their development as human beings and good citizens. They are being indoctrinated several hours a day by commerce, industry, and other forces wanting to mold their minds to a prescribed form.

The effects on public education are real. Modern students are failing in basic subjects. Their intelligence and reasoning capacity are being undermined. Many students stay up well up into the night with their devices, rather than sleeping or doing homework. The blue light emitted by these devices interferes with the release of melatonin, necessary for a good night's sleep. Students come to school tired, zoned out, and unprepared. Wireless radiation has been shown to create "brain fog", or zoning out, or lack of focus. Wireless schools seems like the antithesis to good educational policy.

5G is an unneccessary and dangerous technology that should be refused by this council, and our county, state, and federal governments.

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I do not wish to the Council	speak but want to submit the f	ollowing comments to
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This information is retained as a Public Record, and as such, may be shared with others upon request. Please do not provide any information that you do not wish to be disclosed to others.

Completion of this document is voluntary; all persons may attend the meeting regardless of whether a person completes this document (Government Code §54953.3)

ULD MIGESITE

THE INFRASTRUCTURE FROM THE

From: Sent: To: Subject: Sue Boecker <suzyl0l@aim.com> Sunday, November 10, 2019 12:12 PM Lemos, June 5g Network

I object to being an unpaid lab rat for the 5g telecommunications corporations. Only the United States and Canada are allowing citizens to be exposed to this unproven, high speed / frequency electronic technology before it is proved to be safe for humans. In fact, due to adverse health outcomes of limited testing, firestations are exempt from the requirement for public structures to host 5g tower installations.

Please, do not expose us to this technology.

Sue Boecker Fort Bragg, CA 95437

From:	R & G Collin <collin@mcn.org></collin@mcn.org>
Sent:	Sunday, November 10, 2019 2:22 PM
То:	Lemos, June
Subject:	City G5 Cell ordinance letter
Attachments:	City ord Cell Nov 19.JPG; City cell ord signed ltr Nov 19.PDF

Hi Jone, Please print for the Nov 12 meeting. I have another early childhood meeting that eve, so I cannot attend. Thank you, Georgia

City Resident Request Regarding Small Cell / Wireless Ordinance

Georgia & Roger Collin 1361 Cameron Rd Elk, CA 95432 707 877-3419 collin@mcn.org

Nov. 7, 2019

Dear Mayor, Vice Mayor, and City Council Members,

We are writing to express our great concern about the development of any wireless ordinance that allows the potential installment of **hazardous** 4G/**5**G/small-cell antennas throughout our community. Threats to public health, safety, privacy, security, property values, and more must be addressed and protected in any small cell or other wireless ordinance.

It is said 5G is a dangerous escalation of traditional cellular technology, packed with higher energy radiation that delivers potential damaging effects on human beings, kills bees, and what about the impact on babies and children's growing brains? 5G so self driving cars can function is NOT worth the impact!

<u>We request a well-advertised workshop be held to obtain residents input and the Fort Bragg City</u> <u>Council work with community groups to produce an updated and protective wireless ordinance</u>. And during this time period, until a permanent ordinance is approved, no additional small cells be permitted within the city limits.

Any urgency or permanent ordinance requires built-in protections for the residents of Fort Bragg and surrounding unincorporated areas from this unprecedented dangerous technology. There are protective wireless ordinances being produced by cities and counties all over California that ensure the best protections for the residents of the cities & surrounding areas. We hope this is a primary goal of the Mayor and Fort Bragg City Council.

Thank you for considering the well being of residents and the children of our community!

Sincerely. lorgia Collin Iname Oger Collin

Printed name

From:	indigomendo@mcn.org
Sent:	Sunday, November 10, 2019 6:28 PM
То:	Lemos, June
Subject:	5 G Petition

Dear Mrs. Lemos

Can you please add this to the public comment and forward to city council, planning commission and the city manager?

I just signed the petition "Fort Bragg City Council and City Manager: No wireless facilities next to homes, schools and parks in Fort Bragg, CA" and wanted to see if you could help by adding your name.

Our goal is to reach 100 signatures and we need more support. You can read more and sign the petition here:

http://chng.it/9pH7GzpYsH

Thanks!

Justine Olivia Battersby

From:	Helen Sears <polliwog45@yahoo.com></polliwog45@yahoo.com>
Sent:	Monday, November 11, 2019 9:55 AM
То:	Lemos, June
Subject:	Suggestions for the City Council
Attachments:	SUGGESTIONS FOR FB COUNCIL.docx

Hi, Ms. Lemos.

Attached is what I'd like to say at the Town Council meeting on Tuesday evening, if my husband is well enough that I can attend. Unfortunately, he's very ill right now (he turns 84 next month), and I dread leaving him alone.

At any rate, Jessica Morsell-Haye told us in the meeting our group had with her, Tabitha, Jacob Patterson, and Tom Varga that we should make two suggestions for two new Ordinances at the next Council meeting, then told us what they should be.

I've typed up the suggestions, then added reasons the Council might consider the ideas.

- Would you be willing to forward them on to the members of the City Council? I'm sorry to bother you with such a request, but I don't have their e-mails, except Jessica's. If there's a way for me to get the e-mail addresses of the others, just let me know, and I'll be happy to do it.

- Also, will this be enough to get these requests and reasons into the public record? If not, is there a way for me to do that from home, if I wind up not being able to attend the meeting?

Thank you for any guidance you could give me.

Helen Sears 937-1936

SUGGESTION: CREATE TWO NEW ORDINANCES

- <u>Comply with ADA regulations</u>. Residents who live within 1,000 feet of where a tower or antenna is to be installed should be notified, and they should be given 60 days to request accommodation.
- . <u>The City of Fort Bragg should carry more than \$1m liability</u>, since insurance companies have said they won't cover damage from WiFi.

REASONS FORT BRAGG SHOULD ACT NOW TO RESIST 5G:

- . Frank Clegg, former President of Microsoft Canada, who worked in the telecom industry for 40 years, said recently, "I don't think 5G is safe. The more I learn and the more I research, the more concerned I am. I'm not aware of any research in my field or related fields having to do with the safety of wireless technology."
- . On August 9, a US Court of Appeals for the DC Circuit overturned an FCC order bypassing environmental review for 5G and Small Cell Wireless 4G densification. The Court found that the FCC had failed to adequately address possible harms of its deregulatory efforts and the benefits of environmental and historic preservation review. The court was concerned that the FCC was speeding deployment of cell towers when it had not completed its ongoing investigation into the potential health effects of low-intensity radiofrequency radiation.
- . New Hampshire recently passed a bill establishing a commission to study health and environmental effects of 5G technology. Oregon, Montana, and Louisiana have also taken steps. And New York has started to.
- . US Sen. Richard Blumenthal, D-CT, is asking the Federal Government for proof 5G does not pose health risks. Blumenthal and Rep. Anna Eshoo, D-CA, wrote to FCC Commissioner Brendan Carr seeking information on how his agency has determined 5G technology is safe.
- . Federal Bill HR 530 has been introduced by CA Congresswoman Anna Eschoo, to invalidate the FCC's ruling to accelerate deployment of 5G small cells throughout cities. Senator Dianne Feinstein introduced a Senate companion bill, SB 2012 "Restoring Local Control Over Public Infrastructure Act of 2019," which would similarly repeal FCC rules limiting local government control over telecom infrastructure.
- . Major lawsuits have been filed against the FCC and other entities.
- . The California Supreme Court recently ruled that San Francisco had the right to decide for itself whether to have 5G or not. This sets precedent.

- . Some cities have already banned 5G. Portland, OR, for example. It can be done.
- . Making Fort Bragg a 5G sanctuary would safeguard the city financially, as well as protect tourism and businesses.
- . In the recent power outage, a number of people lost cell phone coverage. Land lines were much more dependable. A call from Fort Bragg's leaders for the preservation and maintenance of landlines would go a long way to keeping people safe during future outages.
- . Dr. Martin Pall has issued a statement saying that 5G and their associated EMFs can trigger a regulatory system that normally protects plants but, when activated, produces high levels of terpenoids that are highly flammable. He says it's like spraying plants with gasoline. We do not need any more fire hazards.

UN MEMBER CALLS OUT SECRETARY GENERAL ON 5G:

Claire Edwards raised her hand and told Antonio Guterres, the Secretary

General of the UN, to remove all EMF devices from UN buildings and stop the roll-

out of 5G, because 5G is designed to focus WiFi in excess of 100 times what is

currently being used, and that beams are used in the same way as directed energy

weapons are.

She said the UN must prioritize actions to protect and respect people, and

that 5G must be subjected to an independent health and safety assessment before

it's launched anywhere in the world.

Mr. Guterres said he confessed ignorance, and said he will contact the WHO.

*

From:	nchao@mcn.org
Sent:	Monday, November 11, 2019 2:18 PM
То:	Lemos, June
Cc:	Miller, Tabatha; CDD User; Lee, Will; Norvell, Bernie; Morsell-Haye, Jessica; Albin-Smith,
	Tess; Peters, Lindy
Subject:	"No wireless facilities next to homes, schools and parks in Fort Bragg"

I am totally against the installation of 5G on the coast. We don't need any more cancer causing elements in our lives. My niece & her organization recently were able to have Encinitas City council to pass similar effort. We can follow their footstep. Here is my signed petition:

 $\frac{https://secure.na1.echosign.com/public/fs?aid=CBFCIBAA3AAABLblqZhCj1apg1u18sjbw-KDuot8x8RfFwhqPxOQIpyw1ToPQLyt0pDbtdlDg9bY4FqgNIc4%2A}{\label{eq:composition}}$

Thank you.

Nancy Chao

From:	Larry Kellogg <lkellogg@mcn.org></lkellogg@mcn.org>
Sent:	Tuesday, November 12, 2019 7:39 AM
То:	Lemos, June; stop5gmendocino@mcn.org
Subject:	4 G & 5G towers in Fort Bragg

Dear Folks,

I object to 4G and 5G micro-towers in Fort Bragg based on the adverse effects on our health, safety, fire risk, devaluation of properties, aesthetics, impacts on the environment, loss of privacy, and excessive energy usage it demands.

We have to consider the health of our community, above all else. respectfully, Larry Kellogg

--

Using Opera's mail client: http://www.opera.com/mail/

Georgia & Roger Collin 1361 Cameron Rd Elk, CA 95432 707 877-3419 collin@mcn.org

Nov. 7, 2019

Dear Mayor, Vice Mayor, and City Council Members,

We are writing to express our great concern about the development of any wireless ordinance that allows the potential installment of **hazardous** 4G/**5**G/small-cell antennas throughout our community. Threats to public health, safety, privacy, security, property values, and more must be addressed and protected in any small cell or other wireless ordinance.

It is said 5G is a dangerous escalation of traditional cellular technology, packed with higher energy radiation that delivers potential damaging effects on human beings, kills bees, and what about the impact on babies and children's growing brains? 5G so self driving cars can function is NOT worth the impact!

