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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

JOSE RIERA; MICHELLE HIMES; DIANE SCURRAH; DEBORAH CHASE; MARCIA BENJAMIN and DANIEL BENJAMIN, individually, and on behalf of all others similarly situated,

Plaintiffs,

v.

MECTA CORPORATION; SOMATICS, LLC; and DOES 1 through 10, inclusive,

Defendants.

Case No.: 2:17-cv-06686 RGK(PJWx)

DECLARATION OF PETER BREGGIN, MD IN SUPORT CLASS CERTIFICATION

I, Peter Breggin, declare under penalty of perjury as follows:

1. I am a medical doctor (physician) with a specialty in psychiatry. I am licensed to practice medicine in New York State and since 2002 I have an active practice of psychiatry in Ithaca, New York. I also have inactive licenses in Virginia, Maryland, and Washington DC, the area where I practiced until 2002.

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2. I graduated from Harvard University with honors in 1958 and Case Western Reserve School of Medicine in 1962, where I conducted four years of psychopharmacology lab research with controlled animal trials under a grant from the National Institute of Mental Health, resulting in the first two published papers in the field of psychopharmacology. In 1963, I earned the highest grade in the country on the psychiatry portion of the National Board of Medical Examiners used to qualify for medical licenses. I completed a mixed internship in medicine and psychiatry at the State University of New York Upstate Medical Center (SUNY). I completed my first year of residency at Harvard's main teaching hospital, working in the Massachusetts Mental Health Center, and a teaching fellowship at Harvard Medical School. I finished my second and third year of psychiatric residence at SUNY. Following that I was a full-time Consultant with the National Institute of Mental Health (NIMH) in Washington, DC while a commissioned officer in the U.S. Public Health Service (1966-1968).

3. Throughout my career, I have taught as a faculty member or adjunct professor at multiple universities, including the University of Maryland (1968-1970), Washington School of Psychiatry (1968-1972), George Mason University (1990-1996), Johns Hopkins University (1996-1999), and the State University of New York at Oswego (2007-2008, 2010-2014).

4. From 1998 to 2002, I was the Founder and Editor-in-Chief of *Ethical Human Sciences and Services: An International Journal of Critical Inquiry* (now titled *Ethical Human Psychology and Psychiatry*). I currently serve as an editorial consultant to numerous other publications, including the *International Journal of Risk and Safety in Medicine*.

5. I have written numerous publications on the practice of electroconvulsive therapy ("ECT"). A true and correct copy of my Resume is attached as Exhibit A which includes my complete bibliography. Dating back to 1979, I wrote the medical book, *Electroshock: Its Brain-Disabling Effects* (New York: Springer), which remains the only medical textbook that focuses on the harms caused by ECT. Since then I have written many medical articles on electroshock treatment, including "Electroshock Therapy and Brain Damage: The Acute Organic Brain Syndrome as Treatment" in *Behavior and Brain Sciences* (1984), "Neuropathology and Cognitive Dysfunction from ECT" in *Psychopharmacology Bulletin* (1986), "Electroshock: Scientific,

ethical, and political issues" in *International Journal of Risk & Safety In Medicine* (1998), "The FDA should test the safety of ECT machines" in *International Journal of Risk & Safety in Medicine* (2010) and "The Utmost Discretion: How Presumed Prudence Leaves Children Susceptible to Electroshock" in *Children & Society* (2014).

6. I have also written many books chapters on ECT and have discussed it in detail in a series of my medical textbooks, most recently, *Brain-Disabling Treatments in Psychiatry: Drugs, Electroshock and the Role of the FDA, Second Edition* (New York: Springer Publishing Company, 2008).

