

# The Most Dangerous Technology Ever Invented – Part Three

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### [Cell Phones Are Not Here to Stay](#)

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On the day digital cell phone service began in New York City, I was away from home at a three-day law conference. The day I returned home I became dizzy. Within a few days I was also nauseous and I had uncontrollable tremors. I had the first asthma attack of my life. My eyeballs felt like they were bulging out, my lips felt dry, fat and puffy, I felt pressure in my chest, and the bottoms of my feet hurt. I became so weak I couldn't lift a book. My skin became so sensitive I couldn't bear to be touched and I could hardly stand to wear my clothes. My head was roaring like a freight train. After the fourth day I could not sleep or eat. During the sixth night my larynx went into spasm three times. Each time that happened I couldn't draw a breath in or out and I thought I was going to die. I left home the next morning, never to return.

This did not happen only to me, or only to a few people. Beginning November 14, 1996, the day Omnipoint Communications turned on all those cell towers, hundreds of thousands of New Yorkers became suddenly ill. Many thought they were having a heart attack, a stroke or a nervous breakdown. The Health Department called it an influenza epidemic, and it lasted until the following May. They did not stop to wonder why it

hit only New York and not any nearby cities at that time. Weekly mortality statistics from the Centers for Disease Control revealed a 17 percent rise in mortality in the city beginning the week of November 17, lasting 11 weeks, that killed 2,300 people.

The epidemic did not hit Boston until the following year, when Sprint began service there on November 12, 1997. Mortality spiked by 15.5% for 16 weeks. It hit San Diego when Pacific Bell began service there on November 1, 1996, lasted for 17 weeks, and raised mortality by 14.5%. It did not hit nearby Los Angeles until the following summer, when Pacific Bell began service there on July 3, 1997, and mortality rose by 30% for the next 15 weeks. It hit Philadelphia in the spring, when Sprint began service there on April 3, 1997, and Detroit in the fall, when Sprint began service there on October 15, 1997. It hit Jacksonville, Florida the previous fall, when Powertel began service there on October 15, 1996. It hit Chicago, Milwaukee, Austin, San Antonio, Fort Worth, Houston, Atlanta, Fresno, Spokane, Portland, Sacramento, Charlotte, and Tulsa, beginning in each city on the day digital cell phone service became available in that city.

I learned, in 1996, that power levels do not matter. After microwave radiation had nearly killed me in Brooklyn after only six days of exposure, I was sure the radiation levels must be sky high, and I hired a professional engineer, Stuart Maurer, to go to my house with his spectrum analyzer to measure the radiation. I came down for the day from my motel room in upstate New York to watch him. To my astonishment, the highest level he measured, anywhere in my house, was 0.0001 microwatts per square centimeter. Clearly I still had a lot to learn about microwave radiation, and many things I thought I knew were wrong.

The same thing is happening now with 5G, only this time instead of blaming an influenza virus, society is blaming a coronavirus. And this time, it is happening everywhere at once

instead of one city at a time. On October 13, 2020, Verizon issued a press release announcing the availability of its 5G network throughout the United States, and on the same day Apple issued a press release announcing the launch of its 5G phone, the iPhone 12. The iPhone 12 and 12 Pro were available in stores October 23, and the iPhone Mini and Max were available in early November. And in every state except two, mortality began to suddenly rise the week of October 24 or soon after, and not later than the week of November 21. The two exceptions were Wisconsin, where the mortality spike began the week of October 17, and Hawaii, which did not have a significant rise in deaths last winter. Nationally, mortality rose an average of 25% for 20 weeks, and 300,000 people died.

It is happening everywhere at once also to birds, insects, wildlife, and plant life. A correspondent in Knoxville, Tennessee wrote to me last week:

*"These past couple of months I've noticed 5 bumblebees now on our flowers that have appeared paralyzed to me. We unfortunately have Verizon's 5G Ultra Wideband very close to our home, which is only available outside, and I think they are being impacted by that. We brought 4 of them into our house, each at different times, and 3 of the 4 revived within about 5 minutes, so I then released them back outside. The 4th one took a little over an hour to revive before it was able to fly off."*

Another observer, in East Dover, Vermont, wrote, a couple of days ago:

*"We grow 3 acres of blackcurrants, 200 blueberry bushes (11 varieties) and a smattering of other novelty berry plants. Our small farm is certified organic with 8 open acres certified (only 3 planted) and the remainder of the 31 acres is wooded. The blackcurrants are early bloomers and our 4 varieties all bloom within a few days of each other. There*

are so many different pollinating insects that come to the fields including a certain type of bumblebee with a red middle. It is wondrous to see and hear all the different shaped insects noisily working away.