We request a well-advertised workshop be held to obtain residents input and the Fort Bragg City Council work with community groups to produce an updated and protective wireless ordinance. And during this time period, until a permanent ordinance is approved, no additional small cells be permitted within the city limits.

Any urgency or permanent ordinance requires built-in protections for the residents of Fort Bragg and surrounding unincorporated areas from this unprecedented dangerous technology. There are protective wireless ordinances being produced by cities and counties all over California that ensure the best protections for the residents of the cities & surrounding areas. We hope this is a primary goal of the Mayor and Fort Bragg City Council.

Thank you for considering the well being of residents and the children of our community!

Sincerely,	\frown
Cyeorgia allen	: Georgia Cellin
	Printed name
Prynla (Lei Roger Collin
	Printed name

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Harry Vere Lehmann Principal Attorney Law Offices of Harry V. Lehmann PC 4 Vineyard Court Novato, California 94947

Area Code 415 Telephone: 897-2121 Facsimile: 898-6959

Via fax: 916-319-2181

August 24, 2017

The Hon. Assemblymember Lorena Gonzalez-Fletcher, District 80 Chair, Assembly Appropriations Committee, *Care Of*: Ms. Jennifer Galehouse, Deputy Chief Consultant Assembly Appropriations Committee

RE: Due to multi-axial EMF crossfire, SB 649 will disproportionately injure the poor, in District 80, and in the rest of urban and suburban California.

Dear Assemblymember Gonzalez-Fletcher:

Due to multi-axial overlapping signal saturation, if SB 649 is enacted as intended, the negative health consequences will fall disproportionately upon the poor. Below are relevant factors supporting this fact:

- 1. One goal of installing 50,000 new cellular distribution antennas is that 5G customers will be able to receive the digital entertainment now provided by cable through the 5G network.
- 2. The cellular broadcast signals from these incorrectly-labeled 'small cell,' microwave transmitters are not cohesive, but rather spherical; not like a laser, more like a lightbulb.
- 3. With the 5G approach a single local microwave broadcast antenna can carry / many different programs simultaneously.
- 4. When non-coherent broadcasts are from the same or nearby towers, their signals will overlap, think of overlapping 3D Venn Diagrams, or like a yard lit by lights of many different colors from the same pole.
- 5. It is therefore unavoidable that such differing signals from the same (or separate and nearby local) 'small cell' 5G antennas will overlap.
- 6. The result of overlapping of non-coherent radio-frequency broadcasts is expanded signal concentration, with an increase in received signal density proportional to the proximity of recipient sites to each other.

- 7. Anyone familiar with the lives of our more recently arrived Hispanic residents knows that their living situations tend to be more dense than the density experienced by financially secure residents. People of all races who live in assisted circumstances are in the same situation: The square footage in apartment units is proportional to what can be afforded.
- 8. For example, if on any given evening at 8 p.m. there are 16 units in an apartment building, and each one is viewing 5G digital entertainment, *then all 16 units will be saturated from <u>each</u> of the non-coherent broadcasts being made from the 'small cell' antenna(s) involved.*
- 9. While there will also be increased signal density in apartments occupied by well-to-do residents, the radiation saturation experienced by the poor will be greater, because the units are closer together.
- 10. Poorer residents, in addition to living in more tightly packed units, due to financial circumstance will sometimes live with more people in each unit than the well-to-do. With 5G entertainment, an increase in people using tablets in any given also increases saturation density.
- 11. Well established science already supplied to Appropriations shows that cellular radiofrequency non-ionizing radiation causes harm to the human biological system, including glioblastoma, and that this harm is caused in part by breakage of the DNA molecule strands as well as disruption of cellular calcium ion utilization. Even 'ordinary' single unit cellular phones will cause a kill-off of 50% of the sperm in a male who keeps a cellular device in his front pants pocket. A recent Israeli study showed a kill-rate at 47%. The poor will be hurt worse than people who live in single family homes far from the streets.

The above noted effects are not tied to race but they *are* tied to money and resulting density of occupation. People who are living in the most congested circumstances will experience far greater levels of signal density. My father was a truly great man who worked as a school custodian in his later years and I was working full time in a restaurant while a freshman in high school. I am glad to still see the world in many ways with the eyes of a person from the serving classes. This is a time when each of us, regardless of background, should recognize that the deployment of so-called 'small cell' 5-G will hurt the poor more than the rich. As a lawyer and as CEO of Green Swan, our advocacy company, I volunteer to debate this with whatever lawyer the telecom industry wishes to sacrifice for that process.

Very truly yours,

Harry V. Lehmann, as a lawyer and as CEO of Green Swan, Inc.



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To Whom it May Concern

I am not a scientist. I am an artist.

Need REAL review of effects this radiation can do to humans.

Studies have gone on for over 15 years and I know passions run deep on both sides of the aisle. Some people dismiss the scares as just that; others believe and even some can sense feelings and changes in energy, emotion, and thought processes.

Some carriers are boosting 4G networks. Not even using 5G. Are devices available? How long before everyone has 5G technology?

10 years? 20 years? Why now? Why not wait until this technology is proven to be harmless? Especially to our children.

Yes, there's Lots of potential, and lots of Info in airwaves but right now these microwaves are higher frequency than anything we're currently using like for tv, radiowaves, phones, etc including light energy, and xrays. Let's play it safe.

I remember when I first came to Mendocino in 2005 and almost no one had a cell phone or spent their days looking at their little devices instead of into the eyes of the person they were with. It was charming. It was a step back from the hustlebustle of city life and people came here to get away from their technological lives. Now It hurts me deeply to see mothers pushing strollers and completely ignoring their child within while they yammer on the phone. But I digress.

Placing the 5G cell towers near schools where our youngest members of society spend so much time, I believe, is a huge mistake. If talking on a cell phone can cause cancer (this is proven) then just imagine how being surrounded by the microwave energies day after day, night after night, especially if you live near a cell tower, might change your life, and not for the best. One piece of research I came across said by 2025 1 in 2 children will be born autistic. Could these microwaves be the cause? Wanna just chill until we find out? I don't have a child but if I did, I would pray the City fathers pause long enough to allow 4-5 more years of studies to be conclusive as to the safety or danger of G5. Thank you.

A I have known scheral people who are affected transmatically by cell mar microwenes,

Based on the revised Guidelines - Exhibit A it appears that the "Guideline" before Council tomorrow modifies the City's LCP visual quality standards, and therefore requires Coastal Commission certification of a City amendment to the LCP.

The key, it appears, is that the "Guideline" introduces an unspecified feasibility test for the communication facilities, where they do not meet the LCP's visual quality protection standards in the coastal zone. While the Coastal Act requires the LCP to minimize the effects of coastal development on scenic resources, neither the Coastal Act nor the LCP couch that minimized adverse aesthetic effect test in terms of technical/technological feasibility.

In short, the "Guideline" appears to be a de facto LCP amendment, and requites the City to process it as a Coastal Act LCP amendment. Until such time, it would appear that any Council action on the Guideline would likely be ineffective in the coastal zone.

Separately, the City staff's CEQA categorical exemption lacks specific analysis to support its contentions. To the extent that the Guideline is in fact a zoning ordinance, and because the individual facilities may potentially have a significant adverse effect on the environment, it requires an Initial Study and, at a minimum, a Mitigated Negative Declaration if not an EIR.

The Guideline appears to exempt the allowed telecommunication facilities from the CDP requirement (e.g., even if located in the CDP appeal zone), which is inconsistent with the Coastal Act and applicable Coastal Commission regulations.

The Guideline appears to be inconsistent with the LCP and the Coastal Act requirement that the City process this purported "guideline" as a LCP amendment.

As it applies to the coastal zone and is a de facto LCP amendment, and has not been out for public review for the six weeks required by Coastal Commission regulations, it appears that the Council is precluded by the Coastal Act from acting on the revised Guideline at tomorrow's Council meeting.

Unless the City staff has obtained a written exemption of the Guideline from LCP amendment review from Coastal Commission staff it seems that the meeting should be continued, especially since it appears that city staff did not do that.

While addition of small telecommunications facilities on existing poles, in the coastal zone, <u>may (potentially)</u> be exempt from CDP review under the Coastal Act's CDP exemption provisions for "hookups", the construction of new monopoles to provide new service does not appear, on first impression, to be such an exempt utility hookup to provide a new customer service.

Annemarie Weibel

11-12-19

11-12-19

From: Annemarie Weibel

To: City Council Members, city staff

Notice to Cease-and-Desist from Processing and Approving Applications for Permits for all 4G or 5G Close Proximity Microwave Radiation Antenna (CPMRA) Wireless Telecommunications Facilities (WTFs) as not compliant with National Environmental Policy Act (NEPA) Requirements

The class of CPMRA-WTFs (the antennas, radios and power equipment that comprise Small Wireless Facilities, that are often attached to Utility Poles, Light poles and other street furniture are not ok to rule on without this.

Dear Fort Bragg City Council Members and city staff,

The DC Circuit Court of Appeals Ruling of August 9, 2019 in <u>Case 18-1129</u> renders every Close Proximity Microwave Radiation Antenna (CPMRA) Wireless Telecommunications Facility (WTF) application incomplete because each application lacks the DC-Circuit Court-mandated NEPA Environmental Assessment (EA) and/or Environmental Impact Statement (EIS) for the envisioned 800,000 CPMRA-WTF installation plan, referenced in the Ruling.

From page 19 of <u>Case 18-1129</u>, of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment (Second Report & Order) (Order), FCC 18-30, 2018 WL 1559856 (F.C.C.) (Mar. 30, 2018):

The scale of the deployment the FCC seeks to facilitate, particularly given its exemption of small cells that require new construction, makes it impossible on this record to credit the claim that small cell deregulation will "leave little to no environmental footprint." Order¶ 41. The Commission anticipates that the needed "densification of small deployments over large geographic areas," id., could require 800,000 deployments by 2026, FCC,Declaratory Ruling & Third Report & Order, FCC 18-133 ¶ 126 (Sept. 26, 2018).

All CPMRA-WTF shot-clocks must, therefore, be tolled with a letter from the municipality or county staff to each Wireless company applicant(s) stating that the applications will remain incomplete until the the EA and/or EIS, as required by NEPA:, is complete.

From page 7 of <u>Case 18-1129</u>, of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment (Second Report & Order) (Order), FCC 18-30, 2018 WL 1559856 (F.C.C.) (Mar. 30, 2018):

Congress enacted NEPA to 'encourage productive and enjoyable harmony between man and his environment' and 'promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man,' among other purposes. <u>Title 42 U.S.C. §4321</u>."

While the shot clocks are tolled, all CPMRA-WTF application processing and other work regarding the placement, construction, modification and operation of these Wireless Telecommunications Facilities **must stop** until the applicant(s) enter substantial, written evidence in the municipality's or county's public record, certifying compliance with NEPA and the 8/9/19 DC Circuit Court Ruling.

