

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS  
(WORCESTER DIVISION)

	)	
X, a 12-year-old minor	)	Civil No. _____
suing by a fictitious name for privacy reasons,	)	
MOTHER, and FATHER, suing under	)	
fictitious names to protect the	)	VERIFIED COMPLAINT
identity and privacy of X, their minor child,	)	SEEKING INJUNCTIVE RELIEF
	)	FOR VIOLATION OF THE
Plaintiffs,	)	AMERICANS WITH
	)	DISABILITIES ACT AND
-v-	)	DAMAGES FOR BREACH OF
	)	CONTRACT AND NEGLIGENCE
THE FAY SCHOOL,	)	
by and through its Board of	)	
Trustees, and ROBERT GUSTAVSON,	)	<b>A PRELIMINARY INJUNCTION</b>
	)	<b>WILL BE SOUGHT</b>
Defendants.	)	
	)	

Twelve year-old Child X (“X”), Mother, and Father allege as follows for their Complaint against The Fay School (“Fay”) and Robert Gustavson (“Gustavson”).

**Summary Statement**

(1) Defendants Fay and its head of school, defendant Gustavson, have violated and continue to violate the rights of plaintiff X, a student at Fay, along with the rights of his parents, plaintiffs Mother and Father. Fay has done so by (i) disregarding X's rights under the Americans with Disabilities Act (the “ADA”), (ii) breaching its contractual obligations to X, Mother and Father conferred by Fay’s Student Handbook, and (iii) failing to use ordinary care for X’s safety while X is at Fay during the school day. Fay has been informed repeatedly by Mother, Father and a qualified physician that X has a condition known as Electromagnetic Hypersensitivity Syndrome (“EHS”). This syndrome, causing physical harm and the risk of very substantial physical harm, is

triggered by exposure to high doses of radiofrequency/microwave radiation (hereinafter sometimes referred to as “emissions”) such as the radiation emitted from the high-density, industrial-capacity Wi-Fi system that has been installed in the classrooms at Fay. Fay’s Wi-Fi system is not the lower-intensity, low-emission variety used in most homes and in some other locations. Rather, the Wi-Fi system Fay chose to install produces extremely high levels of such emissions. Exposure to Wi-Fi emissions at the levels emitted by the type of Wi-Fi to which the children are exposed in Fay classrooms causes, in those persons affected, most notably children, the symptoms of EHS, which include severe headaches, fatigue, stress, sleep disturbances, skin symptoms such as prickling, burning sensations and rashes, muscle aches, nausea, nose bleeds, dizziness and heart palpitations. These reactions to the Wi-Fi emissions are a disability within the meaning of the ADA.

(2) Mother and Father have repeatedly asked defendant Fay to make reasonable accommodations for X’s disability, namely reasonable steps that would likely prevent exposing X to these emissions, or to reduce those emissions to a physically tolerable level. However Fay has repeatedly refused to do so or even to discuss how such an accommodation could be accomplished. Indeed Fay has taken a hostile attitude toward the parents’ concerns, instructing its nurse that legally it is not obligated to be concerned with these emissions, threatening Mother and Father that it will dismiss X from school if Mother and Father persist in expressing their concerns to anyone in the Fay community about the W-Fi system, and threatening to ban them from using the school email system, a system by which parents of Fay students can communicate with other parents and Fay teachers and staff.

(3) X's continued exposure to the high-density Wi-Fi emissions, without any attempt at a reasonable accommodation by Fay to avoid or minimize them, violates the ADA. Fay's refusal to attempt any accommodation is also a breach of the contract obligation by which Fay has undertaken to X, Mother, and Father, that X will be educated in a safe environment, and the specific contractual promise that his disability will be accommodated. Finally, exposing X to these harmful but avoidable emissions is negligence by Fay in that the failure to take reasonable measures to avoid exposing X to these dangerous emissions amounts to the lack of ordinary care towards the safety of X, a minor in Fay's care during the school day.

(4) This lawsuit seeks injunctive relief in the form of an order from this Court directing Fay to make the reasonable accommodations that could prevent the ongoing harm to X from Fay's Wi-Fi emissions because, unless such an order is issued, (i) X will lose his rights of access to Fay, a public accommodation within the meaning of the ADA, (ii) X will suffer the loss of the safe and non-injurious educational opportunity Mother and Father have paid for, X has worked for, and Fay has promised, and (iii) X, Mother and Father will continue to be denied their contract rights secured by the Fay Student and Parent Handbook, all of which will irreparably harm X in a manner not adequately compensated by monetary damages. This action also seeks damages for breach of contract and negligence, and for reasonable attorneys' fees as allowable under the ADA.

**Jurisdiction and Venue**

(5) This Court has subject matter jurisdiction in this case pursuant to 28 U.S.C. § 1331 because Count I, the claim brought under the ADA (Title 42 U.S.C. §12182(a)), is a claim arising under the laws of the United States.

(6) This Court has supplemental jurisdiction over the claims brought in Count II, for breach of contract, and Count III, for negligence, because these state claims are so related to Count I, which is within the original jurisdiction of this Court, that Counts II and III form part of the same case or controversy within the meaning of 28 U.S.C. §1367.

(7) Venue is proper in this District under 28 U.S.C. §1391 because, as more specifically alleged below, both defendants either reside or have their principal place of business within this District, and because a substantial part of the events giving rise to the claims alleged in this Complaint occurred and are continuing to occur within this District.

### **The Parties**

(8) Plaintiff X resides within this District and sues herein under this fictitious name because he is a 12-year-old minor.

(9) Mother and Father are the parents of X and reside within this District. They sue as Mother and Father rather than by their own names because naming them would reveal the identity of X.

(10) Defendant Fay is a private educational institution incorporated under the laws of the Commonwealth of Massachusetts. It is operated by its Officers and a Board of Trustees, and has its campus and principal place of business in the Town of Southborough, Massachusetts, within this District. Fay is a place of public accommodation within the meaning of and subject to the ADA.

(11) Defendant Gustavson resides within this District. At all times referred to herein, Gustavson was the head of school at Fay. The actions of Gustavson, as described in this Complaint, were all undertaken within the course and scope of his duties at Fay

and while acting for and on behalf of Fay and, accordingly, Fay is bound by the actions of Gustavson.

### **Facts Relevant to all Counts**

#### **The Fay School**

(12) Fay is a private, co-educational boarding school that offers both day school and boarding school programs for children from pre-kindergarten through the ninth grade.

(13) Fay is a “place of public accommodation” within the meaning of the ADA (42 U.S.C. §12181(7)(J)) and is therefore subject to the requirements of the ADA. As a result, Fay may not discriminate against any disabled student in any manner preventing that student from the full enjoyment of the services, facilities, privileges, or advantages offered by Fay. When any student has a disability but otherwise meets Fay’s academic requirements and complies with its rules of behavior, Fay must provide any reasonable accommodation to that disabled student that would allow that student to have the full and equal enjoyment of the goods, services, facilities, privileges, or advantages offered by Fay to all of its other students.

(14) Fay offers a day school program for children from pre-kindergarten through the ninth grade. Day students at Fay, such as X, come to the Fay campus weekdays during the school year (and they will sometimes be on campus for weekend events), attend their assigned classes in the classrooms chosen by Fay staff, participate in school functions offered outside of the classrooms, and then leave the campus in the late afternoon, returning home to their parents or guardians.

(15) Fay is responsible for day students' supervision, care and physical well-being while they are on its campus during the day. The students are under the control of Fay teachers and staff and are told what to do, how to conduct themselves, what classrooms to attend at particular times of the day, and where in those classrooms they should sit.

(16) Fay requires its students and their parents to sign and be bound by a Parent and Student Handbook (the "Handbook") which sets forth certain rights and obligations of the students, their parents, and Fay relating to student life at Fay. This Handbook is a contract between the parents, the students and Fay, and each is bound by its terms. Among other matters, this Handbook, by its wording, specifically obligates Fay to keep as a "core value . . . the wellness of mind, body and spirit of each student."

(17) Fay also promises in the Handbook that it will provide each student with "a safe and supportive environment," that "recognizes, respects, and celebrates the full range of human diversity," that it will help when students "are in physical need," that it will "recognize and celebrate . . . disabilities," that it "affirms the necessity of respect for individual differences," and that it will "maintain an environment in which all community members feel supported."

(18) In addition to those promises contained in paragraphs 16 and 17, above, the Fay Handbook assures all students and their parents that Fay will admit and educate any student otherwise qualifying for admission regardless of whether that student has "any disability that can be reasonably accommodated by the School." Fay also assures all students that they will be afforded:

all rights, privileges, programs, and activities generally accorded or made available to students at Fay School. The School does not discriminate on

the basis of such factors in the administration of its educational policies, employment policies, admissions policies, scholarship and loan programs, athletics, or other school administered programs.