“This spring, as I walked down the rows and admired all the blossoms in the front field, I suddenly stopped because it was almost completely quiet. There were two bumblebees among the 2,225 blackcurrant bushes and their buzzing was so noticeable because everything was so silent. When I mentioned this to a fifth generation apple farmer, he said that not only were there no pollinators this year, the timing of everything was off. For example, his asparagus was two weeks early (ours was, too). Compared with 2020, our blackcurrant blooming times were 2 weeks early this year. It was a cold spring but I would think that would delay blooming. So that is another reason the insects weren’t around yet. Two weeks is a huge amount of time! The blueberries were also generally early and the usual succession of blooms through the varieties was altered.

“The next day, I raced over to Forever Wild, a honeybee farmer, and secured a pallet of four hives. It was too cold for them to fly so they stayed in their hives in the middle of a gorgeous bloom of blackcurrants. Apparently, bumblebees will fly when it is in low 50s but honeybees need it to be at least 59 degrees. The honeybee farmer said they pollinate one quarter of the whole state (Vermont) and that all the guys up north (mostly apples) were talking about the same thing – no pollinators and specifically no bumblebees.

“Another curiosity this year was the fact that we had very few Japanese beetles. This could be because it was an extremely wet year but it is interesting to note that the beetles and bumblebees both winter underground. Also, when I visited my parents in September in Concord, MA, my mother pointed out how all the oaks had dark spots on them. All our tree leaves have the same spots here in southern Vermont and

*especially on the beech and quaking aspens. I planted our first berry plants in 2014 so I don't have a vast wealth of personal experience owning and running a farm but I hope to continue my observations and plan on recreating that experiment with aluminum screening that Katie Haggerty did except with blackcurrants."*

A naturalist in Greece, Diana Kordas, wrote a detailed report in October from the island of Samos in the eastern Mediterranean:

*"I live in the country a few kilometers from the capital town of Samos, Vathi, which sits at the end of a large bay, and opposite the tourist village of Kokkari. In July of this summer, 2021, a pilot 5G cell tower was turned on above Kokkari. This cell tower is across the bay from us, one of its two panels points directly at us, and it is at the same height above sea level as our property. It is approximately 6 kilometers away.*

*"Where we live we are surrounded by cell towers and boosters (14 total) operating at 2G, 3G, and 4G frequencies. There has been a gradual diminution of insect and bird life in the last few years, especially since 2014, when 4G came here. Many species are affected; we lost the last of the fireflies (we used to have many) two summers ago. It has been years since we had a bug splattered on the windshield of the car as we drove along. But since that 5G cell tower across the bay went live, we have lost nearly all the pollinators and a great deal more besides.*

*"In the early part of the summer we had a great many pollinators: bumblebees, honeybees, many sorts of wild bees, carpenter bees, wasps of all kinds, and hoverflies. We tend to notice them as we grow all our own fruit and vegetables. Our early summer crops were pollinated without any problem, but melons, tomatoes and courgettes (zucchini) which we*

planted in early July have produced very little fruit as they did not get many pollinators though there were many blossoms. Not a single courgette has been pollinated and the tomatoes produced only 3 fruits; the melons (not as many as we would have expected) seem to have been pollinated by tiny night-flying moths.

“We own three and a half acres of land, which a big property for the island. It has many large trees (pines, cypresses, carobs, wild pistachio, olives, almonds and a grove of extremely rare gum mastic trees) and some fruit trees (apricots, plums and pears) as well as fields of grasses and wild plants. I should note here that we do not use pesticides of any sort, and we do not have any adjoining neighbours who use any pesticides; also, most of the land surrounding us is wild both up the mountain and down to the sea. Our own land has never had any pesticides and I would say the same is most likely true for most of the land around us. This is NOT a pesticide problem.

“We also keep our land as wild as possible, and except for the plots we cultivate the wild plants are allowed to grow freely: grasses, flowers (many orchids), and a lot of wild fennel. There are many bushes and hedges (I don't know the English names for these plants). Many of the trees are over 100 years old, and some of the cypresses are over 300 years old.

“When planting we tend to intercrop and also plant flowering basil and zinnias, which attract pollinators, among the other plants. We also put out saucers of water for them to drink from – bees get thirsty. We usually get lots of bees, butterflies, hoverflies, wasps, etc., of many species, and we had many pollinators until recently. The decline began in July when the tower went live.