Therefore, the City of Fort Bragg in the County of Mendocino needs to hereby cease and desist from:

- 1. Processing any and all CPMRA-WTF, aka "small wireless facilities" applications;
- 2. The placement of any new CPMRA-WTFs;
- 3. The construction of any new CPMRA-WTFs;
- 4. The modification of any CPMRA-WTFs that would result in the addition of any antennas or the increase in Effective Radiated Power from the WTF;
- 5. The operations of any and all extant CPMRA-WTFs

where such CPMRA-WTFs lack EA and/or EIS, per NEPA requirements.

Please inform any and all applicants and potential applicants of their need to comply with NEPA per the above Ruling and to place the results of the Federal EA or EIS into the public record, before their applications can be considered complete.

The current real-estate grab by Telecommunications companies attempting to install CPMRA-WTFs in the public rights-of-way cannot lawfully except where protective of the environment per the 8/9/19 DC-Circuit Court Ruling and consistent with NEPA requirements.

· ``,

Please note, the DC Circuit Court of Appeals further ruled against the FCC overreach on October 1, 2019:

From page 146 of <u>Case 18-1051</u> re: *Restoring Internet Freedom, 33 FCC Rcd. 311 (2018) ("2018 Order"):*

"[because] the Commission's Preemption Directive, see 2018 Order ¶¶ 194–204, lies beyond its authority, we vacate the portion of the 2018 Order purporting to preempt "any state or local requirements that are inconsistent with [the Commission's] deregulatory approach[,]" see id. ¶ 194."

Kindly inform me of your intent to comply with the cease-and-desist notice.

Signed,

Annemarie Weibel

Regards, Annemarie Weibel P.O. Box 566 Albion, Ca 95410

California Medical Association House of Delegates Resolution Wireless Standards Reevaluation 2014 Resolution 107- 14 PASSED Date Adopted Dec 7, 2014

Resolved 1 That CMA supports efforts to reevaluate microwave safety exposure levels associated with wireless communication devices, including <u>consideration of adverse non-thermal</u> <u>biologic and health effects from non-ionizing electromagnetic radiation</u> used in wireless communications; and be it further

Resolved 2 That CMA support efforts to implement <u>new safety exposure limits for</u> <u>wireless devices to levels that do not cause human or environmental harm</u> based on scientific research.

CALIFORNIA MEDICAL ASSOCIATION HOUSE OF DELEGATES 2014 Wireless Communications Public Safety Standards Reevaluation Introduced by Cindy Lee Russell, M.D. AND Ken Yew, M.D.

Whereas there are over 6 billion active cell phones worldwide and dependence of wireless communication networks is rapidly expanding including cell phones, cell towers, wireless routers for home use, medical devices and utility smart meters; and (1)

Whereas scientists are increasingly identifying EMF from wireless devices as a new form of environmental pollution with a growing body of peer reviewed scientific evidence finding significant adverse health and biologic effects on living organisms with exposure to low levels of non-ionizing microwaves currently approved and used in wireless communication, and

Whereas peer reviewed research has demonstrated adverse biological effects of wireless EMF including single and double stranded DNA breaks, creation of reactive oxygen species, immune dysfunction, cognitive processing effects, stress protein synthesis in the brain, altered brain development, sleep and memory disturbances, ADHD, abnormal behavior, sperm dysfunction, and brain tumors; and (2-55)

Whereas there is a long latency period of years to decades to study and identify adverse health effects such as brain cancer, neurodegenerative damage and autism; and

Whereas children's brains are developmentally immature until adolescence, their skulls are thinner and the brain is considerably more vulnerable to toxin exposure, and (23,24)

Whereas the World Health Organization in 2011 designated wireless communications including cell phones to be a possible carcinogenic, and (63)

Whereas many scientists, researchers, public health officials and agencies conclude that wireless electromagnetic frequency (EMF) standards established by the Federal Communications Commission are outdated as they are based only on heat effects which damage to the organism and not biological effects of non –ionizing EMF microwave radiation which are scientifically demonstrated at levels hundreds of times less than current safety exposure limits and <u>thus current standards</u> are inadequate to protect public health; and (49-51)(57)

Whereas the American Academy of Pediatrics in 2013 has asked for reassessment of exposure to radiofrequency electromagnetic fields limits and policies that protect children's health and wellbeing throughout their lifetimes and reflect current use patterns (58)

RESOLVED; that the <u>CMA</u> understands that existing public safety limits for microwave <u>EMF</u> devices are outdated and inadequate to protect public health thus endorses efforts of the Federal <u>Communications Commission to reevaluate its safety standards to include consideration of adverse</u> non thermal biologic and health effects from non ionizing electromagnetic radiation used in wireless <u>communications</u>; and be it further

RESOLVED; that the CMA supports efforts to implement microwave safety exposure limits to levels that do not cause human or environmental harm based on scientific research, and be it further

RESOLVED; that the CMA set up a task force to determine adequate precautionary recommendations for the use of cell phones and wireless devices for schools and children

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February 21, 2019

Marin County Supervisors Room 329 Civic Center, 3501 Civic Center Drive San Rafael, CA 94903

Re: Limiting the scope of Marin's financial risk for 5G litigation

Dear Supervisors -

This is the last of three letters, together sent as a gift with my kindly intent being to respectfully let your Board and County Counsel and our professional administrative policy makers know about emerging factors in EMF litigation risk, which new factors, if not skillfully addressed, will threaten the solvency of the County.

It was very decent of you to put on the Workshop and the turnout and messages spoken showed readily that there is massive constituent objection to 5G. Rather than complaining without suggested path, this letter offers a clearly defined strategy which is suggested as the safest course for minimizing litigation exposure. Maybe your people won't like it, I'm just pitching the best I can. In addition to the suggested overall strategy, actual listed defenses are respectfully listed as items A - G starting at page 9 of this letter.

I write to authenticate this advice; that the County's safest course for limited litigation exposure is, contrary to instinct, to immediately adopt an emergency moratorium on 5G permits and installations, including installations alleged as co-location.

Consider the situation of an aircraft in climb-out, if due to excessive nose-high attitude, it has entered into aerodynamic stall or has progressed beyond that to a spin. Flat spins result in high energy contact with terrain unless the spin is interrupted.

The pilot's instinct, not wanting to crash to earth, is to pull back on the yoke, to keep the nose in the instinctively desired direction, up hoping to get away from the approaching terrain. As you probably know, the actual procedure required to break out of an aerodynamic stall or resulting spin is to go against instinct and push the yoke forward to break the stall.

Based on clearly identifiable factors the current 5G risk posture of the County of Marin resembles that of an aircraft in high stall at the edge of spin, instinct says pull back on that yoke labeled 'settlement,' but the terrain rushing up at the County is an endless array of

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ADA claims and other litigation if Marin *voluntarily* enters into a joint venture for 5G allowing telecom to merge microwave saturation machinery with publicly owned poles. The term 'merge' is used here in the Doctrine of Fixtures context. Please avoid that exposure.

The legal basis for Marin County's liability for Dangerous Condition of Public Property was presented in my letter to the Board dated February 4th and delivered to the offices of your Board on the morning of February 5th, which letter is incorporated herein as though more fully set forth. More explicitly, the County's risk comes from the math.

By the numbers.

After the Workshop and responsive to my letter, there was profuse Astroturfing with a higher shill ratio than poker at a Nevada casino. I avoided reading it, however a person whom I believe is known in her family as Starfleet Command was fascinated and read a few troll shots to me. One implied that I cared about my political chances, but that train left the station decades ago.

Another shill&troll, in a nicely focused hit piece, pitched that since in a legislative submission I'd claimed that 5G presents national security impairments, and also because in a 2017 letter against SB 649 I had once mentioned possible mass casualties, I must be an alarmist with claims to be laughed off. As it was read to me, an erudite person responded on the national security issue with reference to the back doors in Huawei equipment. As to the term 'mass casualties,' that's just arithmetic. Assume arguendo that three years from now 20,000,000 in California will be under constant saturation from 5G. Assume that only 3% of those people become symptomatic in the first half dozen years of operation; that's 600,000 people, and conveniently using six years in example that works out to a hundred thousand people a year. A phrase describing 'possible mass casualties' was just arithmetically descriptive of what happens when even a small percentage of our very large population is harmed. I don't know what that percentage will be, nobody can know the future for sure and the three percent figure is used only for illustration here, although I personally believe it to be justified, including through the findings of Dr. Olle Johansson of the Karolinska Institute, Stockholm. See the ÖRJAN HALLBERG AND GERD OBERFELD letter at Electromagnetic Biology and Medicine, 25: 189-191, 2006. Please consider the situation in Marin, even using that same small percentage.

There are a quarter million people in Marin. The percentage of us whom in the future will be electrosensitive to the point of material recognizable attributable symptoms is unknown. For arithmetic illustration only, not as a stated epidemiological conclusion, using the estimate of only 3% leads us to expect 7,500 Marin residents to be affected by microwave exposure sickness the point of symptom in the near term. And even if it's only one percent, that's 2500 of our people. The connection between this radiation and the symptoms of microwave exposure disease is well established. The NTP proof of causation of cancers in rats was not surprising to professionals in this field, set as it was in the context of hundreds of other studies showing EMF damage (see the UCSD School of Medicine letter incorporated below citing 360 such sources), with other studies previously showing brain cancer causation, see in particular the Norway study by Hardell, if memory serves that was in the

September 2013 edition of the International Journal of Oncology. Since this cause of their illnesses is well known, injured people will seek legal relief. If the injured are 'only' 2500, and 'only' one in five of those files an ADA claim or other litigation, that's still 500 cases against Marin or other local pole owners. Yes, these are hypothetical extensions, no we can't no exactly, and yes, although the percentage of people explaining their illness experiences at the Workshop was clearly higher than three percent of those attending, that was not a random sampling. Yet the resulting numbers of cases in this scenario are so large that even if this situation whittled down to the claims resulting from one half of one percent of our people being rendered ill, and again one in five filed ADA, that's still a big number, and for the professional planner raises serious concern for the very reason that we can't project exactly what is going to happen here, so that we face exposures the limit of which cannot be assured.

When our Supervisors and senior policy people examine whether the '500' cases example just used for illustration is reasonable, consider that the arithmetic example was based on an assumption of *only one percent* of our Marin population being sickened to the point of material attributable symptoms, and *only one in five* of those hurt people pursuing an ADA or other approach. Please also contemplate what happens if the percentage of our Marin population with such alleged traceable symptoms is three percent, *thus generating* 7500 hurt people and 1500 filed cases by the same math. If those are spread over the six years hypothetically used above, that's 250 cases per year. The work of Dr. Henry Lai and a now by 2019 an overwhelming body of scientific evidence show a hazard level that was not even considered remotely a serious risk when that Bill passed, Senator McCain voting against it in tiny minority.

More than 360 peer-reviewed sources on microwave injury are attached.