7. In 1985, the National Institutes of Health (NIH) invited me to be the scientific presenter on the subject of "Neuropathology and Cognitive Dysfunction from ECT" at its *Consensus Development Conference on Electroconvulsive Therapy, June 10-12, 1985.* Consensus Conferences are significant scientific and media events in which acknowledged, well-known experts make presentations on controversial topics and a panel without conflicts of interest renders a consensus from the presentations. The Consensus Conference final statement regarding ECT were published in *JAMA* ("Consensus Conference: Electroconvulsive Therapy," *Journal of the American Medical Association, No. 15, October 1986.*). My scientific presentation, along with others, was individually published ("Neuropathology and Cognitive Dysfunction from ECT" in *Psychopharmacology Bulletin,* 1986).

8. Electroconvulsive therapy is the practice of inducing a grand mal motor seizure through application of electricity to the head and brain. It began in 1938, when Ugo Cerletti and Lucio Bini observed the shocking pigs to render them manageable before slaughter. It has been in widespread use across the States, including California for decades.

9. ECT is primarily used on patients seeking treatment for major depression. It is also liberally prescribed for a broad range of psychiatric conditions including bipolar disorder, schizophrenia and catatonia. I believe the practice has become more widespread since 1979, when I estimated that 100,000 people received ECT per year in the United States. A report by the California Department of Mental Health indicates that over 18,000 people underwent ECT treatment in California in 2001 alone. While there is no formal record of the exact number of

patients who undergo ECT in California each year, my estimate is that it would amount to several thousand per year, perhaps tens of thousands.

10. Early in my career, I administered ECT and supervised a ward upon which ECT was performed. Throughout my career I have observed the effects of ECT. Based upon all my education, experience, training and study of ECT to date, it is my opinion, as to a reasonable medical certainty, that ECT inherently causes damage to the brain, causing symptoms such as severe permanent memory loss, cognitive impairment, and apathy and indifference towards oneself and others.

11. Prior to 1979, the psychiatric community acknowledged that the purpose of ECT was to damage the brain. In 1979, the year that the FDA first ordered the submission of all safety and effectiveness data relating to ECT treatment, I published my aforementioned medical textbook, *Electroshock: Its Brain-Disabling Effects*. In the book, I quoted from the scientific literature the statements of many leading advocates of ECT that brain damage was the intended effect of ECT. Around this time, because of the negative publicity, the dialogue surrounding ECT shifted away from brain damage, and ECT proponents instead began to assert that ECT is a way of correcting chemical imbalances in the brain. There is no scientific foundation for this recent claim that ECT corrects biochemical imbalances. In fact, by causing widespread dysfunction and harm throughout the brain ECT causes biochemical imbalances, as well as other pathological results.

12. ECT universally damages the brains of patients who receive it, and the mechanism of trauma is identical among all ECT victims. Some patients are fortunate enough to escape grossly obvious dysfunctionality, enduring relatively minor cognitive impairment and loss of memory for the days, weeks or months surrounding the treatment. Other patients will experience severe memory losses covering prior decades, as well as continuing memory dysfunction and over all cognitive dysfunction with emotional apathy, disinterest or blunting. Although the degree of harm varies, the nature of the harm caused by ECT is consistently the same, specifically including: (1) retrograde memory loss (past memories injured or destroyed) with the worst losses nearer to the ECT treatments; (2) especially severe memory loss surrounding the ECT itself; (3) anterograde memory loss (a broad term referring to persisting memory and cognitive

dysfunction); and (4) degrees of apathy or disinterest.

13. The reason that all ECT patients endure similar injuries is that the treatments attempt to provide a suitable amount of current to the brain to produce a seizure. The current and the seizures then produce most of the harm, including through the breakdown of the blood brain barrier, hypertension, anoxia, exhaustion of energy sources, heat injury, and electrical injury.