“The bees and other pollinators, and indeed most of the insects, are now almost all gone. We know this for several

reasons: one is what we see (or don't see) on the vegetable beds, one is what we are seeing generally (or not seeing, which is hardly anything) and the most important is what we are not seeing on the carob trees. Every year at this time, the male carobs flower abundantly and draw in hundreds of pollinators: bees of all sorts, wasps, hornets and hoverflies. You can't go anywhere near these trees without being aware of a loud buzzing, and the insects are busy on them all day. These trees bloom for about a month, they are in full flower, and to date there has been virtually nothing on them: one bumblebee, one honeybee, a few hornets, a few flies of different species, a couple of tiny wild bees. We check many times a day, every day.

"This is NOT due to the weather, either. Since the carob trees went into flower we have had a variety of weather patterns, from strong northerly winds to fairly strong southerlies, interspersed with a good many still days. It has rained once. The temperatures are about average for the time of year. Wind or no wind, warm or cool, there are virtually no pollinators on the carobs.

"One day we also checked for bees on every male carob we could find between here and Kokkari, and we couldn't find any insects on any other flowering carob— or any insects at all, except a few flies.

"The flowering carobs are a good indicator of pollinators because they attract so many. Certain plants are good for this, like traveller's joy/cat's claw, a thorny climbing vine which has very sweet-smelling flowers and blooms in this season (we haven't seen any pollinators on them either) and onion flowers, which will attract every type of wasp and hornet there is (but not bees). We do not have onion flowers at this time, but on past occasions when we have had, we got large numbers of wasps and hornets, including many species we did not recognize.

"On our land, as I write this, we have lost not only bees but all sorts of other insects: beetles of all sorts including cockchafers and ladybirds, web-spinning spiders, mantises, moths and butterflies (we always get great clouds of graylings on the pines in July-August, but hardly any this year), dragonflies of all sorts, grasshoppers and crickets. October is the season for dragonflies, and we presently have the warm, still weather when they arrive in the thousands. This year we have maybe 1/100th of the usual number. We have a few hornets (not nearly as many as usual), horseflies (fewer than usual) and flies (which seem of all the insects to be the least affected).

"We still have mosquitoes, but I believe the reason for this is that they breed in our cistern, which has stone walls two feet thick and a cement roof – it is protected from electromagnetic fields. The mosquitoes get in through the overflow pipe and tiny gaps in the stones that cover the drain holes. Our neighbour, who has an open-topped cistern, had thousands of mosquito larvae in the water (and a big mosquito problem) earlier in the summer, now has no mosquitoes. I checked, and there are no larvae in the water of his cistern any more.

"I can only think that the 5G cell tower has caused these things to happen, because nothing else accounts for the sudden, severe drop in the number of insects here. The tower went live in July and the losses we are seeing have happened since July. I also think that we are seeing a drop in the number of small rodents: rats, mice and voles. We are not losing fruit and vegetables to mice or rats, which we always do. Also, on a wild bit of land like this, one tends to find traces of them, or to catch tails whisking away in the beam of a torch at night, or to hear them (tree rats can be quite noisy), and it seems they too are gone or going. My neighbour keeps finding dead rats, yet he never poisons them so they didn't die from that.



*"We are also seeing changes in animal behaviour. We feed a number of golden jackals which are having problems hunting due to a lack of wildlife in the area. The bay of Samos is/we are already surrounded by many cell towers and boosters in addition to the new 5G cell tower and wildlife including insects and birds has been declining for years. However, over the past few weeks the number of jackals coming to us has tripled and they are exhibiting symptoms of extreme anxiety, following us around in the evenings and now starting to appear in the daytime as well (they are primarily nocturnal). These are wild animals that we do not treat as pets, but some of them are becoming positively clingy, approaching to within several feet and sitting for periods of time just a few feet away. Some of them, which were not aggressive before, have started to become very aggressive with other jackals and fights are always breaking out.*

*"The area is also experiencing problems with wild boar, which are also looking for food. We have had several too-close encounters with these large and dangerous animals (which are also appearing at times when they shouldn't, before sunset) and digging up large portions of our land at night. I was charged by one and so was my husband. Many people are seeing them in daytime, and they have dug up gardens, groves and the sides of the road. This has never happened before.*

*"Bird numbers are diminishing. We have still got fairly large numbers of great tits and sardinian warblers, which tend to stick to the deep cover of thick hedges and large trees, but we have lost all the chiffchaffs and chaffinches. We have a few blackbirds but it is a long time since we have seen a songthrush, or a wren. The robins have not arrived from further north, though they should have by now. We have a pair of tawny owls but little owls have disappeared. We get jays and crows, a few ring-neck doves (diminishing) and wood-pigeons, which have become few in number lately. Gull numbers (yellow-legged gulls) are falling and the shags which were*