In response to the natural desire of the policy-defining reader to have proof of scientific concern, attached to this letter is the entire August 18, 2017, 25 page letter in opposition to SB 649 issued by Beatrice Alexandra Golomb, MD, PhD, Professor of Medicine, UC San Diego School of Medicine. From a medical professional of impeccable credential, this studied letter describes the medical consequences of mass installation of 5G, with annotations supporting her conclusion that "If this bill passes, many people will suffer greatly, and needlessly, as a direct result." Dr. Golomb's letter includes 360 citations to peer-reviewed studies showing microwave radiation medical consequences, with 21 pages out of 25 just for the citations.

I respectfully note that it solves for all variables in explaining a causation mechanism for mutagenic DNA change if, in physics terms, the damage is occurring through 'acoustic' means, which is not about music this time, and has everything to do with vibration.

Consider how a microwave works, as can be found in any encyclopedia, the next is from a World Book bought for our kids long ago: "Microwave oven is an appliance that heats food by penetratiang it with short radio waves. These waves cause molecules in food to vibrate rapidly. Friction among the moving molecules creates heat, which cooks the food." This is, at a molecular level, shaken baby syndrome for all your cells. The last industry lobbyist I spoke with on this issue in Sacramento was painfully unstudied in his underlying science dialogue, though he seemed like he'd be a terrific grandfather. I will do my best next to fairly state the core telecom industry point on tissue damage causation from cellular microwave: "Non-ionizing radiation does not have sufficient power to displace an electron from its shell. Therefore it is impossible as a matter of well-understood physics for microwave radiation to cause any direct nonthermal <u>ionic</u> effect (meaning directly caused chemical change) in tissue."

To understand the industry argument it is necessary to remember valence from our high school chemistry classes. I hope scientists who read this, challenging or not, will feel that the industry point, *which is the basis for the FCC safety standards*, has been fairly stated below:

1) The involved non-ionizing radiation does not have the ability to cause an electron to jump shell, so that:

2) Since an electron cannot be forced from shell, there is no change in the ratio between protons and electrons in the involved atoms, which ratio, in chemistry, is '*valence*.'

3) If there is no change in valence ratio, there is no possibility of forced *ionic* recombination at an atomic level. Without a change in valence there can be no forced "ionic," or direct chemical change.

I just found the following definition which gives us an adequate illustration: "Ionic bonding is the complete transfer of valence electron(s) between atoms. It is a type of chemical bond that generates two oppositely charged ions. In ionic bonds, the [metal] loses electrons to become a positively charged cation, whereas the nonmetal accepts those electrons to become a negatively charged anion."

In saying that it is impossible for non-ionizing radiation to force ionic injury to tissue, the industry has been making a correct general statement of physical principle, and then incorrectly extrapolating the industry pitch that: *The only scientifically* sensible explanation for damage to tissue, due to the non-ionizing character of the radiation, would be where prolonged close encounter caused microwave induced thermal damage to tissue. Their whole scientific house of cards is built on the foundation of that Joker.

There exist at least two rationally deduced and also scientifically supported separate mechanisms through which, in fact, this non-ionizing radiation has sufficient power to tear apart living tissue. There is an annotated explanation of this in the Causation section of the July 19, 2017 letter submitted in opposition to SB 649, which can be found at <u>www.greenswan.org</u> our embarrassingly out of date website, Green Swan is our very own 'involuntary non-profit,' but I believe that we'll do well

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once the new products based on the patents reach the market. I won't try to condense that 10 page analysis from July of 2017 here, but today, as in that July 19 letter, the vibratory nature of DNA strand breakage appears illustrated from the University of Maryland interferometer experiments of 1983. As I recall it, citations in the letter, the University of Maryland interferometer study showed that addition the of a 7.43 percent constituent of DNA into plain water (from DNA salts put into the resulting solution level of said 7.43 percent), caused a 24 fold (meaning 24 times) increase in Specific Absorption Rate (how much energy the fluid absorbed), which change in energy absorption was determined to be non-ionic, but rather 'acoustic.' Which means, to my understanding and as best I can phrase it: A transmitted vibration within a medium having the ability to do work at the recipient target within that same medium. In the interferometer study mentioned here, there was molecular change by DNA vibration (energy absorption in the DNA molecule, measured as comparison between the energy penetrating through the plain water compared to penetrating through the DNA solution). Call me sentimental if you want, but I still REALLY love the Ella Fitzgerald Memorex commercial from 1972, check it out.

As said in the July 19 letter, 1 believe that Dr. Trevor Marshall's work had shown the core point of acoustic DNA damage before my conclusion was published, all consistent with the authorities therein, excepting that to my embarrassment I misspelled Dr. Andrew Goldsworthy's name, I haven't tried to correct that in such an already public document, but I apologize. Derivative from this absorptive quality of DNA and synthetic DNA materials, the US Patent and Trademark Office recognized issued U.S. Non-Provisional Utility Patent 9,960,799 on May 1, 2018.

All these years the industry had been saying, ' the vibration won't hurt you, no harm until you cook.' However, Dr. Henry Lai's findings from the University of Washington School of Medicine proved that DNA strand is broken by exposure to cellular signal, established beyond rational scientific doubt. Dr. Lai's findings have never been disproved, and if industry could have, they would have. It is very worth your time to Internet search for: 'Dr. Henry Lai Seattle Magazine,' and to find the part in that article about where a disclosed industry memo pitched that the company involved needed to 'war game,' against Dr. Lai, as part of a concerted and focused effort to discredit him. Some of these people are nothing more than manipulative materialists who care for nothing but stature and wealth.

There are solid reasons for respecting the calcium ion analysis from Dr. Martin Pall, late of the University of Washington School of Medicine: Please see a 15 minute video of his 2015 presentation at The Commonwealth Club event organized by EMF safety expert Camilla Rees, <u>https://vimeo.com/132870272</u>. Dr. Pall is a credentialed scientist, I am not. I respectfully agree Dr. Pall's calcium ion conclusions, hardly surprising that tissue damage is multi-axial with DNA strand breakage and calcium ion cell damage both taking place. For compact access to Dr. Pall's scientific studies on the effects of EMF see: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3780531/</u>. For the

serious academic, see: <u>https://europaem.eu/attachments/article/131/2018-04_EU-EMF2018-5US.pdf</u>.

Please keep the scope of litigation narrow.

Marin County has talented lawyers at County Counsel, there are very many other employees of high talent in the building Litigating with telecom is narrow in scope and narrow in personnel necessary to address a small group of related cases which are no more challenging than any other set of a few coordinated important cases. If Marin is sued by telecom, that's only a few lawsuits.

Alternatively, in contractually allowing telecom permissively to use regional entity utility poles our county cannot comfortably rely on permit immunities and other traditional governmental defenses, because any such voluntarily compliant public entity has direct involvement <u>as a participant in the tort</u>, due to joint venture, doctrine of fixtures et al, leaving pole owners permanently open to Claims for such WHO-defined injuries, cases unknowable number, without end.

Consolidation has taken place from the MDL and the transfer to the 9th. Marin's 5G litigation with Big Telecom (via the FCC puppets) *is narrow in scope*, as it is now in the 9th Circuit. Should Big Telecom's really sue Marin over an emergency moratorium, they walk into the den of lions, and the scope of the suits involved, very likely consolidated, will be very narrow. Thus, the scope of litigation if Marin fights diligently only involves a handful of your skilled lawyers and/or limited outside counsel covered by the insurance pool.

I am personally aware of many people, including in Marin, each who has sufficient documentation of EMF sensitivity and negative medical consequence to morally and legally justify an ADA complaint, to mention just one possible course of action. That gentleman from Inverness tellingly testified about how microwave exposure causes potentially deadly variances in operation from titanium surgical instrument in his chest.

Our county faces a permanent multiplicity of long term litigation from microwave sickness claimants if Marin voluntarily cooperates with telecom on 5G. If our county will simply say no to 5G, the scope of litigation will remain narrow, at least for several years. Furthermore, if the county were ultimately *forced* by the federal government into 5G acceptance, such a forced local entity would have a stronger argument for federal reimbursement than an entity which just went along for the ride. Unfortunately the ultimate approach of such local 5G acceptance is that either the telecom's liability will be shifted to the local taxpayers, or in the instance of a reimbursement from the feds, telecom's liability exposure would be shifted to the federal government, in either instance a disastrous outcome.

Please consider the moral queasiness each Board member would forever after feel if in grasping for defenses against these avoidable lawsuits you were to resort to claiming, against the health of your constituents, that the 1996 Act also protects local governments as well.

Cooling the Mark - Big Telecom's Hidden Persuaders

Electromagnetic hypersensitivity refers to health effects attributed to electromagnetic fields (EMF) exposure and has been formally named "idiopathic environmental intolerance attributed to electromagnetic fields" by the World Health Organization. I am personally aware of substantial settlement awards in EMF workplace injury situations in California and awards for electromagnetic disability involving high degrees of expert diagnosis. I remember a teacher who can no longer teach in a faraway District from here, which District "tested" the WIFI in the classroom only when the students and their Chromebooks were absent, and therefore the routers were in standby state. Similar forms of false 'scientific' testing have shown up in many counties, including in my opinion in Petaluma schools.

This isn't sunburn. Keep in mind that the NTP study specifically reported glioma cells. Some claims will result from life-ruination glioblastoma cancers. And note that the positive finding in the NTP study of cancer causation in the NTP study, rather than being a surprise to those who have long studied in this issue, was a result long widely expected a few examples our of hundreds follow: The Lund University finding of violation of the bloodbrain barrier in rodents at very low wattage was back in 2003, the extremely remarkable book by former Motorola antenna scientist Robert C. Kane, published in 2000, Cellular Telephone Russian Roulette which appeared impossibly scarce for a while but is now available used, is the most pioneering book of all on this subject. The first letter on WIFI dangers to the LAUSD by Dr. Herbert of the Harvard Medical School was way back in 2013, referencing more than a thousand studies showing EMF damage, the Norway study led by Hardell definitively showing an increased rate of brain cancer in cell phone users was published in the International Journal of Oncology in September of 2013. In the introduction to his heroic book, the late (brain cancer) Robert C. Kane notes: "Never in human history has there been such a practice as we now encounter with the marketing and distribution of products hostile to the human biological system by an industry with foreknowledge of these effects." The fact of microwave damage to biology was well established long before the NTP report.

How is it possible not to recognize such a risk? The March 29, 2018 investigative report in The Nation, *How Big Wireless Convinced Us Cell Phones Are Safe* is the finest investigative journalism that I've seen in my life. For those who first thought of Woodward, be sure to read Len Colodny's history of Watergate, titled Silent Coup. Conditioned memes and legends are the biggest of big businesses. Our government was released from statutory restraint years ago and can now lawufully engage in propaganda to its citizens, and whether the blood flows into pockets from the Left or the Right, it comes through the beating heart of America's giant corporations, and some are outright dumb. Consider PG&E for example.

Precision advertising has taught us to shuffle concerns about microwave cancer into the round bin with the Fringe sign on it. Our societal tardiness to recognize this hazard results in large part from advertising and it's related appendage, industry sponsorship of research. So part of this risk ignorance has been advertizing feedback so careful that Jacques Ellul, God rest his soul, would have appreciated the precision.

