

1 Christopher B. Dolan, Esq. (SBN 165358)  
Aimee E. Kirby, Esq. (SBN 216909)  
2 THE DOLAN LAW FIRM  
1438 Market Street  
3 San Francisco, California 94102  
4 Tel: (415) 421-2800  
Fax: (415) 421-2830

5 Attorneys for Plaintiff  
6 LATASHA WINKFIELD

7  
8 **SUPERIOR COURT OF CALIFORNIA**  
**COUNTY OF ALAMEDA**  
9

10 LATASHA WINKFIELD, an individual  
parent and guardian of Jahi McMath, a  
11 minor

12 Plaintiff,

13 v.  
14

15 CHILDREN'S HOSPITAL & RESEARCH  
16 CENTER AT OAKLAND, Dr. David  
Durand M.D. and DOES 1 through 10,  
17 inclusive

18 Defendants.

Case No. PR13-707598

DECLARATION OF CALIXTO  
MACHADO, M.D., PhD, IN SUPPORT OF  
PLAINTIFF'S WRIT OF ERROR CORAM  
NOBIS AND REQUEST REVERSE  
JUDICIAL DETERMINATION OF BRAIN  
DEATH OF JAHI MCMATH

19  
20 I, Calixto Machado, M.D., declare as follows:

21 1. I make this Declaration of my own Personal Knowledge in Support of Plaintiff's  
22 request to have Jahi McMath declared non-brain dead. If called to testify, I could testify to the  
23 following:

24 2. Attached to this Declaration is a true and correct copy of my Curriculum Vitae as  
25 Exhibit "A." It is incorporated herein, is made of my own personal knowledge and constitutes a  
26 Business Record under the California Evidence Code. Exhibit B is a copy of my report which is  
27 brief because of my travel back to Havana and the short window of time to fully examine and  
28

1 interpret the medical evidence. I stand behind my opinion but anticipate writing a longer, more  
2 comprehensive, report for this interesting and potentially groundbreaking case.

3 3. In 1976, I graduated from the University of Havana School of Medicine. I completed  
4 my Residency Program at the Institute of Neurology from 1977-1980. I then went on to complete  
5 my First Degree of Board Certification in Neurology at the Institute of Neurology in 1980. I  
6 followed my First Degree of Board Certification in Neurology with my Second Degree of Board  
7 Certification in Neurology at the Institute of Neurology in 1987. I also graduated as a PhD in  
8 1992.

10 4. Currently, I am a Senior Professor and Researcher in Neurology and Clinical  
11 Neurophysiology at the Institute of Neurology and Neurosurgery. I am the President of the Cuban  
12 Commission for the Determination and Certification of Death, and President of the Cuban Society  
13 of Clinical Neurophysiology. I lead this Commission which wrote the Cuban Law for or the  
14 Determination and Certification of Brain Death. I am a Corresponding Fellow of the American  
15 Academy of Neurology since 1992.

17 5. I have been published over two hundreds (200) times and have received numerous awards  
18 in my field. I was honored by the American Academy of Neurology Lawrence McHenry  
19 Award in 2005, because of my research "*The first organ transplant from a brain-dead*  
20 *donor*".

21 6. I was originally asked by Phil DeFina, PhD, of the International Brain Research  
22 Foundation (IBRF), to review EEG and MRI studies. The EEG studies were given to me  
23 anonymously, meaning that I did not know the patient's name or that the patient was Jahi  
24 McMath. Dr. Defina asked me to review the EEG of a brain injured patient, which I did, and then  
25 respond to the question of whether she was "brain dead."  
26

27 7. I must affirm that I am a defender that brain death means death of the human being, and it is a  
28

1 state with no hope of recovery. Moreover, I am a Corresponding Fellow of the American  
2 Academy of Neurology (AAN), and I consider that AAN Criteria for Brain Death Diagnosis  
3 represent one the most outstanding and reliable Guidelines in the world for confirming the  
4 diagnosis of brain death. The AAN Guidelines emphasized that “*Brain death is a clinical*  
5 *diagnosis*”. Nonetheless, this report also emphasized that “*A confirmatory test is needed for*  
6 *patients in whom specific components of clinical testing cannot be reliably evaluated*”  
7  
8 (Neurology 1995;45:1003-1011). I was unable to make a clinical examination of this case,  
9 because I don’t have the US license medical license. This patient presented a brainstem lesion,  
10 probably due to a herniation syndrome that frequently occurs when edema after a post-anoxic  
11 encephalopathy (Cardio-respiratory arrest) incites conflict of intracranial space. This is a  
12 specific clinical condition when a confirmatory test is recommended.

13  
14 8. I only worked as a volunteer IBRF international expert consultant, examining confirmatory  
15 tests of the patient.

16 9. I was not involved in her initial evaluation, and I don’t know any data from her clinical  
17 and ancillary tests assessment performed in January 2014. Hence, I cannot give any opinion about  
18 that first evaluation, because I only knew about the patient from the US press. I only recently was  
19 able to evaluate the confirmatory tests presented to me, and my expert opinion is only based on  
20 this newly data I could review.