*always on the beach below our land have disappeared entirely. We are getting fewer raptors – we usually have sparrowhawks, Eleanor's falcons, goshawks, buzzards and short-toed eagles, but they are avoiding this area now though we see them elsewhere, as well as ravens.*

*"We have seen virtually no migrating birds in this area this fall: a few flycatchers, a couple of red-backed shrikes, and a flock of Little Gulls flying out to sea is all. We heard but didn't see a flock of bee-eaters, which didn't stop here as they usually do.*

*"In conclusion, cell towers in general have diminished the number of insects and pollinators in this area, along with bird numbers and wildlife generally. The new 5G cell tower has had a devastating effect in a very short time, but it is impossible to know the full consequences until next spring at the earliest."*

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Those of you who remember car windshields splattered with insects, gardens ablaze with butterflies and abuzz with bees, loud choruses of crickets on land, and of frogs in ponds, and thick flocks of songbirds singing their joy at life, will understand what I am about to say. Cell phones are not here to stay. Whether people will willingly give them up is another question.

If people will willingly give up cell phones, the sudden and dramatic improvement in everyone's health and sense of well-being, and the return of all our lost and disappearing cousin species who are still trying to share the Earth with us, will restore hope to the human species and catalyze other changes that will suddenly become possible, most importantly the ending of the mining and use of fossil fuels, which are converting the oxygen in our air to carbon dioxide, acidifying our oceans, polluting our rivers, lakes, streams and

groundwater, and filling oceans, land, atmosphere, and ourselves with particles of plastic.

If people do not willing give up cell phones, then our planet does not have long to live, and cell phones will die with the Earth. In either case, they are not here to stay. Please join me in working toward the restoration of our home. If you have not yet signed it, sign the [International Appeal to Stop 5G on Earth and in Space](#). If your organization has consultation status at the United Nations and has the ability to formally submit this Appeal to the U.N., get in touch with me. If your organization opposes 5G and you have not yet done so, contact me at [info@cellphonetaskforce.org](mailto:info@cellphonetaskforce.org) about signing the amicus brief supporting our case in the Supreme Court. Please download, save, and distribute [Part I](#), [Part II](#) and [Part III](#) of this series. If you still own or use a cell phone, please throw it away, now, and if you do not have a landline, get one.

## References

Anderson, John. "'Isle of Wight Disease' in Bees. I." *Bee World* 11(4): 37-42 (1930). Balmori, Alfonso. "Mobile Phone Mast Effects on Common Frog (*Rana temporaria*) Tadpole: The City Turned into a Laboratory." *Electromagnetic Biology and Medicine* 29: 31-35 (2010).

Bartoniček, Václav and Eliska Klimková-Deutschová. "Effect of Centimeter Waves on Human Biochemistry." *Casopis Lekařů Ceskyh* 103(1): 26-30 (in Czech). English Translation in G. L. Khazan, ed., *Biological Effects of Microwaves*, ATD Report P-65- 68, September 17, 1965 (Washington, DC: Dept. of Commerce), pp. 13-14 (1964). Bawin, S.M. and W. Ross Adey. "Sensitivity of Calcium Binding in Cerebral Tissue to Weak Environmental Electric Fields Oscillating at Low Frequency." *Proceedings of the National Academy of Sciences USA* 73(6):

1999-2003 (1976).

Belokrinskiy, Vasily S. "Hygienic Evaluation of Biological Effects of Nonionizing Microwaves." *Gigiyena i Sanitariya* 1982(6): 32-34. JPRS 81865, pp. 1-5 (1982). Bigu del Blanco, Jaime. Interaction of Electromagnetic Fields and Living Systems with Special Reference to Birds. Laboratory Technical Report LTR-CS-113, Control Systems Laboratory, Division of Mechanical Engineering, National Research Council Canada (1973).

Bigu del Blanco, Jaime and César Romero-Sierra. Bird Feathers as Dielectric Receptors of Microwave Radiation. Laboratory Technical Report LTR-CS-89, Control Systems Laboratory, Division of Mechanical Engineering, National Research Council Canada (1973).

Blackman, Carl F., S.G. Benane, J.A. Elder, D.E. House, J.A. Lampe, and J.M. Faulk. "Induction of calcium-ion efflux from brain tissue by radiofrequency radiation." *Bioelectromagnetics* 1:35-43 (1980).

Blackman, Carl F. "Radiobiological approaches to electropollution." In *Biological Effects of Electropollution*, S. Dutta and R. Millis, eds., Information Ventures, Phila., 1986, pp. 39-46.