By entering Fay, paying the required tuition, and signing the Tuition Contract that binds the parents and child to the terms of the Handbook, X, Mother and Father became entitled to all the rights conferred by the promises quoted in paragraphs 16 through 18, above, and Fay became and remains contractually bound to keep those promises.

#### **X's Decision to Attend Fay**

(19) X is a promising young man who has worked hard at his studies in order to maximize his opportunities to continue attending a worthwhile day school, thereby furthering his education and maximizing his opportunity to attend a good secondary school and, thereafter, a college or university of his choice. He is a student who, like most students, will live up to his academic potential in a physically safe and sympathetic school environment. He and his parents chose Fay over other educational opportunities in substantial part because of its promise of diversity and tolerance, its professed care for student wellness and fair treatment of all students, all of which, they believed, would maximize his chances for academic success and thus justify the sacrifice required in order to pay the private school tuition charged by Fay. In choosing to attend Fay, X and his Mother and Father gave up other educational opportunities in reliance on Fay's promises.

#### **X's Performance at Fay**

(20) From the time X arrived at Fay in 2009, and for the six academic years during which he has been attending Fay, X has been and remains recognized by both the Fay faculty and staff as a likeable, outgoing, and friendly young man. X has been and remains academically very capable and socially well adjusted. He had made very good

grades and has participated fully and positively within the Fay community. X observes all of the Fay School Rules and respects its Core Values. In all respects X meets and well exceeds the academic and social expectations and requirements imposed by Fay in its Handbook.

(21) X has now been in attendance at Fay for six years. On September 9, 2015, he will commence his seventh year at Fay as a seventh-grade student, having just three years remaining for the completion of Fay's nine-year educational program. He has become a fully participating member of the Fay community. He has six full years invested in the nine-year educational plan set by Fay. His friends and peers are at Fay, and he has made solid and important learning relationships with many of Fay's faculty and staff. Moreover, Mother and Father have invested many tens of thousands of dollars to secure X's ongoing place at Fay to enjoy the completion of all the benefits of its educational program. It would therefore be highly disruptive, both educationally and developmentally, to remove X at this time from Fay's program into which he has settled, and then to place him into an entirely different program, with a new faculty, leaving all his friendships and faculty relationships developed over six years.

#### **EHS and the Symptoms Suffered by X**

(22) Students at Fay are taught in classrooms in which the teachers and their students use computers as teaching aids. There are normally no more than 15 students in each class, and sometimes fewer students. The students each have or are loaned laptop computers (usually Chrome books or Surface tablets which are currently Wi-Fi enabled and used during class instruction, often times with the faculty and students using the internet to gain access to information concerning whatever topic is being taught.



Connection to the internet by either Ethernet cord or by Wi-Fi is therefore required but either is possible.

(23) Sometime in or around the spring term of 2013, Fay installed in its classrooms and in various other facilities a new Wi-Fi system, known as the “Aerohive Wi-Fi Network.” This is a high-density, industrial-capacity wireless system which, when operating, emits substantially greater radiofrequency/microwave emissions than the emissions coming from the more low-grade systems used in most homes and in certain other public places. Specifically, the Aerohive Network doubled the prior emissions in Fay classrooms from 2.5 GHz to 5 GHz.<sup>1</sup> Exposure to the emissions from the high-density Wi-Fi now used by Fay is dangerous to persons having an aggravated sensitivity to those emissions, as will be explained in more detail further below.

(24) Sometime after the above-described Wi-Fi system was installed, X started to experience occasional, troubling symptoms, which he reported to his parents when he came home from Fay at the end of the school day. These included headaches, itchy skin, and rashes. These symptoms receded after X had been home for several hours. Moreover, X had no such symptoms over the weekends, when he was not subjected to any such Wi-Fi system. These symptoms continued on and off for the remainder of the 2013 spring term but then abated at the beginning of the summer, when X was no longer in Fay classrooms.

(25) Thereafter, when X returned to the Fay campus in September of 2013 for the 2013/2014 academic year, and attended classes in the rooms in which the high-density Wi-Fi was used, X's symptoms experienced the preceding spring slowly returned.

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<sup>1</sup> GHz is an abbreviation for Gigahertz which is a unit of measurement for electromagnetic wave frequencies equal to 1,000,000,000 Hz.

They became more pronounced as the 2014 academic year progressed, with X having to go to the infirmary with headaches, nose bleeds, dizziness, chest pains and nausea. He was frequently discharged from school for the day, early. More and more often he had to leave school early. Once home, as had been the case the spring before, X's symptoms abated over the course of the afternoon and evening, but would return the following day, if it was a school day. As had also been the case the academic year before, when Fay was not in session, on weekends and over holidays, X did not experience the intense symptoms, which only returned when he had been in the Fay classrooms.

(26) Mother and Father initially did not know what was causing these symptoms, except that they noticed the obvious pattern -- that the intense symptoms came when X had been at Fay and in its classrooms.

(27) X's symptoms intensified as the 2014 spring term progressed. Because of the above-described pattern linking X's symptoms to his physical presence on the Fay school grounds and in the affected classrooms, X's Mother and Father commenced researching potential causes related to the Fay classroom environment. During that spring, Mother and Father had X medically examined for many potential causes and the physicians involved found no medical cause for these symptoms among those for which he was being tested, which did not include EHS, as it was not yet suspected.

(28) Then, on April 11, 2014, Mother went to school to pick up X from the nurse's office and while there discussed the frequency of these symptoms with her. The nurse indicated that various children in the same classes as X was attending were reporting to the Fay Health Center with similar symptoms. This led the mother to a study of the Aerohive Network Wi-Fi system being used in the Fay classrooms and to a general

study of the possibility that X's symptoms were caused by the high-density Wi-Fi emissions emitted by that system.

(29) Mother concluded, after much research and study, that Fay's Wi-Fi was the probable cause of X's symptoms because X had a sensitivity to such emissions, called EHS. EHS, as will be shown next below, is a syndrome that affects numerous individuals when exposed to certain electromagnetic fields, including high density Wi-Fi emissions such as in the system used by Fay.

### **Electromagnetic Fields and EHS**

(30) EHS, Electromagnetic Hypersensitivity Syndrome, is the term that has been adopted by various experts worldwide to describe the reaction of those who suffer adverse reactions to the effects of electromagnetic fields, such as Wi-Fi. This is not the speculative condition Fay has repeatedly asserted as a justification for its refusal to attempt any accommodation to X's symptoms. Fay has simply ignored the science to the point where it has refused to even attempt any accommodation or even to meet to confer on that subject. The science involved is certainly compelling enough to warrant such an accommodation by Fay.

(31) EHS has been recognized as a disability of those who suffer its effects. As reported in research on Indoor Environmental Quality by the United States Access Board<sup>2</sup>, "electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities." Access

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<sup>2</sup> The United States Access Board is an independent federal agency created by Congress in 1973 to ensure access to federal facilities by the disabled under the Americans with Disabilities Act. *See* [www.access-board.gov](http://www.access-board.gov).

Board, Background for Final Rule, Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities. Further,

The presence of electromagnetic fields from office equipment and other sources is a barrier for those with electromagnetic sensitivities . . . .

Measures taken to improve indoor environmental quality, such as reducing air pollution, noise and electromagnetic fields in buildings, will increase their accessibility for people with asthma and/or electromagnetic sensitivities, as well as provide a more healthful environment for all building occupants.

*Id.*

(32) Symptoms of those who suffer from EHS include a higher risk of developing headaches, increases in heart rate, arrhythmias, changes in blood pressure, dizziness, and sleep deprivation, among others. *See*, Environmental Health Trust,<sup>3</sup> *Best Practices with Children and Wireless Radiation - a Review of Science and Global Advisories*, 4-5 (July 2015). Similarly, in an article prepared by Norm Alster through the Edmond J. Safra Center for Ethics at Harvard University, he cites a study conducted in 2013 by Indian scientists S. Sivani and D. Sudarsanam in which they state: “Based on current available literature, it is justified to conclude that . . . [electromagnetic fields] . . . can change neurotransmitter functions, blood-brain barrier, morphology, electrophysiology, cellular metabolism, calcium efflux, and gene and protein expression in certain types of cells even at lower intensities.” Norm Alster, *Captured Agency: How*

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<sup>3</sup> The Environmental Health Trust is an IRC 501(c) (3) organization that educates individuals, health professionals and communities about controllable environmental health risks and policy changes needed to reduce those risks. Past projects include: local and national campaigns to ban smoking and asbestos, exploring what factors lie behind puzzlingly high rates of fibroid tumors, breast cancer and endometriosis in young African American women, and building environmental wellness programs in Wyoming and Pennsylvania to address the environmental impacts of energy development on buildings and interior environments. *See* <http://ehtrust.org>.

