

# 赴美研習「新浮現與再浮現人畜共通傳染病診斷技術」心得報告

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## 摘要

自98年9月30日至10月31日奉派赴美國疾病管制局進行為期32天的技術研習，研習主題為高病原性家禽流行性感冒、蝙蝠狂犬病及西尼羅熱等人畜共通傳染病診斷技術，順利完成前述新浮現與再浮現人畜共通傳染病診斷技術研習，包括免疫組織化學染色法、原位雜合法、H1N1新型流行性感冒即時反轉錄聚合酶鏈反應、螢光抗體力價檢測及直接快速免疫組織化學染色法等診斷技術，返國後可應用於國家診斷實驗室，執行重大人畜共通傳染病診斷與監測，以防止重要疫病入侵及早期篩檢疫病。另攜帶金門採樣之蝙蝠腦組織核酸及血清樣本60例，送至美國疾病管制局狂犬病診斷實驗室檢測，結果Australian bat lyssavirus抗體，腦組織lyssavirus病毒核酸均陰性，此項檢測成果，可供作臺灣狂犬病非疫區佐證資料，也是臺灣第一份蝙蝠血清及腦組織lyssavirus監測成果，期待爾後臺美之間仍能持續針對野生動物新浮現與再浮現人畜共通傳染病，進行更深入的合作研究。

# **The training report on the diagnosis techniques for emerging and re-emerging zoonoses in USA**

Wei-Cheng Hsu

## **Abstract**

We were dispatched to CDC in Atlanta, USA to learn the diagnosis techniques for zoonoses during September 30 to October 31 in 2009. The training topics including immunohistochemistry methods (IHC), in situ hybridization (ISH), real time RT-PCR for influenza A (H1N1), conjugate titration, direct rapid immunohistochemical test (DRIT). It is aimed to apply above diagnosis techniques to important zoonoses diagnosis and surveillance programs to assist on preventing the invasion of important zoonoses and early screening of important zoonoses. During the training course in CDC, 60 bat sera and RNA extracts of brain from Kinmen island were sent to the rabies diagnostic laboratory to examine the presence of lyssavirus antibody and lyssavirus nucleic acid. Preliminary results showed that neither lyssavirus nucleic acid nor antibody against Australian bat lyssavirus were detected. This is the first surveillance result of lyssavirus on bat in Taiwan and could be used as epidemiology information for rabies free country. We wish that the cooperation program on emerging and re-emerging zoonoses of wildlife between Taiwan and USA would be continuously maintained.