

March 9, 2001

Mrs Sharon TONG  
Bills Committee  
Legislative Council Secretariat  
8 Jackson Road  
Central  
Hong Kong

Dear Mrs. Tong,

**Bills Committee on  
Immigration (Amendment) Bill 2000**

---

Thank you very much for your letter dated 23 February, 2001.

After reading the reference papers and submissions that you sent to me and the papers that I downloaded from the home-page of LEGCO, I have the following comments.

1. With regard to the conduction of genetic testings, the "two-laboratories, two-places (split-sample)" model is an acceptable procedure which is reasonable and usually very reliable. One of the reasons for having such a view is that the two laboratories "use exactly the same genetic systems, DNA technologies (PCR) and reagents" which can ensure comparability. Of course, there are other ways of conducting the genetic testings. One way is that each of the two laboratories in two places conducts its own DNA test for the whole sample (say Mother-Child-"Father") and the DNA test results of the two laboratories are compared later. Generally, this "two-whole-samples" model should be preferable to the "split-sample" model. However, the cost for the former would be (more than) double of the latter. No procedure is totally error-free. Appropriate arrangements can be set up to make the "split-sample" procedure extremely reliable.

... /2

2. As a statistician, I would like to point out that "the chance of an unrelated person being included as a possible parent is about 1 in 500,000 and the chance of a true parent being excluded as to be unrelated is lower than 1 in 1 million" is valid under assumptions.

I hope you, the chairman and members of the Bills Committee would find the above views useful. I also attach a disk containing this submission for your reference.

If you need further information or need me to explain some of the details before the Committee, please feel free to contact me.

Yours sincerely,

Tony W.K. Fung  
Associate Dean, Faculty of Social Sciences  
Professor, Department of Statistics and Actuarial Science

TWKF/al

Encl.