*the Federal Communications Commission is Dominated by the Industries It Presumably Regulates*, 11 (Edmond J. Safra Center for Ethics, Harvard University, 2015)

(<http://www.ethics.harvard.edu>).

(33) The above-quoted studies, along with many others, have prompted many governments to address the effect that electromagnetic fields have on humans, most specifically on children. In an appeal made to the United Nations by 190 scientists earlier in 2015, Martin Blank, Ph.D., of Columbia University, stated:

International exposure guidelines for electromagnetic fields must be strengthened to reflect the reality of their impact on our bodies, especially on our DNA. The time to deal with the harmful biological and health effects is long overdue. We must reduce exposure by establishing more protective guidelines.

Business Wire, *International Scientists Appeal to U.N. to Protect Humans and Wildlife from Electromagnetic Fields and Wireless Technology* (May 11, 2015).

(34) Although the ADA Access Board has not created a list of disabilities, the Board is responsible for establishing building guidelines that adhere to ADA standards. In creating these guidelines, the Board takes into consideration those diagnoses that could be considered disabilities under the ADA definition. It noted: “According to the Americans with Disabilities Act and other disability laws, public and commercial buildings are required to provide reasonable accommodations for those disabled by chemical and/or electromagnetic sensitivities.” *See Access Board Guidelines, supra.*

(35) The Environmental Health Trust reports a long list of countries that have addressed electromagnetic exposure. According to EHT, France enacted legislation in 2015 banning the use of Wi-Fi in elementary schools; in 2013, Ghent, a municipality in Belgium, banned the use of Wi-Fi in public spaces that cater to children age 0-3 years;

Spain voted to urge the removal of Wi-Fi in schools; and countries with as differing cultures and political leanings as Switzerland, Germany, Austria, and Russia have recommended that Wi-Fi not be used in schools, and, as alternatives, that schools use Ethernet or fiberoptic connections. See, Environmental Health Trust, *Best Practices*, *supra*, at 13-16. The organization references similar efforts in the United States. For example, Suffolk County in New York began requiring in 2014 that public buildings using a wireless router place a label outside to alert the public of its use upon entering the building. *Id* at 16.

(36) The federal courts have also recognized this syndrome, noting that “some individuals suffer from a condition known as EHS which requires them to avoid exposure to sources of electromagnetic radiation.” This case law will be cited further in the Memorandum of Points and Authorities accompanying plaintiffs’ motion for a preliminary injunction. EHS is a disability within the meaning of the ADA because when it effects an individual it substantially limits one or more major life activity, including learning, reading, and concentrating, all of which are included within major life activities under the ADA, Title 42 U.S.C. § 12102(2)(A).

**Fay’s Stubborn Refusal to Attempt Any Accommodation**

(37) Because of the similarity of X's symptoms to those described in the EHS studies referenced above, among others, and because Mother and Father learned that the Wi-Fi system installed by Fay was an industrial-capacity system with high density Wi-Fi emissions, Mother and Father sought to work with Fay to find an accommodation that would allow X to continue at Fay without suffering the symptoms described above. Others concerned with this problem have brought to the attention of Fay various writings

describing EHS and the concern of its health impacts on children. In the summer of 2014, The Fay Board of Trustees received four letters<sup>4</sup> from experts in electromagnetic fields and their effects in schools on students when these fields are present in high density.

These letters all expressed concern that some students at the Fay school were experiencing the symptoms of EHS and urged the school's board to reconsider its choice of using Wi-Fi within the school, unless done with some attempt at accommodation. In his letter, Dr. Carpenter states:

. . . while acute electrosensitivity symptoms, like the ones I understand your students are experiencing, are of course of great concern (such as cognitive effects impairing attention, memory, energy levels and concentration; cardiac irregularities, including in children; or headaches or other symptoms in students wearing braces), the full effects for society from chronic and cumulative exposures are not known at this time. Given what we do know, however, including the DNA effects, I must, as a public health physician, advise minimizing these exposures as much as possible. Indications are that cell phones and wireless technologies may turn out to be a serious public health issue, comparable to tobacco, asbestos, DDT, PCBs, pesticides and lead paint, or possibly worse given the ubiquitous nature of the exposures.

[See, Exhibit A.]

(38) The concerns and advice expressed in Dr. Carpenter's letter were echoed by the three other experts who sent letters (see Exhibit A) to the school's Board, as well as by the studies and reports referred to further above, and through other materials publicly available.

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<sup>4</sup> See, the letters collectively annexed as Exhibit "A": Letter dated July 28, 2014 from Dr. David O. Carpenter, Director, Institute for Health and the Environment, University of Albany; Letter dated July 25, 2014 from Martin Blank, Ph.D., leading expert on the effects of electromagnetic fields on DNA and biology; Letter dated July 16, 2014 from Stephen Sinatra, M.D., co-founder of Doctors for Safer Schools; Letter dated July 24, 2014, from Olle Johansson, Associate Professor of neuroscience at Karolinska Institute, in Stockholm, Sweden.

(39) After learning of EHS, Mother and Father also had X examined by Dr. Jeanne Hubbuch, a physician to whom they were referred by environmental health specialists. Dr. Hubbuch specifically determined that X suffered from EHS as a result of exposure to the Fay Wi-Fi system. In a letter summarizing her findings, Dr. Hubbuch first noted that other causes of these symptoms had been ruled out by prior examinations, and wrote as follows:

Evaluation by X's pediatrician has not revealed any significant problems. He has a history of seasonal allergies and immediate IgE reactions to tree nuts and peanuts. He has [an unrelated condition.] None of these conditions explain his current symptom pattern. It is known that exposure to WIFI can have cellular effects. The complete extent of these effects on people is still unknown. But it is clear that children and pregnant women are at the highest risk. This is due to the brain tissue being more absorbent, their skulls are thinner and their relative size is small. There are no studies that show that exposure to these two vulnerable groups is safe. We do not know the long term effects of microwave radiation on students and teachers. According to reports from the nurse at The Fay School, there has been an increase over the last year of students complaining of similar symptoms, *i.e.* headaches, dizziness, nausea and chest pressure. A good reference for this is the website of Environmental Health Trust ([www.ehtrust.org](http://www.ehtrust.org)).

It is my opinion, based on my medical training and experience, especially my training in Environmental Medicine that [X] is being adversely affected by prolonged exposure to WIFI at school. Due to biochemical individuality some people are more susceptible to these effects than others. This should be considered seriously since subtle changes are occurring for all even if it is apparent in only a few.

I agree that the precautionary principle should apply here. Many countries have adopted this principle when approaching young children and have adopted stricter regulations to reduce exposure to wireless radiation.

If [X] continues to be exposed on a regular basis to WIFI, it is possible that his intermittent symptoms will become more constant and interfere with his school performance.

[See, Exhibit "B," Letter from Dr. Jeanne Hubbuch, dated August 7, 2014] Dr.

Hubbuch's letter was sent to Fay in the summer of 2014.



(40) Based on all of all of the above, Mother and Father sought to discuss with Fay the possible accommodations that Fay could attempt in order to determine if any accommodation would allow X, otherwise fully qualified and capable of meeting the academic and behavioral standards set by Fay for its students, to continue his education at Fay. Specifically, they have sought to meet and confer with Fay, to be shown the specific classrooms in which X would be taking classes in the spring of 2014, and later, when this request was not met, to be shown the specific classrooms where he would be taking classes this coming fall, commencing on September 9, 2015. From this requested walkthrough and meeting, the parents have hoped to determine, as they believe could be easily accomplished, if Fay would arrange, at the expense of Mother and Father, either (1) for Ethernet cords to be used in those classes instead of Wi-Fi, when X is in attendance,<sup>5</sup> or (2) to determine if the Wi-Fi emissions could be turned down while X is in the classroom without losing their effectiveness, or (3) if there is a part of the classroom where the emissions are less strong. One or more of these arrangements should be easily accomplished in a manner not unreasonably disruptive to the educational activities occurring in the classroom and, indeed, in other locations where industrial Wi-Fi is used on Fay's campus. This walkthrough with these potential solutions have been

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<sup>5</sup> This Ethernet option has two separate possibilities. The first is to have Ethernet capability for all of the desks in the classroom. This would allow for the complete shut off of the Wi-Fi in the affected classroom. Another possibility would be to provide an Ethernet for the desk at which X is sitting. This by itself would allow for a substantial reduction of the Wi-Fi emissions to which X is exposed because a substantial part of those emissions come not from the Wi-Fi transmitter found somewhere in the classroom, which emanates throughout the classroom, but comes from the communication from the individual laptops back to that transmitter. That is indeed the more intense radiation. Allowing Ethernet to X's laptop alone would stop the need for those Wi-Fi emissions, the ones closest to him. If this option were tried along with placing X in the part of the classroom receiving the least intense emissions from the general Wi-Fi transmitter found in the classroom, there could well be an even greater avoidance of Wi-Fi emissions.

proposed to Fay and Fay has declined to allow the walkthrough or participate in any discussions about these or other alternatives.