14. **The result in all cases without exception is a concussive-like traumatic brain injury from every single effective treatment.** The immediate result of this injury is a total disruption of the brain's electrical pattern, driving the recording needle on the EEG strip into a series of explosive, jagged peaks. This is often followed by flat-lining, with a straight line on the EEG indicating that the brain has temporarily stopped functioning, at least in respect to this gross measurement of activity. If the ECT treatment proceeds routinely, the patient is immediately driven into a comatose state. Recovery from the coma then requires several minutes or more in a specialized recovery room under constant supervision. The individual then awakens in a confused state, usually with apathy, and with no memory of what has happened. As the ECTs increase in number, the patient typically awakens from the coma with increasing amounts of brain dysfunction and injury, often with headaches and nausea. There can be no legitimate doubt that ECT damages the brain and mind—no more than there can be about repeated blows on the head that render and individual comatose and then confused and disoriented on awakening. The only question is how much recovery occurs—and anyone who claims that such repeated assaults on the brain are harmless is ignoring the fact that repeated severe traumatic injuries to the brain that cause coma will inevitably leave persistent negative aftereffects to the brain and mind.

15. No mechanism of action by which ECT "treats" depression has been identified or proven to this day by the advocates of the treatment; but there is considerable evidence that the apathy and disinterest caused by the treatment is mistaken for improvement by some patients, families and physicians.

16. Some ECT advocates claim that ECT reduces the risk of suicide. This is an easy claim to test, because the endpoint, suicide, can be easily measured and recorded. Yet there is no sound scientific evidence that ECT reduces the risk of suicide while there is some evidence that it

increases the risk, probably because of the despair patients feel when they realize they have been harmed.

17. The "newer" and allegedly "modified" forms of ECT are not different or less harmful than the original form, as both apply enough electricity to the head of a patient to induce a major motor seizure. It is impossible to induce a major motor seizure through application of electricity to the cranium without causing traumatic brain injury. Indeed, contemporary ECT is more damaging to the brain because it requires much higher energy doses in order to produce a seizure in patients who given prior sedatives for sleep or anxiety, and then anesthesia during the ECT treatments. Sedatives and anesthesia increase the seizure threshold, requiring these more traumatic doses of electricity. In previous years 200 milliamps of electrical current were commonly used in humans as well as in animal experiments to produce seizures as a part of ECT, while today the doses produced by the machines are over 1,000 milliamps.

18. The clinical markers of brain damage and chronic traumatic encephalopathy resulting from ECT include pinpoint hemorrhages, neurogenesis, scattered cell death in the regions beneath the electrodes, vascular wall damage, gliosis, nerve cell abnormalities, dilated blood vessels, and other markers. Brain damage caused by ECT to an individual patient can sometimes be documented by brain scans, electroencephalograms, and autopsy studies. The most sensitive methods for detecting the extent of brain damage from any cause, including ECT, are a clinical interview by an experienced and well-informed clinician who involves the family and neuropsychiatric testing by an experienced and well-informed psychologist. It is my opinion, that the application of a large enough electric current to induce a grand mall or generalized seizure with unconsciousness causes brain injury is well supported by the medical community and findings developed over a significant time in scientifically reliable publications. The following publications confirm pathology damage in the brain or memory and cognitive dysfunction to indicate an underlying physical damage:

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van Daalen-Smith, C.; Adam, S.; **Breggin, P**.; and LeFrançois, B. (2014) The Utmost Discretion: How Presumed Prudence Leaves Children Susceptible to Electroshock. *Children & Society, 28*, 205-217.

19. Memory impairment such as that observed after ECT does not occur naturally, nor is it caused by depression or other psychiatric disorders. The memory loss follows the typical, expected pattern following a discrete, traumatic physical injury to the brain and in fact is similar in its clinical effects to other forms of injury to the head and brain. The possible exception is that ECT seems to produce an especially drastic impact upon personal memories of one's experiences in life, such as family celebrations, holidays, work accomplishments, and educational experiences. For this reason, the harm caused by ECT is particularly destructive to personal identity.

20. Based upon my active involvement in this industry, my experience, training and review of all relevant materials including the nature of the "informed consent" that is generally discussed in the medical communities that offer ECT treatment, physicians that administer ECT do not generally acknowledge or advise of any risk of brain damage, permanent memory loss, or the loss of self that ECT victims frequently report. This is often very discouraging to patients who do not understand why their cognitive abilities have been so severely affected following ECT. Many health professionals tell patients injured by ECT that it is harmless and that their perceived dysfunction in the brain and mind is a "mental illness."

