# 「赴德國豬瘟診斷參考實驗室訪問及交流」出國報告

#### 豬瘟研究組

張家宜 副研究員

#### 摘要

豬瘟(Classical Swine fever)為豬隻重要傳染病,是由豬瘟病毒 (Classical swine fever virus; CSFV)所引起之高傳染性與高致死性疾 病,一旦爆發疫情常造成重大之經濟損失。本所刻正積極規劃成立世 界動物衛生組織 (World Organization for Animal Health; OIE)豬瘟參 考實驗室,鄧明中副研究員與張家宜副研究員奉派於104年9月5日 至17日赴德國研習,此次研習地點包含德國漢諾威獸醫大學之歐盟 (EU Reference Laboratory; EURL) 暨 OIE 豬瘟參考實驗室及德國 Friedrich-Loeffler-Institut (FLI) 機構之國家豬瘟參考實驗室。研習內 容包含細胞培養、病毒分離與血清學檢測技術,及進一步對本所研發 之豬瘟同步多重螢光標示探針應用於區別不同基因型豬瘟病毒之診 斷技術做測試。經由參訪兩處參考實驗室,對參考實驗室之任務、運 作及作業流程有更深入之瞭解,並藉由此次參訪與兩處參考實驗室建 立合作交流管道,對於本所申請 OIE 參考實驗室助益良多。

# Training visit to reference laboratories for CSF in Germany

## Chia-Yi Chang

### Abstract

Classical swine fever (CSF) is one of the most deadly diseases found in swine. CSF is caused by classical swine fever virus (CSFV), a highly contagious and fatal disease and results in huge economic losses to pig farms worldwide. The Animal Health Research Institute (AHRI) plans on establishing reference laboratories for the OIE (World Organization for Animal Health) for the monitoring of several diseases, including CSF. In light of this preparation, Dr. Deng Ming-Chung and Dr. Chang Chia-Yi were dispatched to visit two reference laboratories specializing in CSF in Germany, the EU-OIE reference laboratory at the University of Veterinary Medicine Hannover, and the national reference laboratory for CSF in in the Friedrich-Loeffler-Institut (FLI), from September 5-17, 2015. During our visit to the EU and OIE reference laboratory for CSF, we practiced the diagnostic methods of cell culture, virus isolation and serological tests. Additionally, we tested the reverse transcription multiplex real-time PCR for the detection and genotyping of CSF developed by the AHRI. By visiting and training in two reference laboratories, we were able to gain more insight into the goals, as well as the day-to-day operations and protocols of these reference laboratories. International cooperation between these two reference laboratories and our institute is now under way and will invaluably contribute to the establishment of an OIE reference laboratory, here in Taiwan.