(41) Instead, Gustavson, and others at Fay or speaking on its behalf and under the direction of Gustavson, have insisted that Fay's Wi-Fi system meets the requirements set by the Federal Communication Commission ("FCC") radiofrequency radiation guidelines adopted in 1996, as these had been recommended by the Environmental Protection Agency ("EPA"). They have refused to reconsider that position despite the fact that in 2002, the EPA itself clarified, by letter annexed hereto as Exhibit "C," that these guidelines were only applicable to thermal emissions and "do not apply to chronic, nonthermal exposure situations." (*Id.*, page 1.) Wi-Fi emissions have a non-thermal effect on the human body, and the EPA Guidelines were addressing thermal exposure. That publication goes on to explain that the FCC Guidelines "are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn." *Id.* They have and the EPA states that they have no application to Wi-Fi emissions.

(42) Despite the stated inapplicability of these thermal guidelines by the agency issuing them now 19 years ago, when Wi-Fi was not even a factor in the educational systems in this country, and the fact that Fay has been repeatedly sent a copy of the EPA publication, Exhibit C, stating's its earlier guideline's inapplicability to Wi-Fi, Fay has stubbornly clung to its position that these guidelines are a complete justification for its refusal to take any action to accommodate X's disability or even to have any concern over the day-in, day-out exposure of all its students to the high-density, industrial Wi-Fi

emissions coming from its Wi-Fi network, despite the warnings and the reports it has received and the many more that are readily available to it.

(43) Fay and Gustavson have also insisted that Mother and Father not speak to various relevant personnel on campus about this problem except one designated individual, including not speaking to the Fay school nurse. They have threatened to refuse readmission of X to Fay if the parents discuss this problem with anyone else in the Fay community. Fay has also insisted that despite the opinion obtained by Dr. Hubbuch (Exhibit B) to the effect that X has EHS that is being triggered by the Fay Wi-Fi, that X be seen by “specialists.” Mother and Father, while believing that the EHS diagnosis already made by Dr. Hubbuch was sufficient, nonetheless arranged for the agreed-upon specialist in environmental health to examine X in the hopes that this would finally, without court intervention, cause Fay to meet and confer about possible accommodations. A report of that examination has been provided to Fay.

(44) That physician, by whom Fay insisted X be seen, for what Fay said would be a thorough examination by a specialist, saw X on June 29, 2015. Yet that physician conducted no tests. He only spoke to X for not more than 10 minutes, after speaking with Mother and Father. He then pronounced that in his view there was not enough study yet done to link Wi-Fi emissions to symptoms such as those X is experiencing at Fay School. This doctor stated in essence that he does not believe in EHS. Yet he made no alternate diagnosis. In the end, however, he recommended that X's parents and Fay work closely together to ensure that X has the optimal learning environment at Fay for the upcoming school year.

(45) Since the report of this physician was made and sent to Fay, on June 29, 2015, Mother and Father have reiterated their long-held request that Fay meet and confer with Mother and Father, examine the classrooms in which X will be seated in the upcoming year, and determine whether there is a way to make them Wi-Fi free at least as relates to X, or to minimize his exposure to Wi-Fi. Fay has responded that X must also be seen by other specialists before any such accommodation can be discussed. Yet when the Mother of X contacted those specialists' office, she was informed by the nurse practitioner and manager that they are not familiar with EHS, and had never heard of it.

(46) In summary, plaintiffs have attempted to work with Fay not only as the ADA requires of Fay, the Fay Handbook provides, but also as Fay's own recommended physician himself recommended. One with whom she met did a cursory and quick exam and then said that he did not believe in the condition. The nurse manager for the other two physicians chosen by Fay likewise announced lack of knowledge of the EHS condition. Despite the fact that they did not believe in EHS the one "specialist" with whom the Mother, Father, and X met did recommend that Fay work with the parents to "to ensure that X has the optimal learning environment in 7th grade."

(47) Mother brought this recommendation to the attention of Fay, but Fay has refused to make any accommodation or to discuss any possible accommodations, instead stating again that X should be seen by the "specialists" that they recommended, even though they are not familiar with EHS.

(48) Under the requirements of the ADA, when a disability affects a substantial life function, such as leaning, or concentration, or a student's safety at a school, the student or parents involved may request that the school make reasonable

accommodations to allow the student to partake in the full enjoyment of the services, facilities, privileges and advantages offered by the school, provided that the requested accommodation does not require the school to make a substantial modification of its programs or its academic standards. The school must then offer a reasonable accommodation. In X's case, this means a reasonable accommodation to his EHS if doing so can be accomplished without disrupting Fay's program or academic standards. X's Mother and Father have offered to work with Fay, even at their own expense, to examine the classroom Wi-Fi system, and to attempt installation of a reasonable alternative to their industrial capacity Wi-Fi for use when X is in attendance. Fay has refused to discuss the matter or allow a visit for such purposes to the classrooms. To date, Fay and Gustavson, who controls Fay's decision making on this issue, have not been willing to meet for a substantive discussion on the matter, much less walk-through of the classrooms with knowledgeable about reducing Wi-Fi emissions or replacing Wi-Fi with Ethernet cords for use when X is in attendance, all as more particularly described in paragraph 40, above, all of which have been suggested by Mother and Father to Fay, ~~which has refused~~ implementation of any of these.

(49) At a hearing or trial on this matter, plaintiffs will show that substituting Wi-Fi with Ethernet cords for use when X is in attendance in a classroom is a reasonable accommodation that the parents are willing to fund. The internet system can be altered at low cost and low disruption so that it can, like many systems, alternate between cordless Wi-Fi and Ethernet cord methods for obtaining access to the internet during classes where such access is desired. There are at most 15 students per class and one or possible two faculty members. Installing the Ethernet cords to accommodate that number of

persons would require not much money, time or disruption, particularly if done before the upcoming school year commences on September 9, 2015. Moreover, if, for some reason, this alternate internet access method is not possible, something that cannot be determined until the classrooms are examined, Fay, Gustavson, and Mother and Father should be able to discuss and potentially agree upon other possible methods of accommodating X, such as one Ethernet cord for him, or a reduction of the Wi-Fi emissions, or both, all as described more particularly in paragraph 40 hereof.

(50) Mother and Father, on behalf of X, have been ready and willing to meet with Gustavson or any party to whom he delegates the decision-making for Fay on the issue of how to accommodate X.

(51) The evidence that will be produced at a hearing or at trial will show that it is very probable that X has EHS caused by the high-density Wi-Fi emissions from the Fay Wi-Fi system and devices. In this circumstance, Fay is required by the ADA to attempt reasonable accommodations. This is particularly so since the parents have taken X to many doctors and subjected him to many tests, after which one doctor has diagnosed X with EHS and determined in her written report that it was being triggered by the Wi-Fi emissions at Fay. No other doctor has made any alternate diagnosis. X's symptoms come when he has been in the Fay classrooms and abate when he leaves.

(52) X should be accommodated by the relief sought herein. Fay should work with X's parents to install an alternate system for use when X is in the classroom, or attempt in good faith by some alternate way to design a classroom situation so that X will not be subjected to the same emissions that are the very probable cause of his symptoms. Since Fay and Gustavson have been unwilling to accommodate X, as required by law,

and at the least provide this relief to determine whether it will solve the problem, they should be ordered by this Court to do so.

(53) Unless such an accommodation is made, X will have to withdraw from Fay and will, as a result, suffer injury and loss, including (i) loss of the enjoyment of the last three of his nine years at Fay, (ii) disruption of his educational plan now six years in the making and three years from completion, (iii) loss of the relationships he has developed with various of the Fay faculty and with it the benefits of those relationships in guiding and teaching X as the academic curriculum becomes more challenging in the later academic years, (iv) loss of his peer relationships, developed over the last six years, just as he heads into his adolescent years where those relationships are more valuable to his personal and healthy growth, (v) loss of the opportunity to graduate from Fay and receive a diploma certifying the same, and (vi) loss of the enjoyment and companionship of his peers at Fay and the shared sense of accomplishment that earning a diploma with them will provide. Moreover, instead of all these benefits just enumerated, X will find himself abruptly placed in an alternate educational program completely new to him and to which he will have to adjust without any support from his long-time peers, or the faculty and staff at the Fay school who have counseled him in the past. All of these losses are irreparable injuries that cannot be fully compensated by any award of money damages, and thus warrant equitable relief in the form of an injunction compelling Fay to provide an alternate internet access system. This relief is warranted not only under the provisions of the ADA, but also under Massachusetts contract law.

