

# 赴日本國立感染症研究所及北里大學進行狂犬病診斷技術

## 與研究交流

疫學研究組

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### 摘要

105 年 7 月 3 日至 16 日赴日本國立感染症研究所（National Institute of Infectious Diseases, NIID）獸醫學部及北里大學（Kitasato University）獸醫系獸醫病理學部進行狂犬病診斷技術與研究交流，行程計 14 天，包含洽談研究合作，初步完成 MOU 與生物材料轉移同意書草稿，可資合作單位進行生物材料分讓，研習安排計有「病毒中和抗體檢測方法 RFFIT」、「狂犬病快速檢測方法，如「RT-LAMP」、「直接快速免疫化學檢測 DRIT」、「即時定量反轉錄酶鏈反應(Real time RT-PCR)」等，還有利用質體免疫法進行狂犬病抗體研製，野生動物疾病與狂犬病監測以及狂犬病病理學分析及致病機轉研究交流，此次研習有助於提升臺灣狂犬病實驗室之檢測技術與研究，透過雙邊互訪可增進診斷技術交流並建立長期研究合作關係；日方擬提出國際合作計畫邀請亞洲國家的狂犬病實驗室透過試驗的能力比對或問題解決經驗分享加強實驗室診斷技術共通性及穩定性，可協助無法付費參加參考實驗室能力比對或尚未具有足夠診斷技術的亞洲國家實驗室加強實驗室診斷能力，並對建構亞洲地區狂犬病區域聯防技術平台有極大助益。

**A report on rabies diagnostic techniques and research  
exchange in National Institute of Infectious Diseases and  
Kitasato University, Japan**

Jen-Chieh Chang, Yang-Chang Tu

**Abstract**

For better understanding of rabies diagnostic techniques and research exchange, AHRI dispatched two staff members to visit Department of Veterinary Science, National Institute of Infectious Diseases (NIID) and Department of Veterinary Pathology, School of Veterinary Medicine, Kitasato University, Japan from July 3 to 16, 2016. The 14-day schedule included discussions of academic cooperation and hand-on experiments of rabies diagnosis. An MOU and a Biological Material Transfer Agreement were drafted by both parties. Techniques including RFFIT, RT-LAMP, DRIT, and real-time RT-PCR were practiced during the visit, and experiences of plasmid immunization, surveillance of wildlife disease and rabies in Japan, and pathological analysis and pathogenesis of rabies were shared by Japanese scientists. Moreover, we also discussed how to improve rabies diagnostic techniques and researches in Taiwan. Both parties agree that bilateral visit is helpful for academic and technical exchanges and will be a great benefit to long-term relationship for academic cooperation. The NIID will apply an international cooperative project and invite rabies laboratories of Asian countries to share the experiences of proficiency test and trouble-shooting for improving the quality of rabies diagnosis. It will be helpful to those Asian laboratories which cannot afford proficiency test hosted by OIE Reference Laboratory or did not have enough diagnostic ability for rabies diagnosis. These activities could be beneficial to establish the rabies prevention and surveillance network in Asia.