Brodeur, Paul. *The Zapping of America*. New York: W.W. Norton (1977). Clarke, Dominic, Heather Whitney, Gregory Sutton, and Daniel Robert. "Detection and Learning of Floral Electric Fields by Bumblebees." *Science* 340: 66-69 (2013). Clarke, Dominic, Erica Morley, and Daniel Robert. "The bee, the flower, and the electric field: electric ecology and aerial electroreception." *Journal of Comparative Physiology A* 203: 737-748 (2017).

Dutta, S. et al. :Microwave radiation-induced calcium ion flux from human neuroblastoma cells: dependence on depth of amplitude modulation and exposure time." In *Biological Effects*

of Electropollution, S. Dutta and R. Millis, eds. Information Ventures, Phila., 1986, pp. 63-69.

Edwards, G. S., C. C. Davis, J. D. Saffer, and M. L. Swicord. "Microwave Field-Driven Acoustic Modes in DNA." *Biophysical Journal* 47: 799-807 (1985).

Engels, Svenja, Nils-Lasse Schneider, Nele Lefeldt, Christine Maira Hein, Manuela Zapka, Andreas Michalik, Dana Elbers, Achim Kittel, P. J. Hore, and Henrik Mouritsen. "Anthropogenic Electromagnetic Noise Disrupts Magnetic Compass Orientation in a Migratory Bird." *Nature* 509: 353-56 (2014).

Fink, Hans-Werner and Christian Schönenberger. "Electrical Conduction through DNA Molecules." *Nature* 398: 407-410 (1999).

Frey, Allan H. "Auditory System Response to Radio Frequency Energy." *Aerospace Medicine* 32: 1140-42 (1961).

Frey, Allan H. "Human Auditory System Response to Modulated Electromagnetic Energy." *Journal of Applied Physiology* 17(4): 689-92 (1962).

Frey, Allan H. and Elwood Seifert. "Pulse Modulated UHF Energy Illumination of the Heart Associated with Change in Heart Rate." *Life Sciences* 7 (part 2): 505-12 (1968).

Frey, Allan H. and Rodman Messenger, Jr. "Human Perception of Illumination with Pulsed Ultrahigh-Frequency Electromagnetic Energy." *Science* 181: 356-58 (1973). Frey, Allan H., Sondra Feld, and Barbara Frey. "Neural Function and Behavior: Defining the Relationship." *Annals of the New York Academy of Sciences* 247: 433-39 (1975).

Frey, Allan H. "Is a Toxicology Model Appropriate as a Guide for Biological Research with Electromagnetic Fields?" *Journal of Bioelectricity* 9(2): 233-234 (1990).

Gel'fon, I.A. and Sadchikova, M.N. "Protein fractions and histamine of the blood under the influence of UHF and HF." In

The Biological Action of Ultrahigh Frequencies, A.A. Letavet and Z.V. Gordon, eds., Academy of Medical Sciences, Moscow. JPRS 12471, pp. 42-46 (1960).

Glaser, Zorach R. Bibliography of Reported Biological Phenomena ("Effects") and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation. Bethesda, MD: Naval Medical Research Institute. NTIS reports nos. AD 734391, AD 750271, AD 770621, AD 784007, AD A015622, AD A025354, and AD A029430 (1971- 1976).

Glaser, Zorach R. Bibliography of Reported Biological Phenomena ("Effects") and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation: Ninth Supplement to Bibliography of Microwave and RF Biologic Effects. Cincinnati, OH: National Institute for Occupational Safety and Health. NTIS report no. PB83176537 (1977).

Greggers, Uwe, Gesche Koch, Viola Schmidt, et al. "Reception and Learning of Electric Fields in Bees." *Proceedings of the Royal Society B* 280: 20130528 (2013). Haggerty, Katie. "Adverse Influence of Radio Frequency Background on Trembling Aspen Seedlings: Preliminary Observations." *International Journal of Forestry Research*, article ID 836278 (2010).

Hallowell, C. "Trouble in the Lily Pads." *Time*, Oct. 28, 1996, p. 87. Hawk, Kathy. *Case Study in the Heartland*. Butler, PA, 1996.

Holtze, Christian, R. Sivaramakrishnan, Markus Antonietti, J. Tsuwi, Friedrich Kremer, and Klaus D. Kramer. "The microwave absorption of emulsions containing aqueous micro- and nanodroplets: A means to optimize microwave heating." *Colloid and Interface Science* 302: 651-657 (2006).

