



王之仰 Wang, Chi-Young

教授

專長：病毒學及禽病學 主要教授課程：

大學部：禽病學、獸醫病毒學、獸醫免疫學、診療實習、動物病毒學實習、獸醫免疫學實習、臨床討論
研究所：分子病毒學、分子免疫學、分子病毒學文獻探討、分子免疫學文獻探討

Tel: 04-22840368-48

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

簡要學經歷

美國奧本大學(Auburn University)哲學博士

馬偕紀念醫院醫學研究部博士後研究員

美國阿拉巴馬大學伯明翰分校(UAB)博士後研究員

國立中興大學教授

國立中興大學動物疾病診斷中心研究員

發表著作網址

<https://orcid.org/0000-0001-5407-3414>

研究興趣

最近的研究主要以動物病毒性疾病的臨床診斷為出發點。針對 BFDV-喙羽病毒、APV-家禽多瘤病毒和家禽冠狀病毒等以結合病毒學、免疫學及實驗動物的方式進行(1)鑑定冠狀病毒蛋白的穿孔素(viroporin)活性，並以動物實驗評估穿孔素拮抗劑的抗病毒成效；(2)病毒組成蛋白功能性分析、3D 結構模擬與細胞素製劑的治療效力評估；(3)單源抗體的生產與免疫診斷的應用；(4)包裹式類病毒顆粒的製程開發。期待以所得到的研究成果精進對病毒性疾病的診斷、治療與預防並有助於增進對動物疾病的了解。

學術服務

Viruses 期刊 (SCI, IF=4.7) (客座主編 guest editor: 2022 Jan-2024 Mar)

Viruses 期刊 (SCI, IF=4.7) (編審諮詢委員 topic advisory panel: 2022 Oct-Now)

摘錄代表著作 (2012 年之後)

1. Tsai, S. M., Liu, H. J., Shien, J. H., Lee, L. H., Chang, P. C., Wang, C. Y.*,
2012. Rapid and sensitive detection of infectious bursal disease virus by

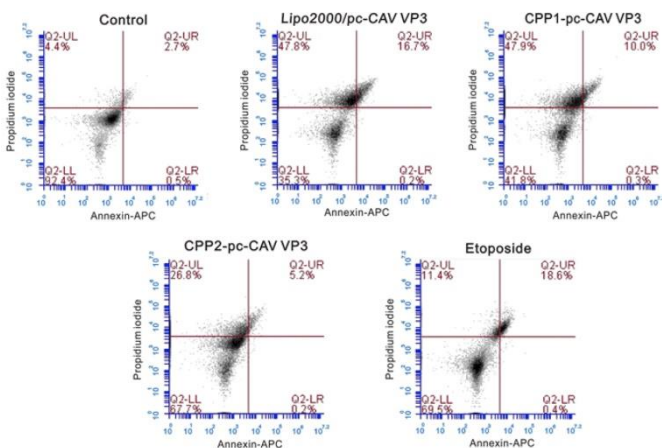
- reverse transcription loop-mediated isothermal amplification combined with a lateral flow dipstick. *Journal of Virological Methods* 181:117-124.
2. Chan, K. W., Liu, P. C., Yang, W. C., Kuo, J., Chang, C. L. T., Wang, C. Y.*, 2012. A novel loop-mediated isothermal amplification approach for sex identification of Colubidae birds. *Theriogenology* 78: 1329-1338.
 4. Ho, C. F., Chan, K. W., Yang, W. C., Chaing, Y. C., Chung, Y. T., Kuo, J., Wang, C. Y.*, 2013. Development of a multiplex amplification refractory mutation system reverse transcription polymerase chain reaction assay for the differential diagnosis of *Feline leukemia virus* vaccine and wild strains. *Journal of Veterinary Diagnostic Investigation* 26(4):496-506.
 5. Huang, S. W., Ho, C. F., Chan, K. W., Cheng, M. C., Shien, J. H., Liu, H. J., Wang, C. Y.*, 2014. The genotyping of Infectious bronchitis virus in Taiwan by a multiplex amplification refractory system reverse transcription polymerase chain reaction. *Journal of Veterinary Diagnostic Investigation* 26(6):721-733.
 6. Lin, F. Y., Tseng, Y. Y., Chan, K. W., Kuo, S. T., Yang, C. H., Wang, C. Y., Takasu, M., Hsu, W. L., Wong, M. L., 2015. Suppression of influenza virus infection by the orf virus isolated in Taiwan. *Journal of Veterinary Medical Sciences* 77(9):1055-1062.
 7. Huang, S. W., Liu, H. P., Chen, J. K., Shien, Y. W., Wong, M. L., Wang, C. Y.*, 2016. Dual ATPase and GTPase activity of the replication-associated protein (Rep) of beak and feather disease virus. *Virus Research* 231: 149-161. (Impact factor: 6.286)
 8. Huang, S. W., Chiang, Y. C., Chin, C. Y., Tang, P. C., Wang, C. Y.*, 2016. The phylogenetic and recombinational analysis of beak and feather disease virus Taiwan isolates. *Archive of Virology* 161: 2969-2988.
 9. Ho, C. F., Huang, S. W., Chan, K. W., Wu, J. S., Chang, S. P., Wang, C. Y.*, 2018. Development of an antigen-capture ELISA for beak and feather disease virus. *Archive of Virology* 163: 145-151.
 10. Chen, J. K., Hsiao, C., Wu, J. S., Lin, S. Y., Wang, C. Y.*, 2019. Characterization of the endonuclease activity of the replication-associated protein of beak and feather disease virus. *Archive of Virology* 164: 20912106.

