

Filed on behalf of: The Board of Trustees of the  
Leland Stanford Junior University

Paper \_\_\_\_\_

By: R. Danny Huntington, Lead Counsel  
Sharon E. Crane, Ph.D., Backup Counsel  
Rothwell, Figg, Ernst & Manbeck, P.C.  
607 14<sup>th</sup> St., N.W., Suite 800  
Washington, DC 20005  
Telephone: 202-783-6040  
Facsimile: 202-783-6031  
E-mail: [dhuntington@rfem.com](mailto:dhuntington@rfem.com)  
[scrane@rfem.com](mailto:scrane@rfem.com)

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

SEQUENOM, INC.  
Petitioner,

v.

THE BOARD OF TRUSTEES OF  
THE LELAND STANFORD JUNIOR UNIVERSITY  
Patent Owner.

---

Case IPR2013-00390  
Patent 8,195,415

---

**DECLARATION OF JOSEPH DERISI, PH.D.**

**STANFORD EXHIBIT 2135**

United States Patent and Trademark Office  
Patent Trial and Appeal Board  
Madison Building East  
600 Dulany Street  
Alexandria, Virginia 22313

The undersigned, Joseph DeRisi, Ph.D., does hereby declare and state that:

1. I make the following declaration based upon my knowledge and belief.
2. I am a Professor and Howard Hughes Investigator in the department of Biochemistry and Biophysics at the University of California, San Francisco (UCSF) School of Medicine.
3. I have been asked to testify about events associated with sequencing runs that were performed on behalf of Christina Fan and Stephen Quake in my laboratory in 2008. It is my recollection that these sequencing runs related to their performing experiments to non-invasively diagnose fetal aneuploidy by quantifying DNA fragments in the blood of a pregnant patient, which DNA fragments can be aligned to particular chromosomes, and certain of which exist at an elevated level when the fetus is aneuploid.
4. I recall having discussions with Dr. Quake regarding these sequencing runs, and I recall Dr. Fan coming to UCSF to work with Clement

Chu for the sequencing runs, and with Kael Fischer for alignment analysis of those sequencing runs.

5. I have reviewed Exhibits 2119 and 2120 which I understand are being submitted in this patent interference proceeding, and it refreshes my recollection as to those events and the dates on which they occurred.

6. On January 9, 2008, Dr. Quake contacted me, requesting to our Solexa sequencer for use with his project on non-invasive diagnosis of fetal aneuploidy. I agreed and indicated that he should talk with Clement Chu to arrange the sequencing. Later in January of 2009, Drs. Quake and I further corresponded about a “reagent barter” where the Quake lab would provide reagents when my lab wanted to run sequencing reactions on the Quake 454 sequencer, and the my lab would provide reagents when we wanted to run sequencing reactions on their Solexa sequencer. (Ex. 2119).

7. In signing this declaration, I understand that the declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I acknowledge that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

8. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I also declare that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Digitally signed by Joseph DeRisi  
DN: cn=Joseph DeRisi, o=UCSF,  
ou=Biochemistry and Biophysics,  
email=joe@derisilab.ucsf.edu, c=US  
Date: 2014.05.07 12:51:27 -07'00'

\_\_\_\_\_  
Date

\_\_\_\_\_  
Joseph DeRisi, Ph.D.