**COUNT I**  
**(Violation of the Americans with Disabilities Act)**

(54) X repeats and realleges each of the above stated allegations set forth in paragraphs 1 through 53, as if separately pleaded herein in their entirety.

(55) The failure to accommodate X by attempting any alternate internet access system that avoids the use of high-density Wi-Fi emissions, or to work in good faith to find some other accommodation, has been and continues to be a violation of the ADA because it is a failure to make or attempt a reasonable accommodation to X's disability. Plaintiffs therefore seek injunctive relief as specified in the Proposed Order that will accompany the Motion for a Preliminary Injunction to be filed. The relief sought should be granted preliminarily and permanently. Plaintiffs also seek to recover the reasonable attorneys' fees allowable under the ADA.

**COUNT II**  
**(Damages for Breach of Contract)**

(56) X repeats and realleges each and every allegation set forth in paragraphs 1 through 53, as if separately pleaded herein in their entirety.

(57) The actions by Fay as described herein have breached the contractual promises Fay made to X, Mother and Father as stated and undertaken in the Handbook. Specifically, Fay promised, as more particularly alleged in paragraphs 16 through 18 hereof, that it would accommodate "any disability that can be reasonably accommodated by the School," working to allow students with such disabilities "all rights, privileges, programs, and activities generally accorded or made available to students at Fay School." It has not kept that promise, or even attempted to do so.



(58) All plaintiffs have been damaged as a result of this breach in amounts that will be proved at trial.

**COUNT III  
(Damages for Negligence)**

(59) X repeats and realleges each and every allegation set forth in paragraphs 1 through 53, as if separately pleaded herein in their entirety.

(60) By Fay's failure to have made any accommodation to X's EHS while X is in the custody of Fay and under its control, Fay has failed to exercise ordinary care for X's safety. This amounts to negligence and has proximately damaged X physically and deprived him of access to his educational experience on many days during the last school year.

(61) X has been damaged as a result of this negligence in amounts that will be proved at trial.

WHEREFORE, X, Mother and Father pray for judgment as follows:

- (A) For a preliminary and permanent injunction ordering Fay to accommodate X's disability by providing for X an alternate, non-Wi-Fi access to the internet in classes and other locations where he is being taught by use of internet access, with such wireless system disabled temporarily when X is present, or to meet and confer in good faith with Mother and Father to find some alternate manner by which these Wi-Fi emissions can be avoided by X in classrooms when X is in attendance, such as those specified in paragraph 40, hereof;
- (B) For damages in the amount to be proved at trial;
- (C) For costs of suit and attorneys' fees; and,
- (D) For such other relief as this Court deems just.

**DEMAND FOR TRIAL BY JURY**

Pursuant to Rule 38, Federal Rules of Civil Procedure, Plaintiff X,  
Mother, and Father, demand trial by jury on all issues so triable.

Dated: August 12, 2015

Respectfully submitted,  
/s/ John J.E. Markham, II  
John J.E. Markham, II  
(BBO No. 638579)  
MARKHAM & READ  
One Commercial Wharf West  
Boston, Massachusetts 02110  
Tel: (617) 523-6329  
Fax:(617)742-8604  
jmarkham@markhamread.com  
Attorney for the Plaintiffs

**Verification of the Complaint**

**[A verification with the full  
names of the Declarants will be filed under seal]**

Mother (who signs herein to preserve the anonymity of her minor son) declares under penalty of perjury that she has read the foregoing complaint and believes that its contents are true to the best of her memory and belief.

Executed this 11th day of August, 2015, in Suffolk County, Massachusetts

  
\_\_\_\_\_  
Mother<sup>5</sup>

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<sup>5</sup> Mother has also executed a duplicate verification using her full name. It will be the subject of a motion to file under seal so that it can be filed without disclosing the identity of [REDACTED] the minor child, which would be disclosed if the mother's true name were publicly disclosed.

# EXHIBIT A

**Institute for Health and the Environment**WHO Collaborating Center  
in Environmental Health

July 28, 2014

Board of Trustees  
Fay School  
48 Main Street  
Southborough, MA 01772

Re: Advisability of WiFi in schools

Dear Sirs/Madams:

This is concerning potential adverse health effects associated with exposure to radiofrequency/microwave (RF/MW) radiation, specifically that from wireless routers and wireless computers. I am writing to express concern that students at your school are experiencing electrosensitivity symptoms from these technologies.

I am a public health physician who has been involved in issues related to electromagnetic fields (EMFs) for several decades. I served as the Executive Secretary for the New York Powerline Project in the 1980s, a program of research that showed that children living in homes with elevated magnetic fields coming from powerlines suffered from an elevated risk of developing leukemia. I served as Director of the Wadsworth Laboratory of the New York State Department of Health, as well as Dean of the School of Public Health at the University at Albany/SUNY. I have edited two books on effects of EMFs, ranging from low frequency fields to radiofrequency/ microwave radiation, or the kind emitted by WiFi routers, cell phones, neighborhood antennas and wireless computer equipment. I served as the co-editor of the BioInitiative Report 2012 (Bioinitiative.org), a comprehensive review of the literature showing biological effects at non-thermal levels of exposure, much of which has since been published in the peer-reviewed journal, *Pathophysiology* (attached). Also, I served on the President's Cancer Panel that examined radiation exposures as they relate to cancer risk, in 2009, and a report from that testimony is also attached. Thus, this is a subject which I know well, and one on which I take a public health approach rooted in the fundamental principle of the need to protect against risk of disease, even when one may not have all the information that would be desirable.

There is clear and strong evidence that intensive use of cell phones increases the risk of brain cancer, tumors of the auditory nerve and cancer of the parotid gland, the salivary gland in the cheek by the ear. The evidence for this conclusion is detailed in the attached publications. The WHO's International Agency for Research on Cancer has also classified the radiation from both cell phones and WiFi as a Class 2B "Possible Carcinogen" (2011). WiFi uses similar radio-frequency radiation as cell phones (in the 1.8 to 5.0 GHz range). The difference between a cell phone and a WiFi environment, however, is that while the cell phone is used only intermittently, and at higher power, a WiFi environment is continuous, and transmitting even when not being used. In addition, WiFi transmitters are indoors, where people (and in this case, children) may be very close by, or certainly close to devices using the WiFi, such as wireless computers, iPads and smart boards, the radiation from which can be intolerable to sensitive people.

Furthermore, commercial routers, like those in schools, operate at much higher wattage than consumer routers. They are designed to penetrate through materials like cement, wood and brick, to handle dozens to hundreds of users, and to reach into outdoor areas, so industrial grade routers are of much greater concern.

An additional consideration to appreciate is that it is not only the power of wireless radiation that causes biological dysregulation, but the frequencies, pulsing, amplitude, and the quantity and kind of information being transmitted that can have effects as well. These 'non-thermal effects' have been shown in thousands of studies to be biologically active, and may be more important than the effects from the power. Thus, while a router may be in the ceiling, or not right next to a student, teacher or administrator, the known biological and health effects, particularly the non-thermal ones, are still very much occurring.

Finally, while acute electrosensitivity symptoms, like the ones I understand your students are experiencing, are of course of great concern (such as cognitive effects impairing attention, memory, energy levels, and concentration; cardiac irregularities, including in children; or, headaches or other symptoms in students wearing braces), the full effects for society from chronic and cumulative exposures are not known at this time. Given what we do know, however, including the DNA effects, I must, as a public health physician, advise minimizing these exposures as much as possible. Indications are that cell phones and wireless technologies may turn out to be a serious public health issue, comparable to tobacco, asbestos, DDT, PCBs, pesticides and lead paint, or possibly worse given the ubiquitous nature of the exposures. While unfortunately we must wait for federal regulation to catch up with the science, the prudent thing to do in the interim would be to exercise precaution at every opportunity.

Computers and the world-wide web have tremendous value in education, but the value also depends on how these are used in numerous respects. As wired internet connections do not pose radiation risk, are readily available, are faster and more secure than WiFi, and are now even available for certain tablets, I highly recommend you factor the risks I have described into your technology planning. At the same time, I would urge you to take the complaints of your students very seriously, and potentially involve the school nurse and teachers in helping to assess the extent of the electrosensitivity problem among students at the school.

