

何秀蘭立法會議員辦事處的信頭

立法會 CB(2)541/00-01(01)號文件  
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Ref. No.

檔案編號： \_\_\_\_\_

傳真

香港中區皇后大道中 8 號  
立法會大樓  
立法會秘書處  
《2000 年入境（修訂）條例草案》委員會秘書  
湯李燕屏女士  
（傳真號碼：2877-8024）

湯女士：

《2000 年入境（修訂）條例草案》

在審議上述條例草案的時候，議員曾就政府提出由中港兩地的化驗所分別抽取和測試當地居住的申請人或其父母，然後交換測試結果的做法提出質疑，認為在科學上是否可行和可靠。

就上述提出的疑問，我們於十二月初親自致函美國血庫聯會 (American Association of Blood Banks) 查詢有關政府建議的兩地測試基因是否符合該機構所訂立的指引和標準。該機構於 12 月 4 日以電郵回覆，提供一些專業的意見。現附上該覆信文本，煩請交給條例草案委員會委員參閱。

何秀蘭  
立法會議員  
(黎榮耀 代行)

連附件

2000 年 12 月 18 日

December 4, 2000

LAI Wing-yiu  
Member's Assistant  
Office of Legislative Councillor Cyd HO Sau-lan  
Room 602, Citibank Tower, 3 Garden Road  
Central, Hong Kong  
(By email: addylai@hknet.com)

Dear Member's Assistant LAI:

On behalf of the Standards Parentage Program Unit of the AABB, I am writing in response to your letter dated 30<sup>th</sup> November 2000. Your letter described proposed legislation by the Hong Kong Government to require some individuals seeking Hong Kong residence to participate in parentage testing when different laboratories will test different subjects. You questioned whether genetic tests derived through collaborative efforts are viable and sound.

It is common practice among US facilities to suggest that routine parentage testing of all individuals be performed with the same techniques and reagents by the same laboratory to ensure accurate and valid reports. A guiding principle is that internal errors are easier to monitor, contain and correct than external ones. Albeit noteworthy, this "single-lab" practice is not specifically required by our standards and has been knowingly circumvented by US Courts on rare occasions. Our standards require that an accredited laboratory shall have a process to ensure that processes and procedures are validated and that all processes and procedures are followed. "Single-lab" testing is an example of a good process.

Historically, the "single-lab" concept arose due to a certain degree of subjectivity on the part of technologists who assigned genetic markers in serological tests based on their familiarity with sera in use. Limited serological reagents were not licensed for specificity or potency. AABB's Guidance for Standards for Parentage Testing Laboratories (2000, Pp. 33) concerning HLA testing still states that, whenever possible, the cells of all individuals in a parentage case be tested together in the same laboratory and/or tested with the same trays or tray sets.

One may argue that recent advances in DNA molecular-based testing have produced less subjectivity (e.g., automation and practically unlimited reagents) and more control (e.g., some technologies permit an internal standard to be run with every unknown sample) over results so, conceivably, collaborative DNA testing could be made technologically viable and sound. The process would require a large effort and close relationship between two or more designated laboratories. For example, laboratories would need to 1) use exactly the same genetic systems, DNA technologies and reagents, 2) cross-train their technologists, and 3) continually exchange specimens for proficiency testing.

However, in your case, the simpler process still seems to exist. Shipping DNA samples over far distances is so safe and elementary that one laboratory could still test all. If more security is desired, samples held by the Chinese authorities and the Hong Kong Government could be exchanged so that both designated laboratories tested the entire set of individuals, truly cross-checking the procedure before the test results are released to Immigration and the BEEA.

Thank you for your inquiry. If I may be of further assistance, please contact my email account ([gjertson@ucla.edu](mailto:gjertson@ucla.edu)).

Sincerely,

David W. Gjertson, Ph.D.  
Chair, AABB Parentage Program Unit

cc: Legislative Councillor Cyd HO Sau-lan (by email: [cydho@hkstar.com](mailto:cydho@hkstar.com))  
AABB National Office c/o Deborah Butler Newman (by email: [debbien@aabb.org](mailto:debbien@aabb.org))