21  
22 10. I reviewed and confirmed that the EEG undertaken by Elena Labkovshp, PhD was  
23 performed in accordance with Minimum Technical Standards for EEG Recording in Suspected  
24 Brain Death (American Clinical Neurophysiology Society).

25 11. It is my opinion as an expert in brain death that the EEG Record shows:

- 26 a. The neurophysiological data is not consistent with the classical EEG isoelectric  
27 pattern found in brain-dead cases.  
28

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- b. Although there were EKG artifacts in derivations, I can appreciate the presence of low voltage EEG true activity.
- c. Although the EEG records show the presence of some artifacts, due to patient head and body movements of electrodes, I can see the existence of EEG activity with a prevalence of diffuse Delta, with superimposed activity within the Alpha and low Beta ranges.
- d. Some intermittent Delta and Theta activity is present in a random pattern. The Technologist assured that the electrodes did not have any contact with the ventilator hoses, which might account for artifacts simulating EEG activity.
- e. In conclusion, the neurophysiological data derived from this assessment, confirms the preservation of true EEG bioelectrical activity in this case.

12. I processed, with my group in Cuba, the Heart Rate Variability Measurements to access the central autonomic nervous system.

13. I personally oversaw the undertaking of a MRI/MRA done at Rutgers University on September 30, 2014, using all conventional sequences (i.e., T1, T2 in different axis, MRA, Fractional Anisotropy, etc.).

14. Attached as Exhibit "B" is a true and correct copy of my report prepared after my review of the diagnostic tests and, additionally, information regarding the onset of menarche in this teen age girl.

15. The MRI shows that the subject had suffered a serious brain injury. It is possible to observe ribbons at the level of the cortex, indicating preservation of neocortex. Had she been brain dead without cerebral blood flow since January of 2014, we would not expect to see the structure of the brain to be as it is now; it would have, most likely, liquefied. This brain did not liquefy, but has maintained tissue structure. This is in fact for me the most important finding in

1 this case to deny that she is brain-dead, because considering the concept of brain death (BD), that  
2 per definition an irreversible absence of cerebral blood flow (CBF) should be present, in this case,  
3 with more than 9 months of evolution with the possible diagnosis of BD, I would have expected to  
4 find the classic description of the “respirator brain” (brain liquefied, without any nervous system  
5 structure, etc.). Although recently Eelco Wijdicks et al. described that there is no specific  
6 anatomo-pathology findings in brain-dead cases, and that “*respirator brain*” no longer exists in  
7 BD, this is due to the fact that diagnosed brain-dead cases are usually kept under respirator for  
8 hours or a few days, prompted by organ retrieval protocols, or because life support is removed.

10 16. In the MRA sequence, done without contrast, it was possible to show slow but  
11 intracranial cerebral blood flow.

12 17. In my analysis of the patient’s heart rate variability (HRV), there are remaining spectra  
13 in the very low (VLF), low (LF), and median frequencies (MB) bands. Also, the frequency of the  
14 ventilator is present, but it is possible to observe modulations of amplitude in this peak, which do  
15 not only correspond with the ventilator effect. This suggests the preservation of functional  
16 modulation of HRV by the autonomic nervous system from structures located at the brainstem.

18 18. I observed the HRV spectra during three experimental conditions: Basal Record,  
19 Photostimulation, and “Mother talks to the patient.” Based on the empirical data provided to me, I  
20 confirmed that there are clear dynamic changes when comparing the three different conditions,  
21 indicating an effect of these stimuli to the modulation of the central autonomic nervous system. In  
22 plain language, the HRV showed she had an emotional content response to the voice of her  
23 mother.  
24

25 19. It is my opinion, as one who is a defender of brain death, and who believes that brain  
26 death does occur, and can be confirmed through testing of the type conducted on Jahi McMath,  
27 that this patient DOES NOT ACTUALLY FULFILL THE BRAIN DEATH CRITERIA AND  
28

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

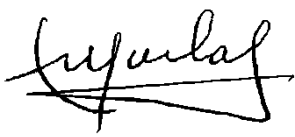
HENCE SHE IS NOT BRAIN DEAD, considering the whole brain criteria of BD.

20. The videos I have seen, showing the movement of Jahi's foot and hand at the request of her mother are significant in that there is a request followed, shortly thereafter, by the requested response. I have seen that the patient responded and then was asked by her mother to respond, again, harder, and in a short span thereafter, the patient did as she was requested. I was able to see that during those videos, the patient did not receive any other stimuli like touching her, or even without the effect of external equipment like a fan or an air conditioner.

21. I have been informed that the patient has entered menarche and has had a menstrual cycle. I have made a literature review in PubMed, and I have not found any report of a menarche appearance in a brain-dead case.

22. I have attached as Exhibit C a power point presentation which I am prepared to give which supports my opinion. I am also doing a 3D modeling but time has not permitted me to finish this as of now.

I declare under the penalty of perjury under the laws of the State of California that the forgoing is true and correct. Signed October \_\_05\_\_, 2014, in \_\_Havana\_\_\_\_\_, Cuba\_\_\_\_\_.



---

Calixto Machado, M.D.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28