An excellent reference on the EMF and electrosensitivity science is "Electrosensitivity and Electrohypersensitivity—A Summary" (2013) authored by M.J. Bevington and available through Electrosensitivity-U.K. ([www.es-uk.info/](http://www.es-uk.info/))

If I can be of further help, please do not hesitate to call.

Yours sincerely,



David O. Carpenter, M.D.  
Director, Institute for Health and the Environment  
University at Albany

Enclosures

**Martin Blank, PhD**  
**Department of Physiology and Cellular Biophysics**  
**Columbia University**  
**New York, NY 10032**

July 25, 2014

Mr. Thomas McKean, President, Board of Trustees  
Mr. James Shay, President-Elect, Board of Trustees  
Fay School  
48 Main Street  
Southborough, MA01772

To the Board of Trustees,

It has been brought to my attention that school children have become symptomatic at your school after installation of WiFi. I am writing to express my concern and to encourage you to review the independent science on this matter.

I can say with conviction, in light of the science, and in particular in light of the cellular and DNA science, which has been my focus at Columbia University for several decades, putting radiating antennas in schools (and in close proximity to developing children) is an uninformed choice. Assurances that the antennas are within 'FCC guidelines' is meaningless today, given that it is now widely understood that the methodology used to assess exposure levels only accounts for one type of risk from antennas, the thermal effect from the power, not the other known risks, such as non-thermal frequencies, pulsing, signal characteristics, etc. They fail also to consider multiple simultaneous exposures from a variety of sources in the environment, and cumulative exposures over a lifetime. Compliance with FCC guidelines, thus, unfortunately, is not in any way an assurance of safety today, as the guidelines are fundamentally flawed. Until the guidelines and advisories in the U.S. are updated, the intelligent thing for your Board of Trustees to do is to exercise the Precautionary Principle and hard wire all internet connections.

I know this might be disappointing to hear, as I understand you have invested in the WiFi. But there is no amount of money that could justify the added physiological stress from wireless antenna radiation and its many consequences, most in particular for children. Our research has shown that the cellular stress response, a protective reaction that is indicative of cellular damage, occurs at levels that are deemed 'safe'. Many other harmful reactions have been reported, such as the impairment of DNA processes that can account for the observed increased risk of cancer, as well as the potential cognitive decline, and sleep effects that may be due to impairment of the blood brain barrier. The DNA effects are of particular concern for future generations, an area of research that is just beginning to raise alarms. As with other environmental toxic exposures, children are far more vulnerable than adults, and they will have longer lifetimes of exposure.

The science showing reasons for concern about the microwave radiation emitted by antennas is abundant and there will be a day of reckoning. As I explain in my recent book,

*Overpowered*, The Precautionary Principle instructs us that in the face of serious threats, a lack of scientific 'certainty' never justifies inaction. The changes occurring at the molecular level, and known associations with many diseases, are sufficient at this time to give us pause and to recommend minimizing exposures to these fields, in our homes, schools, neighborhoods and workplaces. There is significant potential for risk, and to very large numbers of people, and the effects are occurring nonetheless whether or not we are noticing them.

I recommend you hardwire the internet connections at your school, and also encourage students to use hard wired connections at home for internet access, as well as for all computer equipment connections and voice communications.

Sincerely yours,



Martin Blank, PhD  
mb32@columbia.edu,



**Martin Blank, PhD**, Special Lecturer and (ret.) Associate Professor, Columbia University, Department of Physiology and Cellular Biophysics. Dr. Blank is a leading expert in the effects of electromagnetic fields on DNA and biology, and Past President of the Bioelectromagnetics Society. He holds two PhDs, in physical chemistry and in colloid science, an interdisciplinary field involving chemistry, physics and nanoscience. Dr. Blank was author of the BioInitiative Report's section on the impact of electromagnetic fields on Stress Proteins; Editor of the journal *Pathophysiology's* special issue on Electromagnetic Fields (2009); and co-author of "Electromagnetic fields and health: DNA based dosimetry" (2012), which recommends a new way of assessing the biological impact of electromagnetic fields across the spectrum, using DNA. Dr. Blank's book, *"Overpowered—What Science Tells Us About the Dangers of Cell Phones and Other WiFi-Age Devices"*, was published in 2014.





**STEPHEN T. SINATRA M.D., F.A.C.C.**

F.A.C.N., C.N.S., C.B.T.,

*Integrative Metabolic Cardiology*

July 16, 2014

Chairman and Trustees  
Fay School  
48 Main Street  
Southborough, MA 01772

RE: Wi-Fi in Schools

Dear Chairman and Trustees:

I am writing this letter on behalf of concerned parents of children who are attending schools with Wi-Fi technology. I'm a cardiologist and co-founder of Doctors for Safer Schools, an organization dedicated to informing teachers, parents and superintendents about the uncertainty and possible environmental health hazards of Wi-Fi technologies.

The heart is a delicate and complex electromagnetic organ that can be adversely affected by exogenous signals from wireless technology and microwave radiation. For this reason it is unwise to expose students and teachers to Wi-Fi radiation for internet access, especially when safer alternative wired options are available. Children are particularly vulnerable to this radiation and the incidents of cardiovascular events including sudden cardiac arrest, seems to be increasing, especially among young athletes (up to the age of 19). In some cases this is due to undetected heart defects, blunt trauma to the heart in contact sports, and heat stress during strenuous exercise, but in instances these irregularities may be exacerbated by or due to microwave signals interfering with the autonomic nervous system that regulates the heart.

I know this because I am a board certified cardiologist and have been a Fellow of the American College of Cardiology since 1977. At the Manchester Memorial Hospital in Connecticut, I served in several roles, including Chief of Cardiology, Director of Cardiac Rehabilitation, and Director of Medical Education.

In both Canada and the United States a large number of students are complaining that they feel unwell in classrooms that have Wi-Fi technology. These complaints have been investigated and what emerges is the following:

1. Symptoms common among these students include headaches, dizziness, nausea, feeling faint, pulsing sensations or pressure in the head, chest pain or pressure, difficulty

concentrating, weakness, fatigue, and a racing or irregular heart accompanied by feelings of anxiety. These symptoms may seem diverse but they indicate autonomic dystonia or dysfunction of the autonomic nervous system.

2. Symptoms do not appear in parts of the school that do not have this technology (Wi-Fi-free portables) and they do not appear in homes that do not have wireless technology.

3. We know that the heart is sensitive to and can be adversely affected by the same frequency used for Wi-Fi (2.4 GHz) at levels a fraction of federal guidelines (less than 1%) and at levels that have been recorded in two Ontario schools with Wi-Fi technology.

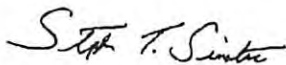
4. The incidence of sudden cardiac arrests (SCA) among young athletes is increasing and doctors don't know why. In one small Ontario community, the number of students experiencing SCA is disturbingly high. Whether WiFi and nearby cell phone antennas exacerbate SCA needs to be investigated further before students are subjected to these fields.

In conclusion it is unwise to install wireless technology (WiFi) in schools. We do not know what the long-term effects of low-level microwave radiation are on students and teachers. The safety of this technology on children has not been tested and I would advise that you follow the precautionary principle that states the following:

*"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."*  
(Rio Conference 1992).

The principle implies that we have a social responsibility to protect the public from exposure to harm, when scientific investigations have found a plausible risk. That "plausible risk" exists for microwave radiation at very low levels. These protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result. In some legal systems the application of the precautionary principle has been made a statutory requirement.

Sincerely,



Stephen T. Sinatra, M.D., F.A.C.C., F.A.C.N., C.N.S



**Karolinska Institutet**  
Department of Neuroscience  
Experimental Dermatology Unit

Stockholm, July 24, 2014

Mr. Thomas McKean, President, Board of Trustees  
Mr. James Shay, President-Elect, Board of Trustees  
Fay School  
48 Main Street  
Southborough, MA 01772

Ladies and Gentlemen,

It has been brought to my attention that children in your school are physically being impacted by radiation from WiFi antennas, and that some of the student's reactions have been severe. I was concerned to learn this. It is unwise to chronically expose children to this type of radiation, as their bodies are more sensitive than adults and the radiation has been shown to impair not just physiological functioning but cognitive function and learning.

Radiation of the kind emitted by WiFi transmitters impacts attention, memory, perception, learning capacity, energy, emotions and social skills. There is also diminished reaction time, decreased motor function, increased distraction, hyperactivity, and inability to focus on complex and long-term tasks. In some situations, children experience cardiac difficulties. In one Canadian school district, incidence of cardiac arrest in children was 40x the expected rate, and defibrillators have had to be placed at each school. Online time, particularly multi-tasking in young children, has been linked with a chronically distracted view of the world preventing learning critical social, emotional and relational skills. There is a physiological as well as psychological addiction taking place. I am sure, that as stewards of the lives of the children in your charge, you would not wish any of these outcomes.