That's why CT1A ditched Dr. Carlo after he told them, 20 years ago, about the cancer risks he'd found. Please kindly read the 3/29/18 article from The Nation. Was it all in bad faith ? In 20-20 hindsight it is always easy to condemn past mistakes in the light of new insights, but the devotional team spirit cultivated within the wildly profitable field of telecom was often coupled with a sincere belief in the minds of competent engineers that the nature of the radiation involved meant it could not cause non-thermal damage to flesh. That issue has already been treated explicitly, and you already have exhaustive data from the contents of links supplied by many constituents besides me.

Based on the Workhop the constituent viewpoint is two hundred people in ratio to three out-of-town shills. Once the now available science information is understood by an interested person, there's no need for a sales pitch. I don't like being involved in this 5G issue, it is difficult and unhappy work which has presented personal security challenges but this is unavoidably necessary for me for moral grounds, study sometimes causes knowledge which inherently compels action by those concerned with their souls.

An understanding of group psychology is integral to serious modern corporate PR and political campaign practice and Big Telecom is glad to influence our views; best of all if the media-conditioned public has been sufficiently trained to treat polite dissenting views as 'fringe.' I'm old enough to have read Vance Packard when The Hidden Persuaders was new, of course there is Walter Lippman's bare statement that: "*The real environment is altogether too big, too complex, and too fleeting for direct acquaintance" between people and their environment. People construct a pseudo-environment that is a subjective, biased, and necessarily abridged mental image of the world* (Lippmann, 1922: 4)." August Bullock's *The Secret Sales Pitch* is the best modern work I've seen. The reality is that a true expert campaigner can cause new phrases and outlooks to be long remembered. For example, the late great Lyn Nofziger used to horribly pun 'better a Harry Lehmann than a bald priest.' Please concentrate on forgetting that pun. That is an example of the same sort of skill that telecom is paying for to form your views. NMFR.

Additional defenses for the County of Marin lawyers to contemplate for all EMF suits.

Without even scant lip service to Due Process, the FCC is waging a national Condemnation campaign to seize property rights belonging to cities and counties, local Districts, and other public entities and private entities. The term 'Condemnation' is used in the normal legal descriptive sense of a public entity taking private property the owner of that property being entitled under Due Process to access to the courts for replevin, with such just compensation being essential both under statutory law in all State jurisdictions and also on Constitutional grounds. I make no attempt here to exhaustively provide all of the many defenses which are readily familiar. What follows, A through E, are five less obvious defense approaches.

A- The defense of moral conduct.

I respectfully suggest an additional lawful basis for rejection of 5G which is not prohibited by the 1996 Act, namely that the installation of 5G given the totality of circumstances, is immoral, and Marin elects not to allow 5G installation on moral grounds. What are they going to say to that? Will telecom come argue that morality no longer matters? And we certainly do have room in our laws for morality in civil matters, it is called 'equity.' It is complete seriousness suggested that if sued, in defense of its moratorium, the County of Marin may respond, so long as there is an actual record of proceedings to same effect that: 'Based on the totality of the circumstances, the County of Marin has placed a moratorium on 5G on moral grounds.' I know that your linear thinkers will cringe, but I've been an M. Scott Peck fan for almost 30 years, and WTF are they going to say to that one? It is mostly self-admitted ego defense for me to say this, but before you decide to reject any idea just because of initial perceived unusual level of novelty, please examine U.S. Patents as next listed: 9,997,824, 9,960,799, 9,747,884, 8,890,697, 9,191,055, 9,379,757, 9,564,680, and 9,065,900. None of those have to do with 5G, all of them have to do with portable equipment and their Applications were filed before I'd even heard the term '5G.' As a result of my study in that work, I am morally required object to radiation saturation of Marin.

There appears no moral wiggle room on this one, it is immoral to irradiate people in order to sell them instant access to Bonanza reruns. It came to our attention during the long hard fight against SB 649 that discussions were ongoing between telecom and the cable industry. I wasn't a fly on the wall, my then and current comprehension of the situation is that telcom's goal to be covert all of the services we may now subscribe and enjoy to 5G wireless. Cuts out a lot of cable people, for one example. It is in the nature of invention that the greatest accomplishments come from unexpected quadrants.

B- The defense of Separation of Powers.

Telecom's own bought and paid for smurf choir now chants that neither cities, counties nor citizens can have access to the courts over being fried by their signals. Telecom relies here on the odious 1996 Telecommunications Reform Act, Section 704, which has been often often interpreted by industry to prohibit the courts from even entertaining any claims based on adverse health consequences. This is a massive violation of the basic concept of Separation of Powers.

The FCC claims that their pet Act is so powerful that now the Executive Branch can preclude the courts from even having jurisdiction over any tower-siting issues. Our system of courts has never been perfect and never will be perfect, but the courts are the safety net protecting us from the excesses of governance. It is extremely important that the issue of Separation of Powers, in this instance the severe overreach of the federal Executive Branch be fought in any litigation over 5G with telecom.

Å.

C- A prohibition of environmental claims does not preclude claims for direct physical harm to humans.

Another example in good faith litigation is whether any language in the 1996 Act was generally understood at the time and context of its drafting, actually prohibits cases based on <u>direct physical harm to a human beings</u>, as opposed to harm to the 'environment' in which we all reside.

Here in Marin many of us may take a more Alan Watts view of the environment, and see us all human life as part of an interconnected whole. But the 1996 Act was written in DC from the generally prevailing Western outlook of individual separateness, which some would argue is a cornerstone of the individuality to which we are all entitled. In that view, the 'environment' is the surroundings we live <u>in</u>, not something of which we humans are a part.

When the 1996 Act was passed, I respectfully submit that the generally prevailing Western approach of separateness, the all too often encountered 'us versus the environment in the name of wealth and progress,' was the common outlook. So the term 'environment' should not be interpreted as encompassing direct physical harm to humans, because in the Western view, which remains the generally prevailing view, we are not part of environment, but rather it's occupiers. The 1996 Act did not expressly prohibit claims for direct physical harm from microwave sources

D- The FCC is violating Due Process.

These FCC thumb puppets are saying to us all, 'skip the Due Process part' with the FCC asserting the position that even the Judicial Branch cannot stop this corporate-dictated irradiation of our population. Now is the time for all good people to come to the aid of their country. We have both statutory and Constitutional entitlements to Due Process when the government takes something of value from us. Every Due Process right that would normally attach in a Condemnation or Inverse Condemnation case, from our federal Constitution, from California's Constitution, and from both state and federal statute should be available to counties and cities and others who are about to have their property rights in these utility poles siezed. This a gross over-reach in terms of Due Process as well as Separation of Powers.

E - Equal Protection of the Law.

This letter is written with our professional public administration people in mind and in recognition that these high ranking professionals guide policy too. It has been demonstrated that credible science shows that physical harm will result to some or all of us from excessive microwave absorption. Most of the people reading this are very educated. You can read the data and reach the necessarily deductive conclusions just as well as I can. This isn't a hobby or a game, this is serious. Our professional administrators and all their staffs have their own life quality at stake with regard to microwave saturation. For one example, it is well established, I think first from Dr. Argawal late of Cleveland Clinic, now at Mayo, that there

is a 50% kill rate in sperm from smart phone proximity (front pants pocket), the last Israel study I saw said '47%'.

F - Is there really a 'gap in coverage?'

I have worked with scientists in this field since being introduced to Dr. Devra Davis in late 2009, and as a result of being pressed into objection to 5G by the data in a meeting I had tried to dodge in March of 2017. I had spent more than seven years by then in study of this area, study of the same sort used for the Chevron aviation gas class action (new engines for 1647 aircraft), the Mobil Oil AV-1 litigation (850 aircraft get overhauled, rebuilt or new engines), or any other serious major case. After, literal nausea when I shook hands in March of 2017, with grudging reluctance recognizing that I was morally forced by my knowledge to work on stopping SB 649 and related telecom efforts. I studied for and prepared at least 15 written presentations, eleven of them to state legislators or our Governor. I have for years been in regular communication with people who have used state-of-the-art meters to check for signal strength. Consistently it has been found that telecom-alleged gaps in coverage are usually phantoms The experience is that, for personal communication as envisioned by the 1996 Act, claimed gaps in coverage are alleged but those allegations are very seldom found to be accurate. You can find data on this at <u>http://www.scientists4wiredtech.org</u>.

G- The allowance of federal preemption covers personal communication devices only, and does not cover what telecom is pitching to you as 5G (but which is actually densification of 4G with 5G upgrade intended.

The legislative intent and the actual wording of the 1996 Telecommunications Reform Act was to provide reliable coverage for personal communication devices, used for communication. Now the industry is telling you that it is necessary for us to install so-called 'small cell' antennas on every block. But Verizon's own CEO says this not necessary for 5G, see this video: https://www.youtube.com/watch?v=lYAufhIgkpI&feature=youtu.be&t=31. See also: https://www.youtube.com/watch?v=jnyG2bliKCs&feature=youtu.be&t=30s , in which a Verizon engineer shows that high density is not necessary for communication. And 5G is so toxic that phones are being designed to turn down signal if your fingers get near the antenna: Lenovo of China, owners of Motorola just released the following technology in their latest smartphone coming to the US so that: Device will shut down 5G radios upon detecting proximity and the device will shut down 5G radios at the smartphone surface where fingers would be covering some of 10 antennae in the device, to keep device's emissions under the allowed FCC's MPE levels:

https://www.theverge.com/2019/2/16/18227951/motorola-5g-moto-mod-fcc-millimeter-wave-proximity-z3-pro

Those who have followed this closely, particularly during the hearings in Sacramento on SB 649 conclude that a core motive for the anticipated '5G revolution' is the provision of entertainment through 5G, taking the place of cable. Because of the demonstrated strength of telecom's signals from the macro towers already in existence, see above convincing Verizon videos, the only need which would demand the density is to supplant cable. <u>That is not</u> <u>within the scope preemption as sought and stated in the 1996 Act</u>. Therefore, Section 704 does not apply to 5G. Verizon's own PR shows provision of cable-level 5G entertainment: https://www.verizonwireless.com/support/5g-home-faqs/?intemp=vzwdom. It is impossible for telecom to truthfully claim that the federal preemption extends to 5G, because the Act was written only for personal communication devices, not the provision of TV shows.

Concluding statement.

Some groups will be more exposed to radiation than others, i.e., in public housing. It is reasonable to expect that the poor will bear a heavier burden. As the son of great dad who worked as a school custodian, I submit those who say they really care about assuring that the less advantaged are treated equally should fight against 5G from that perspective.

Due to density of living environment, those living in high density environments will be the most exposed. Imagine that you happen to live in a apartment with outside stairs at 8:30 p.m., and just one person from each apartment in your 40 unit building is using the Internet via 5G; you now have the opportunity to be zapped by the subscriptions from your surrounding neighbors. Those who live on big lots and rural ranches will be less exposed.

