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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。針對家禽傳染性支氣管病毒(Infectious bronchitis virus)及喙羽病病毒(Beak and feather disease virus)等結合分子病毒學、免疫學、電子顯微鏡及實驗動物的方式進行(1)鑑定 IBV 病毒蛋白的穿孔素(viroporin)活性，並對腸道菌叢(microbiota)進行分析以找出飼料添加物的抗病毒機制; (2)病毒組成蛋白功能性分析、3D 結構模擬與細胞素的抗病毒功效評估; (3)開發包裹式類病毒顆粒作為疫苗的奈米載體; (4)以帶有特殊活性的病毒蛋白於疾病動物模式上進行基因治療。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) (編審諮詢委員 topic advisory panel: 2022 Oct-Now)

摘錄代表著作 (2013 年之後)

1. 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.
2. 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.

3. 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.
4. 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)
5. 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.
6. 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.
7. 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.
8. 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.
9. 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**)
10. 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**)
11. 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 σC and inner core protein σA and non-structural σNS from ubiquitin-proteasome degradation. Veterinary Microbiology 264: 109277.
12. 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**)

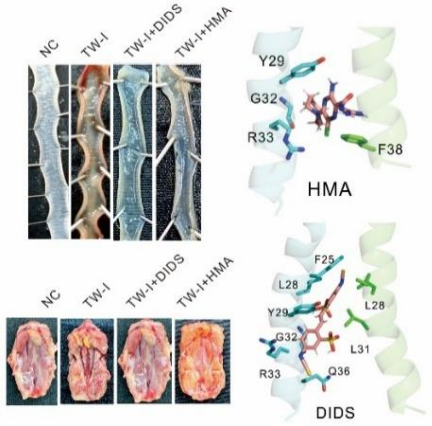
13. Chen, R. K., Hsiao, C., Yang, P. Y., Periyasamy, T., Wang, C. Y.*, 2022. Characterization of *Agapornis fischeri* interferon gamma and its activity against beak and feather disease virus. Virus Research 308: 198634. (Impact factor: **5**)
14. Hsu, C. Y., Chen, Y. H., Huang, W. R., Huang, J. W., Chen, I. C., Chang, Y. K. , Wang, C. Y., Chang, C. D., Liao, T. L., Nielsen, B. L., Liu, H. J., 2022. Oncolytic avian reovirus σA-modulated fatty acid metabolism through the PSMB6/Akt/SREBP1/acetyl-CoA carboxylase pathway to increase energy production for virus replication. Veterinary Microbiology 273: 109545.
15. 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**)
16. 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**)
17. 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**)
18. 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 11:1666. (Impact factor: **7.8**)
19. Chang, Y. K., Lin, Y. J., Cheng, C. Y., Tsai, P. C., Wang, C. Y., Nielsen, B. L., Liu, H. J., 2024. Nucleocytoplasmic shuttling of BEFV M protein-modulated by lamin A/C and chromosome maintenance region 1 through a transcription-, carrier- and energy-dependent pathway. Veterinary Microbiology 291: 110026 (Impact factor: **2.4**)
20. Sitinjak, M. C., Chen, J. K., Liu, F. L., Hou, M. H., Lin, S. M., Liu, H. J., Wang, C. Y.*, 2024. Antiviral effect of the viroporin inhibitors against Taiwan isolates of infectious bronchitis virus (IBV). Virus Research 349: 199458 (Impact factor: **2.5**).
21. Wang, C. Y.*, 2025. Recent advances of avian viruses research. Viruses 17: 99 (Impact factor: **3.8**).
22. Sitinjak, M. C., Chen, J. K., Liu, P. C., Wang, C. Y.*, 2025. Engineering *in vitro*-assembled beak and feather disease virus-like particles loaded with biomolecules. Biochemical and Biophysical Research Communications 759: 151704 (Impact factor: **2.5**).

23. Hsu, C. Y., Li, J. Y., Huang, W. R., Liao, T. L.,Wen, H. W., Wang, C. Y., Lye, L. F., Nielsen, B. L., Liu, H. J., 2025. The oncolytic avian reovirus p17 protein suppresses invadopodia formation via disruption of TKs5 complexes and oncogenic signaling pathways. Frontiers in Cellular and Infection Microbiology 15: 1603124 (Impact factor: 4.**6**).

