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出國報告：赴英國參加口蹄疫診斷技術培訓

新興傳染病組

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摘要

英國 The Pirbright Institute（TPI）所設立之世界口蹄疫參考實驗室，為國際農糧組織（Food and Agriculture Organization of the United Nation；FAO）及世界動物衛生組織（World Organisation for Animal Health；WOAH）指定之國際參考實驗室，長期肩負全球口蹄疫病性鑑定、血清學檢測、分子流行病學分析、檢測技術研發及國際技術支援等重要任務，為全球口蹄疫防疫體系之核心機構。目前我國已建立病毒分離（Virus isolation）、核酸檢測、酵素連結免疫吸附法（Enzyme-linked immunosorbent assay；ELISA）及病毒中和試驗（Virus neutralization test；VNT）等口蹄疫檢驗技術，足以支援現行診斷、監測及既有應變，惟鑑於鄰近區域除持續流行 O 型及 A 型口蹄疫病毒，近期更爆發 SAT1 型疫情，凸顯掌握及精進多血清型別口蹄疫之檢測技術之重要性，透過本次赴英國 TPI 口蹄疫世界參考實驗室研習相關檢測技術，以強化我國面對境外口蹄疫病毒入侵風險之實驗診斷能力。

Report on Participation in Foot and Mouth Disease Diagnostic Techniques Training in the United Kingdom

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Abstract

The World Reference Laboratory for Foot and Mouth Disease (WRLFMD), established at The Pirbright Institute (TPI) in the United Kingdom, is an international reference laboratory of the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (WOAH). It has long been responsible for critical global functions including pathogenic characterization, serological testing, molecular epidemiological analysis, diagnostic assay development, and international technical support for foot and mouth disease (FMD), serving as a core institution in the global FMD control system. Taiwan has established a range of FMD diagnostic methods, including virus isolation, nucleic acid detection, enzyme-linked immunosorbent assay (ELISA), and virus neutralization test (VNT), which are sufficient to support current diagnostic, surveillance, and emergency response needs. However, considering the continued circulation of serotype O and A FMD viruses in neighboring regions, as well as the recent emergence of serotype SAT1 outbreaks, the importance of strengthening diagnostic capabilities for multiple FMD serotypes has become increasingly important. Through this training at the TPI, the laboratory diagnostic capacity for addressing the risk of incursions of exotic FMDV will be strengthened.