Imms, Augustus D. "Report on a Disease of Bees in the Isle of Wight." *Journal of the Board of Agriculture* 14(3): 129-40 (1907).

Koh, K.H., C Montgomery, D Clarke, EL Morley and D Robert. "Bumble Bee Hair Motion in Electric Fields." *Journal of Physics: Conference Series* 1322: 012001 (2019). Kordas, Diana. Comment to US Fish and Wildlife Service Concerning the Effects of a 5G Cell Tower on the Island of Samos. October 13, 2021.

Kordas, Diana. "Birds and Trees of Northern Greece: Population Declines since the Advent of 4G Wireless An Observational Study." Oct. 5, 2017, 26 pages.

Kunjilwar, K.K. and Jitendra Behari. "Effect of amplitude-modulated RF radiation on cholinergic system of developing rats." *Brain Research* 601:321-324 (1993). Margaritis, Lukas H., Areti K. Manta, Konstantinos D. Kokkaliaris, et al. "Drosophila Oogenesis as a Bio-marker Responding to EMF Sources." *Electromagnetic Biology and Medicine* 33(3): 165-189 (2014).

Microwave News. "Industry Pressures FCC to Adopt ANSI RF/MW Exposure Standard." March/April 1996, pp. 1, 11-12.

Microwave News. "Highlights." May/June 1995, p. 12.

Moore, Julie L., indexer. Cumulated Index to the Bibliography of Reported Biological Phenomena ("Effects") and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation, compiled by Zorach R. Glaser. Riverside, CA: Julie Moore & Associates (1984).

Navakatikian, Mikhail A. and Lyudmila A. Tomashevskaya. "Phasic Behavioral and Endocrine Effects of Microwaves of Nonthermal Intensity." In: David O. Carpenter and Sinerik Ayrapetyan, eds., *Biological Effects of Electric and Magnetic Fields* (New York: Academic), vol. 1, pp. 333-42 (1994).

Nieh, James C. "The Stop Signal of Honey Bees: Reconsidering Its Message." *Behavioral Ecology and Sociobiology* 33(1): 51-56 (1993).

Nikitina, Valentina N. 2001. "Hygienic, Clinical and Epidemiological Analysis of Disturbances Induced by Radio Frequency EMF Exposure in Human Body." In Kjell Hansson Mild, Monica Sandstrom, and Eugene Lyskov, eds., *Clinical and Physiological Investigations of People Highly Exposed to Electromagnetic Fields* (Umeå, Sweden: National Institute for Working life), Arbetslivsrapport 3, pp. 32-38 (2001).

Nittby, Henrietta, Gustav Grafström, Dong Ping Tian, Lars Malmgren, Arne Brun, Bertil R.R. Persson, Leif G. Salford, and Jacob Eberhardt. "Cognitive Impairment in Rats after Long-Term Exposure to GSM-900 Mobile Phone Radiation." *Bioelectromagnetics* 29: 219-232 (2008).

Paffhausen, Benjamin H., Julian Petrasch, Uwe Greggers, et al. "The Electronic Bee Spy: Eavesdropping on Honeybee Communication via Electrostatic Field Recordings." *Frontiers in Behavioral Neuroscience* 15: 647224 (2021).

Panagopoulos, Dimitris J. "Effect of Microwave Exposure on the Ovarian Development of *Drosophila melanogaster*." *Cell Biochemistry and Biophysics* 63: 121- 132 (2012).

Panagopoulos, Dimitris J. "Analyzing the Health Impacts of Modern Telecommunications Microwaves." In *Advances in Medicine and Biology*, Leon V. Berhardt, ed., Nova Science Publishers, NY, Vol. 17, pp. 1-55 (2011).

Panagopoulos, Dimitris J., Evangelia D. Chavdoula, and Lukas H. Margaritis. "Bioeffects of Mobile Telephony Radiation in Relation to Its Intensity or Distance from the Antenna." *International Journal of Radiation Biology* 86(5): 345-357 (2010). Panagopoulos, Dimitris J. and Lukas H. Margaritis. "Mobile Telephony Radiation Effects on Living Organisms." In *Mobile Telephones, Networks, Applications, and Performance*, A.C. Harper and R.V. Buress, eds., Nova Science Publishers, NY, pp. 107-149 (2008).

Panagopoulos, Dimitris J., Andreas Karabarbounis, and Lukas H.



Margaritis. "Effect of GSM 900-MHz Mobile Phone Radiation on the Reproductive Capacity of *Drosophila melanogaster*." *Electromagnetic Biology and Medicine* 23(1): 29-43 (2004).