After hearing so many coherent and sincere presentations at the Workshop, most of the long term trial lawyers who listened likely immediately recognized the potential for ADA claims, though a defense lawyer wouldn't have discussed that set of risks at a serious level until getting further data on the dimensions of exposure. As the Workshop went on we all witnessed many people of entire believability speak of the suffering they had witnessed and personally experienced from microwave exposure.

The microwave hazard to human health is well corroborated: See the collection of professional scientific data collection at the website of The Environmental Health Trust, founded by epidemiologist Dr. Devra Lee Davis, which is <u>www.ehtrust.org</u>, see the collection of data, and please see the collection of scientific positions to be founder under "Quotes from Experts and other well organized scientific data, including from Dr. Magna Havas, to be found at <u>http://electromagnetichealth.org</u>, which I believe was founded by the activist and expert Camilla Rees. Dr. Havas saved a vital trove of Navy documents from destruction, I have seen a 1972 Navy document on EMF exposure with 400 sources listed.

My law specialty is in engineering cases which require serial striving for competency in the depositions of the Ph.D. experts. I am donating this study effort because it is the best I can do with the time and background I can donate, sent as a gift in the hope of treasuring life.

Cordially,

Harry V. Lehmann

UNIVERSITY OF CALIFORNIA, SAN DIEGO

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BERKLET + DAVIS + IRVINI + LOS ANGELES + MERCED + RIVERSIDE + SAN HEGO + 24M (BANCISCO



Beatrice Alexandra Golomb, MD, PhD Professor of Medicine UC San Diego School of Medicine 9500 Gilman Drive, #0995 La Jolla, CA 92093-0995 Phone: 858 558-4950 x201

August 18, 2017

To whom it may concern,

I urge in the strongest terms that you vigorously oppose California SB 649.

If this bill passes, many people will suffer greatly, and needlessly, as a direct result.

This sounds like hyperbole. It is not.

My research group at UC San Diego alone has received hundreds of communications from people who have developed serious health problems from electromagnetic radiation, following introduction of new technologies. Others with whom 1 am in communication, have independently received hundreds of similar reports. Most likely these are a tip of an iceberg of tens or perhaps hundreds of thousands of affected person. As each new technology leading to further exposure to electromagnetic radiation is introduced – and particularly introduced in a fashion that prevents vulnerable individuals from avoiding it – a new group become sensitized to health effects. This is particularly true for pulsed signals in the radiowave and microwave portion of the spectrum, the type for which the proposed bill SB 640 will bypass local control.

Mechanisms by which health effects are exerted have been shown to include oxidative stress (the type of injury against which antioxidants protect, see optional section below), damage to mitochondria (the energy producing parts of cells), damage to cell membranes^{1, 21}, and via these mechanisms, an impaired "blood brain barrier"³⁻⁵ (the blood brain barrier defends the brain against introduction of foreign substances and toxins; additionally, disruption can lead to brain edema⁶), constriction of blood vessels and impaired blood flow to the brain⁷, and triggering of autoimmune reactions^{8, 9}. Following a large exposure, that depresses antioxidant defenses, magnifying vulnerability to future exposures, some persons no longer tolerate many other forms and intensities of electromagnetic radiation that previously caused them no problem, and that currently cause others no problem. But this group deserves – nay needs -- the right to be able to avoid these exposures.

Affected individuals not only experience "symptoms" that "merely" cause them distress and suffering, when they are exposed – symptoms like headaches^{10,11}, ringing ears^{10,11} and chest pain¹⁰ from impaired blood flow, heart rhythm abnormalities^{10,11}, and inability to sleep^{10,11}. These symptoms arise from physiological injury. Moreover, many experience significant health problems that can include seizures¹¹, heart failure, hearing loss¹²⁻¹⁴ and severe cognitive impairment^{11, 15}. The mechanisms involved are those also involved in development and progression of neurodegenerative conditions including Alzheimer's disease¹⁶.

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SANTA BARDARA + SANTA CRLZ

Fully half who were employed when their problems developed lost their job because of the problem, among participants of a survey we conducted. They reported that their condition had cost them up to 2 million dollars to date. Many had lost their homes. A number became homeless, and have swelled the ranks of so-called "EMF refugees"¹⁷⁻¹⁹. Among those affected, many were previously high functioning individuals – engineers, doctors, lawyers. The best and the brightest are among those whose lives – and ability to contribute to society –will be destroyed. High profile individuals with acknowledged electrohypersensitivity include, for instance. Gro Harlem Brundtland – the former 3-time Prime Minister of Norway and former Director General of the World Health Organization²⁰; Matti Niemela, former Nokia Technology chief²¹; as well as the wife of Frank Clegg²², who formerly headed Microsoft Canada and is current head of Canadians for Safe Technology²³.

Each new roll-out of electromagnetic technology for which exposure is obligatory, swells the ranks of those who develop problems with electromagnetic fields (EMF), particularly following a significant exposure to pulsed radiowave-microwave radiation, and particularly when people have no ability to avoid it.

Many state that they didn't give credence to the problem (if they had heard of it at all) until they themselves fell prey to it.

This is not a psychologically driven condition. Multiple objective physiological changes reflecting mechanisms of injury have been shown in persons with this condition^{24, 25}.

The role for oxidative stress, that has been shown in innumerable studies (below), is affirmed by evidence of a link of this condition to genetic variants in antioxidant defenses, that are less avid in defending against oxidative stress³⁰⁷ People cannot manipulate their genes, to produce such an outcome by suggestibility.

An analysis by a University of Washington researcher showed that most studies funded by industry reported failure to show physiological effects. However, most studies without such industry bias affirmed effects. This is redolent of findings shown in medicine²⁶, regarding which the former editor in chief of the BMJ (the British Medical Journal), Richard Smith, noted, based on findings of a study, "This {result} suggests that, far from conflict of interest being unimportant in the objective and pure world of science where method and the quality of data is everything, it is the main factor determining the result of studies."²⁷. So where articles deny injury from nonionizing radiowave-microwave radiation, there is commonly a stake aligned with financial benefit from such denial.

Those who are affected are in desperate need of *protection* by our elected officials. They need creation of safe spaces and housing, and roadways to allow travel, not removal of any prospect of one; protection of local rights to make decisions - not removal of any recourse or ability to avoid what injures them. They are far more strongly in need of protections than a great many protected classes – their problems arose due to actions of others, against which they were given no control – *and can be reversed*, in most cases, if the assault on them is rolled back. Through no fault of their own, and in some cases against their will (e.g. before opt out was permitted with smart meters), they were subjected to an

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exposure that has altered their lives as they knew them, and forced them - needlessly - to the margins of society.

Let our focus be on safer, wired and well shielded technology - not more wireless.

This legislation, if passed, and the resulting unrestricted roll-out of this technology, will predictably and directly injure and disable a new group, and add depth of suffering to those already affected.

In other spheres we abridge freedoms to protect the vulnerable few. We require that every schoolchild be vaccinated, supposedly to protect the vulnerable few who may not respond effectively to a vaccine. The need to protect the vulnerable group is deemed to be so great that it justifies the decision to abridge individual rights.

In contrast, this bill seeks to abridge individual freedoms, and local rights, in the service of *harming* a vulnerable group, and creating a new one.

(The common factor appears to be that in both cases, the direction is aligned with a powerful industry that influences political decisions.)

Luckily, no abridgment of individual rights and freedoms is required to protect,t here.

If any group can opt out (such as, I understand, firefighters*)²⁸; then every group deserves that equal right. Others should not be second class citizens, subject to fewer protections.

It would go far to helping this cause if anyone complicit in promoting or passing the legislation (and then after that, *their* families) were required to be the first subjected, for a substantial test period, to the *greatest* amount of exposure that anyone *else* (and their families) may be subjected to, when new policies of this type are rolled out. It will still not do them equal damage; because they may not represent the vulnerabilities that others will have; but such a policy might help them to think twice. *That* is a bill 1 would strongly endorse.

Most who are now affected – were not, until they were. This may become you – or your child or grandchild. Moreover, if you have a child, or a grandchild, his sperm, or her eggs (all of which she will already have by the time she is a fetus in utero), will be affected by the oxidative stress damage created by the electromagnetic radiation, in a fashion that may affect your future generations irreparably.

It was noted above that, among survey completers, fully half of those who were employed at the time they developed electrosensitivity, lost employment *due to* this problem. (This may understate the scope of the tragedy, since this most-affected group may be least likely to be able to respond to an online survey.) Many who previously had no problem navigating in the world are now restricted from access to basic services like hospital care, post offices and libraries because of these problems. With each new introduction of technology that exposes many to yet a new nondiscretionary source of electromagnetic radiation, particularly (but not exclusively) that which emits pulsed radiation in the radiowave-microwave part of the spectrum, a new group of people are affected; and the suffering of those who are already affected increases greatly. BLRKALLY + DAVIS + HV ISL + LOS AMBRELS + MERCED + RIVERSIDE + SAN DICER) + 5AN FRANCISCO



Please, defend the public and our future. Protect the rights of the individual and the locality, against a form of incursion that will lead to serious harm to some – and set a terrible precedent. Vote no on California SB 649, and urge that everyone else do the same.

Sincerely,

Beatrice Alexandra Golomb, MD, PhD Professor of Medicine UC San Diego School of Medicine

*Comment on the fire fighter exemption:"The legislature granted an exemption from SB 649 to the firefighters who requested it for health reasons. Throughout California firefighters have long complained of often disabling symptoms from cell towers on their stations. Cities frequently rent out space on fire stations to add to city revenue. ...Symptoms experienced by the firefighters have included neurological impairment including severe headache, confusion, inability to focus, lethargy, inability to sleep, and inability to wake up for 911 emergency calls. Firefighters have reported getting lost on 911 calls in the same community they grew up in, and one veteran medic forgot where he was in the midst of basic CPR on a cardiac victim and couldn't recall how to start the procedure over again...Prior to the installation of the tower on his station, this medic had not made a single mistake in 20 years. A pilot study (2004) of California firefighters showed brain abnormalities, cognitive impairment, delayed reaction time, and lack of impulse control in all 6 firefighters tested (https://ecfsapi.fcc.gov/file/7022117660.pdf). This study led to the overwhelming passage of Resolution 15 by the International Association of Firefighters in Boston in August 2004. Res. 15 called for further study and was amended to impose a moratorium on the placement of cell towers on fire stations throughout the US and Canada."^{15 28}

Optional – More on the Science

There is a robust literature showing that electromagnetic radiation, including in nonionizing frequencies, and at *levels*^{29, 30} below those that are cause thermal effects (heating) – causes physiological effects, injury, and cell death –not only in humans but many animals and plants^{3, 7, 31-49}. Unsurprisingly, industry has sought – against the tide of evidence to the contrary - to maintain that radiation must be ionizing or heating to cause injury.

