



黃千衿 Huang, Chienjin

教授

專長：分子病毒學、分子生物學、融合瘤

主要教授課程：

研究所：高等微生物學、高等臨床病毒學、高等
分子生物學、單源抗體技術學、病毒致
病機轉

Tel: 04-22840894 ext. 707

E-mail: cjhuang@dragon.nchu.edu.tw

簡要學經歷及重要榮譽

- 國立中興大學理學士 1984
- 國立中興大學理學碩士 1987
- 美國華盛頓大學哲學博士 1993
- 國立中興大學遺傳工程中心助理員 1984-1988
- 美國華盛頓大學病理生物系研究 1988-1989
- 美國華盛頓大學醫學院微生物系博士後研究 1993-1994
- 國立中興大學獸醫微生物學研究所副教授 1994-2006
- 國立中興大學獸醫微生物學研究所教授 2006-2009
- 國立中興大學微生物暨公共衛生學研究所教授 2009-

研究興趣及成果簡述

研究興趣包括病毒基因表現與致病機制相關研究、快速診斷方法與診斷試劑及遺傳工程疫苗之研發。目前研究成果已針對豬隻多種重要病毒性疾病建立 PCR 快速診斷技術，並建構出假性狂犬病毒基因缺損病毒株及分別製備豬瘟病毒與豬環狀病毒各種有效重組次單位病毒蛋白，可進行疫苗及診斷試劑之開發。

代表著作 (2004-2021)

1. **Huang*, C.**, J.-J. Hung, C.-Y. Wu, and M. S. Chien. 2004. Multiplex PCR for rapid detection of pseudorabies virus, porcine parvovirus and porcine circoviruses. *Veterinary Microbiology* 101: 209-214.
2. Huang, Y.J., M.S. Chien, C.Y. Wu, and **C. Huang***. 2005. Mapping of functional regions conferring nuclear localization and RNA-binding activity of pseudorabies virus early protein UL54. *Journal of Virological Method* 130: 102-107.
3. **Huang*, C.**, M.S. Chien, C.M. Hu, C.W. Chen, and P.C. Hsieh. 2006. Secreted expression of the classical swine fever virus glycoprotein E^{ms} in yeast and application to a sandwich blocking ELISA. *Journal of Virological Methods* 132: 40-47.
4. Wu, P.C., M.S. Chien, Y.Y. Tseng, J. Lin, W.L. Lin, C.Y. Yang, and **C. Huang***. 2008. Expression of

- the porcine circovirus type 2 capsid protein subunits and application to an indirect ELISA. *Journal of Biotechnology* 133: 58-64.
5. Lin, G.J., T.Y. Liu, Y.Y. Tseng, Z.W. Chen, C.C. You, S.L. Hsuan, M.S. Chien, and **C. Huang***. 2009. Yeast-expressed classical swine fever virus glycoprotein E2 induces a protective immune response. *Veterinary Microbiology* 139:369-374.
 6. Wu, C.W., M.S. Chien, T.Y. Liu, G.J. Lin, W.C. Lee, and **C. Huang***. 2011. Characterization of the monoclonal antibody against classical swine fever virus glycoprotein E^{ms} and its application to an indirect sandwich ELISA. *Applied Microbiology and Biotechnology* 92:815-821.
 7. Lin, G.J., M.C. Deng, Z.W. Chen, T.Y. Liu, C.W. Wu, C.Y. Cheng, M.S. Chien, and **C. Huang***. 2012. Yeast-expressed classical swine fever E2 subunit candidate provides complete protection against lethal challenge infection and prevents horizontal virus transmission. *Vaccine* 20:2336-2341.
 8. Wu, P.C., W.L. Lin, C.M. Wu, J.N. Chi, M.S. Chien, and **C. Huang***. 2012. Characterization of porcine circovirus type 2 (PCV2) capsid particle assembly and its application to virus-like particle vaccine development. *Applied Microbiology and Biotechnology* 95:1501-1507.
 9. Wu, C.W., M.S. Chien, and **C. Huang***. 2013. Characterization of the swine U6 promoter for short hairpin RNA expression and its application to inhibition of virus replication. *Journal of Biotechnology* 168:78-84.
 10. Cheng, C.Y., C.W. Wu, G.J. Lin, W.C. Lee, M.S. Chien, and **C. Huang***. 2014. Enhancing expression of the classical swine fever virus glycoprotein E2 in yeast and its application to a blocking ELISA. *Journal of Biotechnology* 174: 1-6.
 11. Chi, J.N., C.Y. Wu, M.S. Chien, P.C. Wu, C.M. Wu, and **C. Huang***. 2014. The preparation of porcine circovirus type 2 (PCV2) virus-like particles using a recombinant pseudorabies virus and its application to vaccine development. *Journal of Biotechnology* 181: 12-19.
 12. Wu, P.C., T.Y. Chen, J.N. Chi, M.S. Chien, and **C. Huang***. 2016. Efficient expression and purification of porcine circovirus type 2 virus-like particles in *Escherichia coli*. *Journal of Biotechnology* 220: 78-85.
 13. Wu, C.Y., C.M. Liao, J.N. Chi, M.S. Chien, and **C. Huang***. 2016. Growth properties and vaccine efficacy of recombinant pseudorabies virus defective in glycoprotein E and thymidine kinase gene. *Journal of Biotechnology* 229: 58-64.
 14. Chi, J.N., C.Y. Wu, P.C. Wu, M.S. Chien, and **C. Huang***. 2016. Production of porcine circovirus type 2 virus-like particles by an attenuated recombinant pseudorabies virus. *Virology & Immunology Journal* 1(1): 000102.
 15. Wu, C.Y., C.W. Wu, C.M. Liao, M.S. Chien, and **C. Huang***. 2017. Enhancing expression of the pseudorabies virus glycoprotein E in yeast and its application in an indirect sandwich ELISA. *Journal of Applied Microbiology* 123: 594-601.
 16. Cheng, C.Y., C.W. Wu, M. S. Chien*, and **C. Huang***. 2019. N-terminus of classical swine fever virus strain TD96 glycoprotein E^{ms} contains a potential heparin-binding domain. *Veterinary Microbiology* 232:79-83.
 17. Wu, C.W., T.Y. Wu, C.J. Kuo, Y.P. Lu, M.S. Chien*, and **C. Huang***. 2020. Characterization of the monoclonal antibody specific to the ORF72 protein of koi herpesvirus and cellular distribution analysis of the viral protein. *Journal of Fish Diseases* 2020;00:1-9.
 18. Chang, C.C., C.W. Wu, Y.C. Chang, C.Y. Wu, M.S. Chien*, and **C. Huang***. 2021. Detection and phylogenetic analysis of porcine circovirus type 3 in Taiwan. *Archives of Virology* 166:259-263.