Given the large and growing body of science indicating biological and health effects from the radiation emitted by antennas, it would be most imprudent at this time to permit wireless antennas on—or inside—your property. Understand the FCC exposure guidelines only protect against the acute power density, or acute thermal, effects, and they do nothing to protect against the other aspects of the radiation's risk, such the frequencies, amplitude, pulsing, intensity, polarity and biologically disruptive information content. Thus, until the FCC establishes guidelines for the non-thermal effects, any reliance by your school on current FCC guidelines, based solely on *thermal effects* would necessarily be incomplete. I urge a school of your caliber to be a leader on this issue, and appreciate that two wrongs do not make a right.

I enclose for your review the transcript of the Seletun Scientific Statement laying out the key concerns on this topic. If I can be of further help, please, do not hesitate to be in touch.

Yours truly,

Olle Johansson, Associate Professor  
The Experimental Dermatology Unit,  
Department of Neuroscience,  
Karolinska Institute, 171 77 Stockholm, Sweden

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# EXHIBIT B

124 WATERTOWN STREET, SUITE 2F  
WATERTOWN, MASSACHUSETTS 02472  
TELEPHONE (617) 744-0401  
FAX (617) 744-5346

JEANNE T. HUBBUCH, M.D.

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August 7, 2014

Mr. Alan Clarance  
Director of Operations  
Fay School  
48 Main Street  
Southborough, MA 01772

RE: [REDACTED]  
DOB: [REDACTED]

To Whom It May Concern:

[REDACTED] is an 11 year old boy who has attended the Fay School in Southboro, MA since 2009 (Grades 1-5). He was in good health with no unusual complaints or absences until the Spring of 2013. Between 3/28/13 and 5/23/13, he had four absences and 1 early release due to complaints of headaches or stomach aches. He had no unusual complaints over the Summer. He returned to school and attended full time in The Root Building beginning fall of 2013.

The Fay School has had WIFI since 2009 in the general school areas. In February 2013, The Root Building where he attended during 2013-2014 school year upgraded the WIFI from 2.5 to 5 GHZ.

[REDACTED] has had a pattern of symptoms occurring beginning in September where he was released early after seeing the nurse or absent. His complaints were headache, chest pressure, dizziness, nausea, tinnitus, eye pressure. When he went home he immediately felt better. He had no complaints on weekends or school breaks and has had no similar complaints since out of school this Spring. The following are the dates of [REDACTED] releases/absences:

#### 2013-2014 School Year

- 9/9/13 - Home Early at 1:15pm
- 9/23/13 - Home Early at 11:15am
- 10/24/13 - Home Early at 12:00pm
- 10/28/13 - Home Early at 1:30pm
- 11/20/13 - Absent

- 4/11/14 - Home Early at 11:45am
- 4/15/14 - Home Early at 2:40pm
- 4/18/14 - Absent
- 5/1/14 - Home Early at 2:35pm
- 5/14/14 - Absent
- 5/27/14 - Absent
- 5/28/14 - Absent

#### **2012-2013 School Year**

- 3/28/13 - Absent
- 3/29/13 - Absent
- 4/1/13 - Home Early at 12:00pm
- 5/22/13 - Absent
- 5/23/13 - Absent

Of note, he also complained of milder headache and dizziness at other times but not so severe as when he went to the nurse or was released.

It is significant to know that [REDACTED] is a good student who does well in school, likes attending school and has good friends at school. He participates in sports. Thus there is no secondary reason for his complaints. Also of significance is that his parents removed all WIFI and cordless phones in their home over two years ago because of their concern with possible health effects. [REDACTED] does not have a cell phone.

Evaluation by [REDACTED] pediatrician has not revealed any significant problems. He has a history of seasonal allergies and immediate IgE reactions to tree nuts and peanuts. He has [REDACTED]. None of these conditions explains his current symptom pattern.

It is known that exposure to WIFI can have cellular effects. The complete extent of these effects on people is still unknown. But it is clear that children and pregnant women are at the highest risk. This is due to the brain tissue being more absorbent, their skulls are thinner and their relative size is small. There are no studies that show that exposure to these two vulnerable groups is safe. We do not know the long term effects of microwave radiation on students and teachers. According to reports from the nurse at The Fay School, there has been an increase over the last year of students complaining of similar symptoms, i.e. headaches, dizziness, nausea and chest pressure. A good reference for this is website of Environmental Health Trust ([www.ehtrust.org](http://www.ehtrust.org)).

It is my opinion, based on my medical training and experience, especially my training in Environmental Medicine that [REDACTED] is being adversely affected by prolonged exposure to WIFI at school. Due to biochemical individuality some people are more susceptible to these effects than others. This should be considered seriously since subtle changes are occurring for all even if it is apparent in only a few.

I agree that the precautionary principle should apply here. Many countries have adopted this principle when approaching young children and have adopted stricter regulations to reduce exposure to wireless radiation.

If [REDACTED] continues to be exposed on a regular basis to WIFI, it is possible that his intermittent symptoms will become more constant and interfere with his school performance.

Sincerely,



Jeanne Hubbuch, MD

JH/ma

cc: [REDACTED] (mother)  
Susan Ruskowski (School Nurse)

JEANNE T. HUBBUCH, M.D.

124 WATERTOWN STREET, SUITE 2F  
WATERTOWN, MASSACHUSETTS 02472  
TELEPHONE (617) 744-0401  
FAX (617) 744-5346

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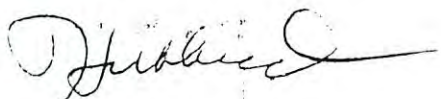
April 14, 2015

RE: [REDACTED]  
DOB: [REDACTED]

To Whom It May Concern:

[REDACTED] has been diagnosed with Electromagnetic Hypersensitivity. The ICD-10 code is T78.8 (Idiopathic Environmental Intolerance).

Sincerely,



Jeanne Hubbuch, MD

JH/ma

cc: [REDACTED] (mother)



124 WATERTOWN STREET, SUITE 2F  
WATERTOWN, MASSACHUSETTS 02472  
TELEPHONE (617) 744-0401  
FAX (617) 744-5346

JEANNE T. HUBBUCH, M.D.

March 31, 2015

RE: [REDACTED]  
DOB: [REDACTED]

To Whom It May Concern:

[REDACTED] is being following for complaints of headaches, nausea, and dizziness. These complaints were initially intermittent, ie. 4-5 school days per week, until late February when he began having daily headaches, which would come on during the day at school and last into the evening. His headaches now are interfering with his ability to do homework in the evening. The persistent symptoms are also interfering with his ability to focus on his schoolwork, which is affecting his ability to learn without impairment.

[REDACTED] had school vacation recently and noted no headaches, nausea or dizziness, except one day when he was ill with bronchitis and had a fever. On return to school, the debilitating headaches again recurred on a daily basis and lasted into the evening. [REDACTED] has been dismissed from school for symptoms resulting from his hypersensitivity on numerous occasions.

It is my opinion that [REDACTED] has Electromagnetic Fields (EMF) hypersensitivity and should be accommodated in a reduced environment.

Sincerely,



Jeanne Hubbuch, MD

cc: [REDACTED] (mother)

# EXHIBIT C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 16 2002

OFFICE OF  
AIR AND RADIATION

Ms. Janet Newton  
President  
The EMR Network  
P.O. Box 221  
Marshfield, VT 05658

Dear Ms. Newton:

This is in reply to your letter of January 31, 2002, to the Environmental Protection Agency (EPA) Administrator Whitman, in which you express your concerns about the adequacy of the Federal Communications Commission's (FCC) radiofrequency (RF) radiation exposure guidelines and nonthermal effects of radiofrequency radiation. Another issue that you raise in your letter is the FCC's claim that EPA shares responsibility for recommending RF radiation protection guidelines to the FCC. I hope that my reply will clarify EPA's position with regard to these concerns. I believe that it is correct to say that there is uncertainty about whether or not current guidelines adequately treat nonthermal, prolonged exposures (exposures that may continue on an intermittent basis for many years). The explanation that follows is basically a summary of statements that have been made in other EPA documents and correspondence.

The guidelines currently used by the FCC were adopted by the FCC in 1996. The guidelines were recommended by EPA, with certain reservations, in a letter to Thomas P. Stanley, Chief Engineer, Office of Engineering and Technology, Federal Communications Commission, November 9, 1993, in response to the FCC's request for comments on their Notice of Proposed Rulemaking (NPRM), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (enclosed).