Scores or hundreds of studies show that radiation, including specifically radiowavemicrowave spectrum radiation, and including low-level exposure, can impair antioxidant defenses, increase "oxidative stress" (free radical injury) and damage mitochondria, the energy producing parts of cells^{1, 2, 34, 50-6930, 70-104105-13646, 137-171}. These effects occur with ionizing and nonionizing radiation, at thermal and subthermal levels. (Indeed, much or most of the damage by ionizing radiation, and radiation above the thermal limit, occurs by mechanisms also documented to occur without ionization, and below the thermal limit.) These BERKELEN + MANTS + IRVINE + LES ANDREES + MERCED + RIVERSHILL + NAN DREBJ + SAN FRANCINCH



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mechanisms cohere with the mechanisms documented to play a role in symptoms and health conditions that are reported in those who are electrosensitive – extending to seizures $^{172-176}$, heart failure $^{177-184}$ and cognitive decline $^{5, 32, 57, 108, 185-195}$.

These mechanisms have known involvement in induction of brain cancer, metabolic diseases like obesity and diabetes, autism, autoimmune disease, and neurodegenerative conditions, conditions that have exploded. In each case these have been linked, or presumptively linked, in some studies to electromagnetic radiation^{8, 9, 16, 34, 196-219}

Such radiation also has effects on sperm^{33, 100, 220-228}; and the DNA of sperm²²⁹ (consistent with recent news reports of marked recent declines in sperm counts and function).

Such radiation also has toxic effects in pregnancy²³⁰, to the fetus and subsequent offspring²³¹⁻²³⁵ including at low levels²³⁶, and is tied to developmental problems in later life, including attention deficit and hyperactivity^{31,235-241}. It is critical to defend pregnant women (and eggs of girls who may at a later time become pregnant) from exposures with such toxicity.

Electromagnetic radiation across much or most of the spectrum (not excluding visible light) has been shown to depress levels of melatonin^{40, 72, 242-252}, which is best known for its role in sleep (and indeed, impaired sleep is the most consistent symptom in affected individuals^{10, 11}).

Melatonin is in fact a critical antioxidant that defends the body against harm from many toxic exposures²⁵³⁻²⁶⁶ including electromagnetic radiation itself^{61, 66, 67, 82, 101, 107, 118, 121, 138, 144, 151, 204, 249, 267-284} reducing the oxidative stress that is implicated in cancer, metabolic diseases like obesity and diabetes, autism, autoimmune disease, bipolar disorder and neurodegenerative conditions, and that also plays a role in heart attack and stroke^{9, 285-32930-343}

Radiation, and specifically radiation in the radiowave-microwave portion of the spectrum can also depress levels of other critical antioxidant systems that also defend the body against chemical, radiation, and other sources of injury. These other antioxidant systems include the glutathione system, superoxide dismutase and catalase^{81, 102, 115, 116, 233, 344-358} which are also involved in defending against health problems.

This suggests that depression of antioxidant defenses due to electromagnetic radiation may magnify risk of chemically induced health effects (and depression of antioxidant systems due to some chemicals may amplify risk of harm from electromagnetic radiation). Indeed just such effects have been reported^{359,360}.

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BERKELLY + 19 MAX + 18 MAX + 11 % ANGLELS + MURCHD + RIVERSIDE + SAN DIEGO + SAN TRANSISCO



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HERRELLY + DAVIS + HVINL + LUS AND LES + MERCELF + RIVERSIDE + SANDRAD + SANTRANGISCO



SANTABARDÁRÁ + SÁSTA CRUZ

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BERKLLEY + DAVIS + JRVINE + 1445 AMJELLES + MIRETED + INVERSION + SAN DIEGO + SAS DRANDSTO



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Georgia & Roger Collin 1361 Cameron Rd Elk, CA 95432 707 877-3419 collin@mcn.org

Nov. 7, 2019

Dear Mayor, Vice Mayor, and City Council Members,

We are writing to express our great concern about the development of any wireless ordinance that allows the potential installment of **hazardous** 4G/5G/small-cell antennas throughout our community. Threats to public health, safety, privacy, security, property values, and more must be addressed and protected in any small cell or other wireless ordinance.

It is said 5G is a dangerous escalation of traditional cellular technology, packed with higher energy radiation that delivers potential damaging effects on human beings, kills bees, and what about the impact on babies and children's growing brains? 5G so self driving cars can function is NOT worth the impact!

We request a well-advertised workshop be held to obtain residents input and the Fort Bragg City Council work with community groups to produce an updated and protective wireless ordinance. And during this time period, until a permanent ordinance is approved, no additional small cells be permitted within the city limits.

Any urgency or permanent ordinance requires built-in protections for the residents of Fort Bragg and surrounding unincorporated areas from this unprecedented dangerous technology. There are protective wireless ordinances being produced by cities and counties all over California that ensure the best protections for the residents of the cities & surrounding areas. We hope this is a primary goal of the Mayor and Fort Bragg City Council.

Thank you for considering the well being of residents and the children of our community!

Sincerely. Floogen Collin Roger Collin

Printed name

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STOP 5G MENDOCINO

Recipient: Fort Bragg City Council and City Manager

Letter: Greetings,

No wireless facilities next to homes, schools and parks in Fort Bragg, CA

STOP 5G MENDOCINO started this petition to Fort Bragg City Council and City Manager

NO WIRELESS FACILITIES NEXT TO HOMES, SCHOOLS AND PARKS IN FORT BRAGG, CALIFORNIA

Fort Bragg neighbors started this petition to City of Fort Bragg. Sign this petition NOW. We, the undersigned, encourage the City of Fort Bragg to oppose small wireless facilities (SWF) next to our homes, schools and parks. We ask you to adopt and enforce a strict wireless facilities ordinance, resolution and guidelines and develop a plan that maintains wireless availability without destroying our local values and aesthetics of our town. We urge you to hold an educational workshop, form a Telecommunications Infrastructure Committee and create a map (master plan) with all current and known future towers and residential, business, and coastal zones.

SWF's next to homes, schools and parks will ruin the aesthetics of Fort Bragg, cause blight and destroy views. Trees shall not be cut down to make room for SWF's. No SWF's next to ocean vistas and historic buildings on Main Street between Redwood and Spruce Street and not in front of the Weller House. Co-location is an eyesore. Poles become top-heavy (90 lbs.) and expose citizens to higher radio frequency (RF). SWF's can create fires do to lithium-ion batteries in generators, high winds, lightning strikes, and earthquakes. They will attract criminals and vandals interested in copper.

Carriers will add additional parts, change technology, increase the RF-communication EMF, make antennas higher and bulkier. Permits need to be reissued yearly with a full new application process. Homeowners and neighbors who live within 2,500 ft. need a 90 days advance individualized notice and a public hearing at least 20 days before the determination is made and a decision by a vote of the City Council.

SWF's are not a "least intrusive" way to deal with a "significant gap". As line of sight, rain and trees do not hinder 5G a 2,500 ft. setback is needed. We need fiber optics and centers where people can gather and use facilities jointly.

Property values will tank by 20%. Upon a sale owners need to disclose that a SWF is on the property. Property tax will be reduced. Many locals and tourists will not live, work and play in the city anymore.

RF emissions are linked to cancer and many other serious health effects. Signs posted on antennas indicate that RF emissions are higher than federally recommended. Many children are attending Waldorf Schools where there is NO technology. No insurance company will cover damage or illness. Who will bear legal responsibility for damage to life, limb and property from RF exposure, whether ground - or space-based? Electromagnetic sensitivity is recognized by the American Disabilities Act (ADA) and trumps the Federal Communications Commission (FCC) guidelines from 1996.

General Liability Insurance needs to cover health and aesthetic standards, needs to cover \$2 million for each occurrence and \$4 million in the aggregate to protect the city from claims and suits for bodily injury and property damage.

The International Appeal to Stop 5G on Earth and in Space is translated into 30 languages, signed by 130,000 individuals,1,100 organizations from 203 countries and territories including

3,381 scientists, 1,913 medical doctors, 5,848 engineers, 3,525 psychologists, social workers and psychotherapists, and 3,052 nurses.

Don't tell us that your "hands are tied". Many other cities are creating strong legal deterrents to 5G technology. The industry now has more lobby money in congress than any other industry in history. Billions of dollars of influence - influence that is making its way into state and city government offices around the country.

Hard wiring our communication devices protects us from 2, 3, and 4G RF. LED lights already transmit 5G. Our autonomic nervous system can't handle the 5G non-stop assault with 20 billion more devices, 800,000 5G antennas and 20,000 satellites and unmanned drones transmitting 5G signals into air, land and sea 24/7. These devices are deployed and patented by defense contractors, not telecommunications companies and are a part of the electronic weapons technology.

We urge you to deny SWF's, and demand a reformed process. The deployment of additional equipment for "Smart City", Internet of Things (IoT), Artificial Intelligence (AI) and Facial Recognition goes beyond thoughts of a controlled society written about in the book 1984. Our privacy, security and freedom would be compromised in every possible way, which is morally wrong.

Please follow your mission statement and resolutions by supporting quality public services, quality of life, community health and safety, preserve the natural beauty, safe streets and sustainable development.

Respectfully submitted,

Fort Bragg neighbors

Stop 5G Mendocino

If you live on the Mendocino coast join us at 6pm on Monday, October 28, 2019 at Town Hall, 363 N. Main Street in Fort Bragg. Bring along your written statement or send ahead of time to City clerk June Lemos <Jlemos@fortbragg.com>

Keep spreading the word. All of our voices are needed!

E-mail <stop5gmendocino@mcn.org> if you would like to stay informed and/or help. You can send a copy of your written statement to us as well. THANKS!

Please note: We have not set up fundraising for this petition. The "Promote Petition" option Change.org asks of you will not go towards this cause. If you've donated and want your money reimbursed, please email their help center.

Artwork is by artist Shelley Masters. Thank you Shelley.

UPDATE 1

OCT 26, 2019

Hi,

So far we only have 33 supporters, 74 views and 11 shares and the meeting is this coming Monday. Please support all of us!

Monday 10-28-19 sometime after 6pm the Fort Bragg City Council will

consider adopting Guidelines & Standards for WIRELESS Telecommunication Facilities. If you are concerned about the damaging effects of 5G on people, plants & animals & live on

the Mendocino Coast please attend (speak for 3 minutes), and write an e-mail (your own) or use sample below. Send copy to City Clerk June Lemos <Jlemos@fortbragg.com <mailto:Jlemos@fortbragg.com>> City Manager Miller, Tabatha <TMiller@FortBragg.com> Planning Commission <cdd@fortbragg.com> and City Council members: Will Lee <Wlee@fortbragg.com > Norvell, Bernie <Bnorvell2@fortbragg.com>, Jessica Morsell-Haye <jmorsellhaye@fortbragg.com>,Peters, Lindy <LPeters2@fortbragg.com>,and Tess Albin-Smith <Talbinsmith@fortbragg.com>

Subject title for e-mail "City Council meeting 10-28-19 item 8B, Fort Bragg's Guidelines & Standards for Telecommunication Facilities" Meeting is at Fort Bragg Town Hall 363 N. Main Street. Agenda:

https://cityfortbragg.legistar.com/View.ashx?M=A&ID=718438&GUID=1D5AC13D-E442-449E-B243-42B903750EDB

After you sign the petition forward to City Clerk June Lemos <Jlemos@fortbragg.com> and <stop5gmendocino@mcn.org> and encourage everyone on your facebook list of friends to sign. Leave a brief personal comment on web page as well.