11. Chen, Y.Y., Yang, W.C., Chang, Y.K., Wang, C.Y., Huang, W.R., Li, J.Y., Chuang, K.P., Wu, H.Y., Tong, D.W., Liu, H.J., 2020. Construction of polycistronic baculovirus surface display vectors to express the PCV2 Cap (d41) protein and analysis of its immunogenicity in mice and swine. *Veterinary Research* 51: 112.
12. Chen, J. K., Hsiao, C., Lo, A. R., Wang, C. Y.*, 2020. Characterization of the nuclear localization sequence of beak and feather disease virus capsid proteins and their assembly into virus-like particles. *Virus Research* 289: 198144. (Impact factor: **5**)
13. Reshi, L., Wang, C. Y., 2020. Andrographolide as a potent and promising antiviral agent. *Chinses Journal of Natural Medicine* 18: 760-769. (Impact factor: **4.6**)
14. Huang, W. R., Li, J. Y., Liao, T. L., Yeh, C. M., Wang, C. Y., Wen, H. W., Hu, N. J., Wu, Y. Y., Hsu, C. Y., Chang, Y. K., Chang, C. D., Nielsen, B. L., Liu, H. J., 2022. Molecular chaperon TRiC governs avian reovirus replication by protecting outer-capsid protein σ C and inner core protein σ A and non-structural σ NS from ubiquitin-proteasome degradation. *Veterinary Microbiology* 264: 109277.
15. Liu, F. L., Chang, S. P., Liu, H. J., Liu, P. C., Wang, C. Y.*, 2022. Genomic and phylogenetic analysis of avian polyomaviruses isolated from parrots in Taiwan. *Virus Research* 308: 198634. (Impact factor: **5**)
16. Chen, R. K., Hsiao, C., Yang, P. Y., Periyasamy, T., Wang, C. Y.*, 2022. Characterization of *Agapornis fischeri* interferon gamma and its activity against beak and feather disease virus. *Virus Research* 308: 198634. (Impact factor: **5**)
17. Hsu, C. Y., Chen, Y. H., Huang, W. R., Huang, J. W., Chen, I. C., Chang, Y. K., Wang, C. Y., Chang, C. D., Liao, T. L., Nielsen, B. L., Liu, H. J., 2022. Oncolytic avian reovirus σ A-modulated fatty acid metabolism through the PSMB6/Akt/SREBP1/acetyl-CoA carboxylase pathway to increase energy production for virus replication. *Veterinary Microbiology* 273: 109545.
18. Wang, C. W., Chen, Y. L., Mao, S. J. T., Lin, T. C., Wu, C. W., Thongchan, D., Wang, C. Y.*, Wu, H. Y., 2022. Pathogenicity of Avian Polyomaviruses and Prospect of Vaccine Development. *Viruses* 14: 2079. (Impact factor: **4.7**)

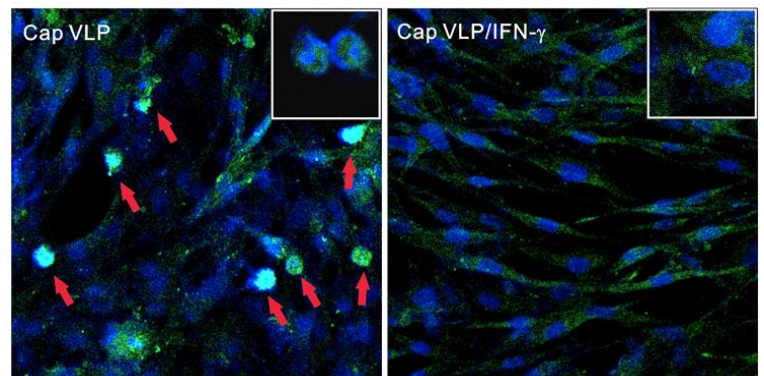
19. Sitinjak, M. C., Chen, J. K., Lee, M. Y., Liu, H. J., Wang, C. Y.*, 2023. Characterization of a novel reporter system for beak and feather disease virus. *Gene* 867: 147371. (Impact factor: **3.913**)
20. Sitinjak, M. C., Chen, J. K., Wang, C. Y.*, 2023. Characterization of novel cell-penetrating peptides derived from the capsid protein of beak and feather disease virus. *Virus Research* 330: 199109. (Impact factor: **5**)
21. Hsu, C. Y., Jang, Y., Huang, J. W., Huang, W. R., Wang, C. Y., Wen, H. W., Tsai, P. C., Yang, C. Y., Munir, M., Liu, H. J., 2023. Development of polycistronic baculovirus surface display vectors to simultaneously express viral proteins of porcine reproductive and respiratory syndrome and analysis of their immunogenicity in mouse and swine. *Vaccines* (accepted). (Impact factor: **7.8**)

專書

Special Issue of “*Viruses*”: "State-of-the-Art Avian Viruses Research in Asia" (2022 Oct) (ISSN 1999-4915). Editor: Chi-Young Wang 主編:王之仰



利用流式細胞儀觀察病毒蛋白導致細胞凋亡的現象
(Adapted from *Virus Research* 330: 199109)



在共軛焦顯微鏡下觀察干擾素- γ 阻止類病毒顆粒的核進入
(Adapted from *Virus Research* 308:198634)

更新日期：2023年10月14日