The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not apply to chronic, nonthermal exposure situations. They are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn. The hazard level (for frequencies generally at or greater than 3 MHz) is based on a specific absorption dose-rate, SAR, associated with an effect

that results from an increase in body temperature. The FCC's exposure guideline is considered protective of effects arising from a thermal mechanism but not from all possible mechanisms. Therefore, the generalization by many that the guidelines protect human beings from harm by any or all mechanisms is not justified.

These guidelines are based on findings of an adverse effect level of 4 watts per kilogram (W/kg) body weight. This SAR was observed in laboratory research involving acute exposures that elevated the body temperature of animals, including nonhuman primates. The exposure guidelines did not consider information that addresses nonthermal, prolonged exposures, i.e., from research showing effects with implications for possible adversity in situations involving chronic/prolonged, low-level (nonthermal) exposures. Relatively few chronic, low-level exposure studies of laboratory animals and epidemiological studies of human populations have been reported and the majority of these studies do not show obvious adverse health effects. However, there are reports that suggest that potentially adverse health effects, such as cancer, may occur. Since EPA's comments were submitted to the FCC in 1993, the number of studies reporting effects associated with both acute and chronic low-level exposure to RF radiation has increased.

While there is general, although not unanimous, agreement that the database on low-level, long-term exposures is not sufficient to provide a basis for standards development, some contemporary guidelines state explicitly that their adverse-effect level is based on an increase in body temperature and do not claim that the exposure limits protect against both thermal and nonthermal effects. The FCC does not claim that their exposure guidelines provide protection for exposures to which the 4 W/kg SAR basis does not apply, i.e., exposures below the 4 W/kg threshold level that are chronic/prolonged and nonthermal. However, exposures that comply with the FCC's guidelines generally have been represented as "safe" by many of the RF system operators and service providers who must comply with them, even though there is uncertainty about possible risk from nonthermal, intermittent exposures that may continue for years.

The 4 W/kg SAR, a whole-body average, time-average dose-rate, is used to derive dose-rate and exposure limits for situations involving RF radiation exposure of a person's entire body from a relatively remote radiating source. Most people's greatest exposures result from the use of personal communications devices that expose the head. In summary, the current exposure guidelines used by the FCC are based on the effects resulting from whole-body heating, not exposure of and effect on critical organs including the brain and the eyes. In addition, the maximum permitted local SAR limit of 1.6 W/kg for critical organs of the body is related directly to the permitted whole body average SAR (0.08 W/kg), with no explanation given other than to limit heating.

I also have enclosed a letter written in June of 1999 to Mr. Richard Tell, Chair, IEEE SCC28 (SC4) Risk Assessment Work Group, in which the members of the Radiofrequency Interagency Work Group (RFIAWG) identified certain issues that they had determined needed to be addressed in order to provide a strong and credible rationale to support RF exposure guidelines.

Federal health and safety agencies have not yet developed policies concerning possible risk from long-term, nonthermal exposures. When developing exposure standards for other physical agents such as toxic substances, health risk uncertainties, with emphasis given to sensitive populations, are often considered. Incorporating information on exposure scenarios involving repeated short duration/nonthermal exposures that may continue over very long periods of time (years), with an exposed population that includes children, the elderly, and people with various debilitating physical and medical conditions, could be beneficial in delineating appropriate protective exposure guidelines.

I appreciate the opportunity to be of service and trust that the information provided is helpful. If you have further questions, my phone number is (202) 564-9235 and e-mail address is [hankin.norbert@epa.gov](mailto:hankin.norbert@epa.gov).

Sincerely,



Norbert Hankin  
Center for Science and Risk Assessment  
Radiation Protection Division

Enclosures:

- 1) letter to Thomas P. Stanley, Chief Engineer, Office of Engineering and Technology, Federal Communications Commission, November 9, 1993, in response to the FCC's request for comments on their Notice of Proposed Rulemaking (NPRM), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation
- 2) June 1999 letter to Mr. Richard Tell, Chair, IEEE SCC28 (SC4) Risk Assessment Work Group from the Radiofrequency Radiation Interagency Work Group

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

Child ■, Mother, and Father

(b) County of Residence of First Listed Plaintiff Worcester (EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number) John J.E. Markham, II, Markham & Read One Commercial Wharf West, Boston, MA 02110 617-523-6329

DEFENDANTS

The Fay School, by and through its Board of Trustees, and Robert Gustavson

County of Residence of First Listed Defendant Worcester (IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known) Sara Goldsmith Schwartz, Schwartz & Hannum PC 11 Chestnut Street, Andover, MA 01810 (978) 623-0900

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- 1 U.S. Government Plaintiff, 2 U.S. Government Defendant, 3 Federal Question (U.S. Government Not a Party), 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

Table with columns for Plaintiff (PTF) and Defendant (DEF) citizenship: Citizen of This State, Citizen of Another State, Citizen or Subject of a Foreign Country, Incorporated or Principal Place of Business In This State, Incorporated and Principal Place of Business In Another State, Foreign Nation.

IV. NATURE OF SUIT (Place an "X" in One Box Only)

Large table with categories: CONTRACT, REAL PROPERTY, TORTS, CIVIL RIGHTS, PRISONER PETITIONS, FORFEITURE/PENALTY, LABOR, IMMIGRATION, BANKRUPTCY, SOCIAL SECURITY, FEDERAL TAX SUITS, OTHER STATUTES.

V. ORIGIN (Place an "X" in One Box Only)

- 1 Original Proceeding, 2 Removed from State Court, 3 Remanded from Appellate Court, 4 Reinstated or Reopened, 5 Transferred from Another District, 6 Multidistrict Litigation

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity): Title 42 U.S.C. §12182(a) Brief description of cause: Defendants continue to violate plaintiff's rights under ADA by failing to provide reasonable accommodations.

VII. REQUESTED IN COMPLAINT:

CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P. DEMAND \$ 250,000 CHECK YES only if demanded in complaint: JURY DEMAND: X Yes [ ] No

VIII. RELATED CASE(S) IF ANY

(See instructions): JUDGE DOCKET NUMBER

DATE 8/12/2015 SIGNATURE OF ATTORNEY OF RECORD /s/ John J.E. Markham, II

FOR OFFICE USE ONLY

RECEIPT # AMOUNT APPLYING IFP JUDGE MAG. JUDGE

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

1. Title of case (name of first party on each side only) \_\_\_\_\_

2. Category in which the case belongs based upon the numbered nature of suit code listed on the civil cover sheet. (See local rule 40.1(a)(1)).

- \_\_\_ I. 410, 441, 470, 535, 830\*, 891, 893, 895, R.23, REGARDLESS OF NATURE OF SUIT.
- \_\_\_ II. 110, 130, 140, 160, 190, 196, 230, 240, 290,320,362, 370, 371, 380, 430, 440, 442, 443, 445, 446, 448, 710, 720, 740, 790, 820\*, 840\*, 850, 870, 871.
- \_\_\_ III. 120, 150, 151, 152, 153, 195, 210, 220, 245, 310, 315, 330, 340, 345, 350, 355, 360, 365, 367, 368, 375, 385, 400, 422, 423, 450, 460, 462, 463, 465, 480, 490, 510, 530, 540, 550, 555, 625, 690, 751, 791, 861-865, 890, 896, 899, 950.

\*Also complete AO 120 or AO 121. for patent, trademark or copyright cases.

3. Title and number, if any, of related cases. (See local rule 40.1(g)). If more than one prior related case has been filed in this district please indicate the title and number of the first filed case in this court.

\_\_\_\_\_

4. Has a prior action between the same parties and based on the same claim ever been filed in this court?

YES  NO

5. Does the complaint in this case question the constitutionality of an act of congress affecting the public interest? (See 28 USC §2403)

YES  NO

If so, is the U.S.A. or an officer, agent or employee of the U.S. a party?

YES  NO

6. Is this case required to be heard and determined by a district court of three judges pursuant to title 28 USC §2284?

YES  NO

7. Do all of the parties in this action, excluding governmental agencies of the United States and the Commonwealth of Massachusetts ("governmental agencies"), residing in Massachusetts reside in the same division? - (See Local Rule 40.1(d)).

YES  NO

A. If yes, in which division do all of the non-governmental parties reside?

Eastern Division  Central Division  Western Division

B. If no, in which division do the majority of the plaintiffs or the only parties, excluding governmental agencies, residing in Massachusetts reside?

Eastern Division  Central Division  Western Division

8. If filing a Notice of Removal - are there any motions pending in the state court requiring the attention of this Court? (If yes, submit a separate sheet identifying the motions)

YES  NO

(PLEASE TYPE OR PRINT)

ATTORNEY'S NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

TELEPHONE NO. \_\_\_\_\_