Persson, Bertil R. R., Leif G. Salford, and Arne Brun. "Blood-brain Barrier Permeability in Rats Exposed to Electromagnetic Fields Used in Wireless Communication." *Wireless Networks* 3: 455-61 (1997).

Phillips, Ernest F. "The Status of Isle of Wight Disease in Various Countries." *Journal of Economic Entomology* 18: 391-95 (1925).

Polk, Charles. "Implications of Measured Electric Conductivity of DNA for Bio-effects of E.M. Fields." In *Bioelectromagnetics Society Annual Meeting*, June 9-16, 2000, München, Germany, Abstracts book, pp. 22-23.

Raumer, Max. "Heisse Gespräche." *ZEIT Wissen*, May 2006, <https://www.zeit.de/zeitwissen/2006/05/Handy-Strahlung.xml/komplettansicht>. Romero-Sierra, César, Arthur O. Quanbury, and J. Alan Tanner. Feathers as Microwave and Infra-Red Filters and Detectors – Preliminary Experiments. Laboratory Technical Report LTR-CS-40, Control Systems Laboratory, Division of Mechanical Engineering, National Research Council Canada (1970). Sadchikova, Maria N. "Clinical manifestations of reactions to microwave irradiation in various occupational groups." In *Biologic Effects and Health Hazards of Microwave Radiation: Proceedings of an International Symposium*, Warsaw, 15-18 Oct., 1973, P. Czerski et al., eds., pp. 261-267 (1974).

Saglioglou, Niki E., Areti K. Manta, Ioannis K. Giannarakis, Aikaterini S. Skouroliakou, and Lukas H. Margaritis. "Apoptotic Cell Death during *Drosophila* Oogenesis Is Differentially Increased by Electromagnetic Radiation Depending on Modulation, Intensity and Duration of Exposure." *Electromagnetic Biology and Medicine* 35(1): 40-53 (2014). Sagripanti, Jose-Luis and Mays L. Swicord. "DNA Structural

Changes Caused by Microwave Radiation." International Journal of Radiation Biology and Related Studies in Physics, Chemistry and Medicine 50(1): 47-50 (1986).

Sagripanti, Jose-Luis, Mays L. Swicord, and C. C. Davis. "Microwave Effects on Plasmid DNA." Radiation Research 110(2): 219-231 (1987).

Salford, Leif G., Arne E. Brun, Jacob L. Eberhardt, Lars Malmgren, and Bertil R.R. Persson. "Nerve Cell Damage in Mammalian Brain after Exposure to Microwaves from GSM Mobile Phones." Environmental Health Perspectives 111(7): 881-83 (2003).

Salford, Leif G., Bertil Persson, Jacob Eberhardt, Gustav Grafström, and Lars Malmgren. "Non-thermal Effects of EMF upon the Mammalian Brain." Abstract for a presentation made at an international conference titled The Precautionary EMF Approach: Rationale, Legislation and Implementation, Benevento, Italy, February 2006.

Schwartz, Jean-Louis, Dennis E. House, and Geoffrey A.R. Mealing. "Exposure of Frog Hearts to CW or Amplitude-Modulated VHF Fields: Selective Efflux of Calcium Ions at 16 Hz." Bioelectromagnetics 11: 349-358 (1990).

Serant, Claire. "A Human Science Experiment." New York Newsday, May 10, 2004. Sikorski, M. and J. Bielski. "Disturbances of glucose tolerance in workers exposed to electromagnetic radiation." Medycyna Pracy 47(3) 227-231 (1996) (in Polish). Souder, William. "An Amphibian Horror Story." New York Newsday, Oct. 15, 1996, pp. B19, B21.

Souder, William. "Deformed Frogs Show Rift Among Scientists." Houston Chronicle, Nov. 5, 1997, p. 4A. Stern, John. "Space Aliens Stealing Our Frogs." Weekly World News, April 17, 1990, p. . Sutton, Gregory P., Dominic Clarke, Erica L. Morley, and Daniel Robert. "Mechanosensory hairs in bumblebees (*Bombus*

terrestris) detect weak electric fields." Proceedings of the National Academy of Sciences 113(26): 7261-7265 (2016). Swicord, Mays L. "Chain-Length-Dependent Microwave Absorption of DNA." Biopolymers 22: 2513-2516 (1983).

Syngayevskaya, V. A. 1970. "Metabolic Changes." In I. R. Petrov, ed., Influence of Microwave Radiation on the Organism of Man and Animals (Leningrad: "Meditsina"), in English translation, 1972 (Washington, DC: NASA), report no. TTF-708, pp. 48-60 (1970).