21. The psychiatric profession is keenly influenced by device manufacturers' research and required FDA reporting. The Manufacturer and User Facility Device Experience ("MAUDE") database houses medical device reports submitted to the FDA by mandatory reporters and serves as a primary source of information for psychiatrists and other medical professionals to rely on in evaluating and informing patients of the relative risk and safety of utilizing medical devices.

22. If the manufacturers fully performed their reporting and testing requirements, the psychiatric community would be informed of all risks of ECT through the required mandatory

reporting of any adverse events required to be reported and/or addressed by manufacturers in the MAUDE database.

23. If the ECT device manufacturers had reported upon any adverse events associated with the administration of ECT in the use of their devices to the FDA as required so that they appear within the MAUDE database, the psychiatric community would have utilized the MAUDE database reporting as an avenue to become informed of such untoward events. Such reporting associated with ECT provides the medical community as a whole with information regarding the risks of utilizing the ECT procedures and in informing our patients of known risks, the dangers and the inherent damages known to be universally caused by ECT. Had there been reporting over the years as required, physicians administering ECT would have been apprised of the grave dangers inherent in ECT in time to prevent injury.

24. I have served as the expert witness in numerous actions where adverse events, such as brain damage, have occurred as a result of ECT. Despite these actions where adverse events were alleged and did occur, I am not aware that the manufacturers of ECT devices, including MECTA Corporation and Somatics, LLC investigated or reported to the FDA those adverse events and understand they have continued to manufacture, sell and distribute their ECT machines. I am not aware of any reporting of any such known adverse ECT events reported by any ECT manufacturer within the FDA's MAUDE database.

25. In the previous litigation actions that I have been involved addressing the injuries caused by ECT, the defense has often portrayed the individual plaintiffs' injuries as stand-alone events, rather than the remarkably uniform result of an invariably injurious psychiatric practice that has repeated itself continuously over the years that ECT has been utilized in the psychiatric community.

26. I believe ECT is still available as a treatment methodology and remaining on the market today because of the substantial influence and power of the psychiatric lobby which gains from and supports ECT. Based upon my experience and involvement, it is not uncommon for psychiatrists to typically charge whatever the insurance will cover for a session of ECT. In addition, anesthesiologists and the facility, as well as others, are all compensated from an ECT

practice where hospitals charge considerably for the procedure. The proceeds from ECT, typically paid by Medicare, are often sufficient to support the profitability of individual psychiatrists and the entire psychiatric department at healthcare facilities.

27. Typical consent forms that patients sign before receiving ECT are routinely and uniformly inadequate by not disclosing the known risks of long-term damage that occurs from ECT. Typical consent forms provided to most ECT patients that I have reviewed, including the standard APA consent forms, do not inform the patient that ECT inherently damages the brain, nor do they warn of the risk of permanent memory loss and the probable long-term cognitive impairment that can occur. These consent forms generally warn only of risks such as nausea, headaches, and short-term memory loss which would not discourage patients and their families from ECT treatment.

28. The adverse events that have occurred following the administration of ECT over the past several decades have clearly demonstrated that the certainty of damage to the brain from ECT, the risk of permanent memory loss and the probable long term cognitive impairment are risks that should have been disclosed to any patient receiving ECT. Had Defendants populated the MAUDE database with reports of reasonably known adverse events by filing adverse event reports with the FDA as required, the treating psychiatrists of members of the putative class would have been in a position to warn members of the putative class of the latent dangers inherent in ECT treatment in time to prevent their injuries.

29. All of the information I have provided here is documented in my dozens of peer-reviewed articles and scientific books. I also provide the profession and the public with a free ECT Resource Center on my website, www.breggin.com which contains more than a hundred scientific documents, including my entire book, *Electroshock: Its Brain-Disabling Effects*. The Resource center can also be reached directly at www.123ECT.com.

I declare under penalty of perjury the foregoing is true and correct. Executed this ___ day of December, 2017 at Ithaca, New York.

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Peter Breggin, M.D.