We have not set up fundraising for this petition. The "Promote

Petition" option Change.org asks of you will not go towards this cause.

Link to petition <u>https://www.change.org/p/fort-bragg-city-council-and-city-manager-no-wireless-facilities-next-to-homes-schools-and-parks-in-fort-bragg-ca</u>

In addition send an e-mail to the Ccity of Fort Bragg. Sample letter see below. If you want to write a shorter letter or put it in your own words go ahead, but as a minimum include these words in your message:

I object to 4G and 5G micro-towers in Fort Bragg based on the adverse effects on our health, safety, fire risk, devaluation of properties, aesthetics, impacts on the environment and excessive energy usage it demands.

Sample letter:

https://www.scribd.com/document/429005925/City-Letter-Stop-5G-Wireless-Ordinance https://www.scribd.com/document/429005925/City-Letter-Stop-5G-Wireless-Ordinancecommission

Thanks from members of STOP 5G MENDOCINO & Fort Bragg neighbors.

Do you like seeing this along the Mendocino Coast? It is already on Navarro Ridge Road.

Update 2 NOV 6, 2019

NOV 6, 2019

We need your help! 75 have signed. Let's get to 100!

Is there any way you could attend the Fort Bragg city council meeting November 12 at 6 pm at Town Hall 363 N. Main Street in Fort Bragg and speak for 3 min. about this topic? (Do to power outage the meeting originally scheduled for 10-28 got postponed). Agenda (item 8B):

https://city.fortbragg.com/AgendaCenter/ViewFile/Agenda/_11122019-806

The public has a chance to comment in writing before Tuesday's November 12 meeting to City clerk June Lemos <Jlemos@fortbragg.com>, City manager Miller, Tabatha

<TMiller@FortBragg.com> Planning Commission <cdd@fortbragg.com> and City Council members Will Lee <Wlee@fortbragg.com>, Norvell, Bernie <Bnorvell2@fortbragg.com>, Jessica Morsell-Haye <jmorsellhaye@fortbragg.com>, Peters, Lindy

<LPeters2@fortbragg.com> and Tess Albin-Smith <Talbinsmith@fortbragg.com> See previous public comments (70 pages):

https://cityfortbragg.legistar.com/View.ashx?M=F&ID=7820195&GUID=B2FCEE7E-D60F-4BDB-984B-CB8E585D557D

Please sign this petition (include your name and a brief comment). It will be presented to the Fort Bragg City Council on November 12. Please send a copy to City clerk June Lemos <Jlemos@fortbragg.com> and <stop5gmendocino@mcn.org> Please forward this to your friends and encourage them to sign and spread through facebook.

We have not set up fundraising for this petition. The "Promote Petition" option Change.org asks of you will not go towards this cause.

Below are two sample letters. At a minimum include: I object to 4G and 5G micro-towers in Fort Bragg based on the adverse effects on our health, safety, fire risk, devaluation of properties, aesthetics, impacts on the environment and excessive energy usage it demands. https://www.scribd.com/document/429005925/City-Letter-Stop-5G-Wireless-Ordinance https://www.scribd.com/document/429005925/City-Letter-Stop-5G-Wireless-Ordinance-commission

Another sample is here:

https://citizensfor5gawareness.org/wp-content/uploads/2019/09/Letter-to-Politicians.pdf Many cities and towns in California have filed law suits protesting the pressure from the federal government to allow small cell wireless facilities to be installed in cities and towns next to homes, schools and parks. Many cities and towns used experts to educate themselves and their communities about the dangers of this new technology and held workshops to educate the public. Most of them held one or more meetings focusing on just this topic alone. Fort Bragg so far has not.

Thanks, Fort Bragg neighbors Stop 5G Mendocino

Signatures

Name	Location	Date
ANNEMARIE WEIBEL	US	2019-10-21
Ali Van Zee	Oakland, CA	2019-10-21
Murven Sears	Fort Bragg, US	2019-10-21
Rachel Ganapoler	Port Townsend, WA	2019-10-21
Diego Velado	US	2019-10-22
Rodrigo Martinez	California	2019-10-22
Andrea Alfaro	Mainz, Germany	2019-10-22
Sally Stewart	Mendocino, CA	2019-10-22
A Musgrove	Albion, CA	2019-10-22
Martin Ganapoler	San Francisco, CA	2019-10-22
David Ganapoler	Belvedere Tiburon, CA	2019-10-22
Daney Dawson	Mendocino, CA	2019-10-22
Judith Vidaver	Fort Bragg, CA	2019-10-22
Lexis Long	Waterford, US	2019-10-22
Noah Romine	Murfreesboro, US	2019-10-22
Brandon Copeland	Redford, US	2019-10-22
Armando Medina	Denver, US	2019-10-22
G Gaming	US	2019-10-22
Rebecca Lane	Middletown, CA	2019-10-22
Kelly McCloskey	Kailua Kona, US	2019-10-23

Name	Location	Date
Tatum Baustert	Plano, US	2019-10-23
Linda Jupiter	San Francisco, CA	2019-10-23
Joseph Ketter	Minneapolis, US	2019-10-23
Timothy Cole	Hamilton, US	2019-10-23
Kendall Smith	Frisco, US	2019-10-23
Alex Bowen	Cincinnati, US	2019-10-23
emily Diaz	Houston, US	2019-10-23
Alyssa Collins	Callahan, US	2019-10-23
Maya Aoun	Dearborn Heights, US	2019-10-23
Hajir Alkhoja	Mckinney, US	2019-10-24
Micah Brown	Flower Mound, US	2019-10-24
Lisa Wilson-McIntyre	Tallulah, US	2019-10-24
Georgia Collin	Elk, CA	2019-10-26
Shelley Masters	Sonoma, CA	2019-10-27
Roberta Ahrens	Petaluma, CA	2019-10-27
Austin Begay	Peoria, US	2019-10-27
Sammy Zullo	US	2019-10-27
Raegan Bossard	Caldwell, US	2019-10-27
Lyla Rae Delrosario	Brooklyn, US	2019-10-27
Ashlynn Stoltman	Gilbert, US	2019-10-27
Camren Carpenter	Phoenix, US	2019-10-27
Ayanda Jamela	Plainfield, US	2019-10-27

Name	Location	Date
Jayden A	Newnan, US	2019-10-27
Colin Elder	Chicago, US	2019-10-27
Brandon Walker	Plainfield, US	2019-10-27
Reanna Ramirez	Brownsville, US	2019-10-28
Dont Worry abt it	Chicago, US	2019-10-28
Kiki Henning	carlsbad, US	2019-10-28
Carter Venzon	Reno, US	2019-10-28
Lian Uk	Phoenix, US	2019-10-28
Late Bell	Fort Lauderdale, US	2019-10-28
Zaria Newton	Fort Lauderdale, US	2019-10-28
Madison Myers	Grand Prairie, US	2019-10-28
Ronald Sorensen	Pinellas Park, US	2019-10-29
Christine Teamer	Douglasville, US	2019-10-29
Jonathan Hernandez	Miami, US	2019-10-29
Kyle Choy	Burlingame, US	2019-10-29
Hannah Van Gorder	Colorado Springs, US	2019-10-29
Melanie Nieto	Orlando, US	2019-10-29
Krystal Lee	Chandler, US	2019-10-29
Gill Bates	Santa Ana, US	2019-10-29
Autumn Hamlett	Albuquerque, US	2019-10-29
Angel Amador	San Francisco, US	2019-10-29
bobby neal	Frisco, US	2019-10-29

Name	Location	Date
Daniela Perez	Mcallen, US	2019-10-29
Rossi Gutierrez	Streamwood, US	2019-10-29
Brooke Mueller	Temecula, US	2019-10-29
Angelina Young	Reno, US	2019-10-29
Amayah Wray	Madison, US	2019-10-29
Beyonce Cecenas	Fort Worth, US	2019-10-29
Mark Blakely	Greensboro, US	2019-10-29
Eden Bedford	Austin, US	2019-10-29
amber knight	benson, US	2019-10-29
Rebecca Aum	Mendocino, US	2019-10-30
Terrence Vaughn	Fort Bragg, CA	2019-11-03
sharon ledbetter	santa rosa, CA	2019-11-08
Elisa Krug	Magnolia, US	2019-11-08
Heather Williams	Ormond Beach, US	2019-11-09
Korekiyo Shinguji	Billings, US	2019-11-09
Cecile Cutler	Fort Bragg, CA	2019-11-09
Bruce Broderick	Fort Bragg, CA	2019-11-09
Norman de Vall	Mendocino, CA	2019-11-09
Jaharee Brown	Atlanta, US	2019-11-09
Val Stevens	US	2019-11-09
Caitlin Engel	US	2019-11-10
Johnny Jackson jr	Brush Creek, US	2019-11-10

Name	Location	Date
Elena Miceli	Clearwater, FL	2019-11-10
janie rezner	ft bragg, CA	2019-11-10
Joe Adams	Union Beach, US	2019-11-10
Justin Thompson	Sherman, US	2019-11-10
Elaine Charkowski	Fort Bragg, CA	2019-11-11
Inger Grape	Mendocino, CA	2019-11-11
justine battersby	albion, CA	2019-11-11
Heather de Herget	Fort Bragg, CA	2019-11-11
Sarah Grace	Garberville, CA	2019-11-11
Holly Tannen	Fort Bragg, CA	2019-11-11
Geneva Dees	Newberry, US	2019-11-11
Genesis Mejia	Lehigh Acres, US	2019-11-11
Jurgen Bailey	Los Angeles, US	2019-11-11
Maron Smith	Houston, US	2019-11-11
Kelly Fitzgerald	Pensacola, US	2019-11-11
rachana acharya	sacramento, US	2019-11-11
Nancy Harris	Fort Bragg, CA	2019-11-11
Elias Rutledge	Stockton, US	2019-11-11
Erin Ahn	Lexington, US	2019-11-11
Anthony Koller	Fort Bragg, CA	2019-11-11
Nancy Chao	Fort Bragg, CA	2019-11-11
christina castle Rey	fort bragg, CA	2019-11-11

Name	Location	Date
Nancy Wallace-Nelson	Mendocino, CA	2019-11-12
Divora Stern	Willits, CA	2019-11-12
Maria Gilardin	Calpella, CA	2019-11-12
daniel bobek	long beach, NY	2019-11-12
christy mulvey	kailua-kona, HI	2019-11-12
Nathan Johansson	US	2019-11-12