Tanner, J. Allan. "Effects of Microwave Radiation on Birds." Nature 210: 636 (1966). Tanner, J. Alan and César Romero-Sierra. "Bird Feathers as Sensory Detectors of Microwave Fields." In: Stephen F. Cleary, ed., Biological Effects and Health Implications of Microwave Radiation. Symposium Proceedings (Rockville, MD: U.S. Department of Health, Education and Welfare), Publication BRH/DBE 70-2, pp. 185- 87 (1970).

Tanner, J. Alan, Jamie Bigue del Blanco, and César Romero-Sierra. Bird Feathers as Dielectric Receptors of Microwave Radiation. Laboratory Technical Report LTR-CS-89, Control Systems Laboratory, Division of Mechanical Engineering, National Research Council Canada (1973).

Tanner, J. Alan and César Romero-Sierra. "The Effects of Chronic Exposure to Very Low Intensity Microwave Radiation on Domestic Fowl." Journal of Bioelectricity 1(2): 195-205 (1982).

Trovato, E. Ramona, Director, Division of Radiation and Indoor Air, Environmental Protection Agency. Letter to Federal Communications Commission (June 19, 1995). Underwood, Robyn M. and Dennis vanEngelsdorp. "Colony Collapse Disorder: Have We Seen This Before?" Bee Culture 35(7): 13-18 (2007).

United States General Accounting Office. Efforts By The Environmental Protection Agency To Protect The Public From

Environmental Nonionizing Radiation Exposures. CED-78-79, B-166506 (March 29, 1978).

United States Senate, Committee on Appropriations, 104th Congress. Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Bill, Report No. 104-140 (September 5, 1995).

U.S. Environmental Protection Agency. "Federal Radiation Protection Guidance; Proposed Alternatives for Controlling Public Exposure to Radiofrequency Radiation." Notice of Proposed Recommendations, Federal Register, Vol. 51, No. 146, pp. 27318- 27339 (July 30, 1986).

U.S. Environmental Protection Agency. "Federal Radiation Protection Guidance for Public Exposure to Radiofrequency Radiation," ARP-FRL-2245-6. Advanced Notice of Proposed Recommendation, Federal Register, Vol. 47, pp. 57338-57440 (Dec. 23, 1982).

vanEngelsdorp, Dennis, Jay D. Evans, Claude Saegerman, Chris Mullin, Eric Haubruge, Bach Kim Nguyen, Maryann Frazier, Jim Frazier, Diana Cox-Foster, Yanping Chen, Robyn Underwood, David R. Tarpy, and Jeffery S. Pettis. "Colony Collapse Disorder: A Descriptive Study." PLoS ONE 4(8): e6481 (2009).

Vogt, Amanda. "Mutant Frogs Spark a Mega Mystery." Chicago Tribune, August 4, 1998, sec. 7, p. 3.

Warnke, Ulrich. Bees, Birds and Mankind: Destroying Nature by "Elektrosmog" (Bienen, Vögel und Menschen: Die Zerstörung der Natur durch ,Elektrosmog'). Kompetenzinitiative, Stuttgart, Germany (German edition 2007; English edition 2009).

Watson, Traci. "Frogs Falling Silent across USA." USA Today, August 12, 1998, p. 3A. Wilson, William T. and Diana M. Menapace. "Disappearing Disease of Honey Bees: A Survey of the United States." American Bee Journal, February, pp. 118-19; March, pp. 184-86, 217 (1979).

Zaret, Milton M. Investigation of Personnel Hazard Associated with Radio-Frequency Fields Encountered in Naval Operations. Office of Naval Research, Contract No. N00014-69-C-0358, ONR Identification No. NR 101-765. Dept. of the Navy, Arlington, Virginia (1971).

Zaret, Milton M. Hearings before the Committee on Commerce, United States Senate, Ninety-Third Congress, First Session on Public Law 90-602, Radiation Control for Health and Safety Act of 1968, Serial No. 93-24, pp. 100-113. Washington: U.S. Government Printing Office (1973).

Zaret, Milton M. "Cataracts Following Use of Microwave Ovens." New York State Journal of Medicine 74(11): 2032-2048 (1974).

Zaret, Milton M. "Selected cases of microwave cataract in man associated with concomitant annotated pathologies." In Biologic Effects and Health Hazards of Microwave Radiation: Proceedings of an International Symposium, Warsaw, 15-18 Oct., 1973, P. Czerski et al., eds., pp. 294-301 (1974).

Zaret, Milton M. "Blindness, Deafness and Vestibular Dysfunction in a Microwave Worker." The Eye, Ear, Nose and Throat Monthly 54: 291 (1975).

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