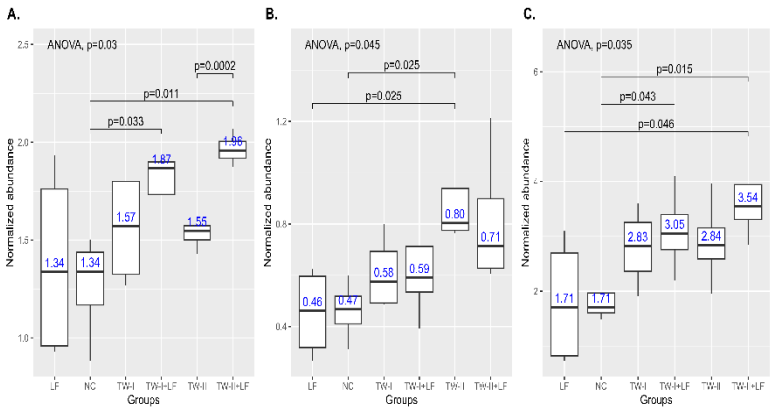
24. Sitinjak, M. C., Chen, J. K., Lee, H. J., Chen, C. M, Wang, C. Y.*, 2026. Antiviral effect of lactoferrin against infectious bronchitis virus (IBV) are associated with alterations in the gastrointestinal microbiome. Poultry Science 105(7): 106995 (Impact factor: 4.**2**; **Q1**).

專書

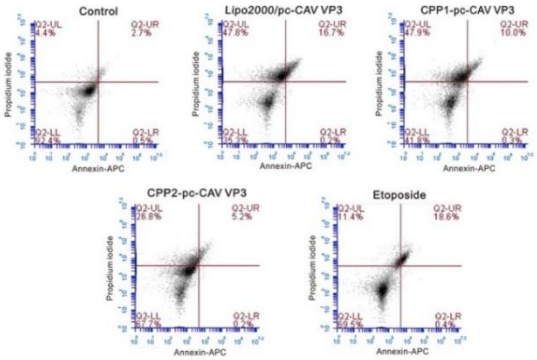
1. Special Issue of "*Viruses*": "State-of-the-Art Avian Viruses Research in Asia"(2022 Oct) (ISBN 978-3-0365-6623-8). Editor: Chi-Young Wang 主編:王之仰
2. Special Issue of "*Viruses*": "Recent Advances of Avian Viruses Research"(2025 Feb) (ISBN 978-3-7258-3348-1). Editor: Chi-Young Wang 主編:王之仰



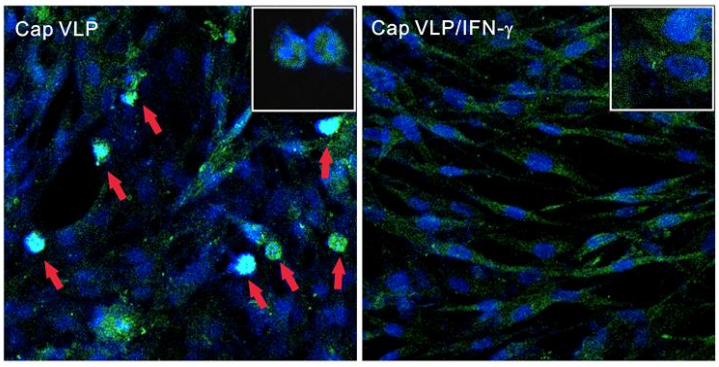
抗家禽傳染性支氣管病毒蛋白活性的效力評估與藥物結合模型
(發表於 *Virus Research 349: 199458*)



乳鐵蛋白調整腸道菌叢所產生的短鏈脂肪酸來抗家禽傳染性支氣管病毒
(發表於 *Poultry science 105: 106995*)



利用流式細胞儀觀察病毒蛋白導致細胞凋亡的現象
(發表於 *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
(發表於 *Virus Research* 308:198634)

(5/6/2026 更新)