



Chang, Poa-Chun

Distinguished Professor

Profession specialty: Molecular Biology, Biochemistry, Microbiology and Biotechnology

Courses taught:

Undergraduate: Veterinary Immunology

Graduate: Advanced Microbiology, Applied Molecular Genetics, Advanced Molecular Biology, Protein Structure and Function

Tel : 04-22840369 ext 56

E-mail : pcchang@mail.nchu.edu.tw

Educational Background

Postdoctoral Fellow, Department of Genetics, Stanford University School of Medicine (1992-1995)

PhD, National Yang Ming Medical University, Biochemistry (1991)

Current Position and Professional Career

Lifetime Distinguished Professor, National Chung Hsing University (since 2018)

Distinguished Professor and Director, Graduate Institute of Microbiology and Public Health, National Chung Hsing University (2009-2018)

Director, Graduate Institute of Veterinary Microbiology, National Chung Hsing University (2005-2008)

Honors

Excellent Professor of Industry-University Cooperation, National Chung Hsing University (2019)

Technology Transfer Award, National Chung Hsing University (2008)

Research Award, National Chung Hsing University (2003)

Publication (since 2015)

1. D.-H. Tan, Y.-S. Gong, S.-C. Ou, C.-Y. Yang, J.-H. Shien, Y.-C. Pang, **P.-C. Chang*** (2021, Sep). Relationship between the serotypes and hemagglutinin gene sequences of *Avibacterium paragallinarum*. *Avian Diseases*. In press. (SCIE, 43/141, VETERINARY SCIENCES). MOST 109-2313-B-005 -011.
2. D.-H. Tan, S.-C. Ou, J.-H. Shien, S.-W. Huang, M.-K. Hsieh, **P.-C. Chang*** (2020, Jun). Serotypes and hemagglutinin gene sequences of *Avibacterium paragallinarum* isolated in Taiwan. *Avian Diseases*. 64:197-202 (SCIE, 43/141, VETERINARY SCIENCES). MOST 106-2313-B-005-051-MY3.
3. T.-Y. Tseng, Y.-C. Liu, Y.-C. Hsu, **P.-C. Chang**, M.-K. Hsieh, J.-H. Shien, S.-C. Ou*. (2019, Nov). Preparation of Chicken Anemia Virus (CAV) Virus-Like Particles and Chicken Interleukin-12 for Vaccine Development Using a Baculovirus Expression System. *Pathogens*, 8(4). pii: E262. doi: 10.3390/pathogens8040262. (SCIE, 65/135, MICROBIOLOGY).
4. S.-Y. Liu, K.-P. Li, M.-K. Hsieh, **P.-C. Chang**, J.-H. Shien, S.-C. Ou* (2019, Sep). Prevalence and Genotyping of *Chlamydia psittaci* from Domestic Waterfowl, Companion Birds, and Wild Birds in

- Taiwan. *Vector Borne Zoonotic Dis*, 9(9), 666-673. (SCIE, 95/193, PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH).
5. C.-W. Lin, M.-C. Cheng, S.-Y. Lin, S.-H. Hung, S.-Y. Jhang, C.-W. Chang, **P.-C. Chang**, Y.-C. Hu* (2018, Oct). Hybrid baculovirus-mediated prolonged hemagglutinin expression and secretion in vivo enhances the vaccine efficacy. *Journal of the Taiwan Institute of Chemical Engineers*, 91, 47-56. (SCIE, 27/138, ENGINEERING, CHEMICAL).
 6. C.-C. Liu, S.-C. Ou, D.-H. Tan, M.-K. Hsieh, **P.-C. Chang*** (2018, Mar). Length of poly-cytidine repeats controls the phase-variable expression of the fimbrial protein in *Avibacterium paragallinarum*. *Taiwan Veterinary Journal*, 44(1): 27-32. MOST 106-2313-B-005-051-MY3. K.-P. Li, **P.-C. Chang**, M.-C. Cheng, D.-H. Tan, L.-H. Chen, Y.-P. Liu, Y.-J. Lin, H.-J. Tsai, J.-H. Shien* (2017, Jan). Sequence diversity and associated pathogenicity of the hemagglutinin cleavage site of H5N2 avian influenza viruses isolated from chickens in Taiwan during 2013–2015. *Journal of Veterinary Medical Science*, 79(1):108-114. (SCIE, 77/141, VETERINARY SCIENCES).
 7. C.-C. Liu, S.-C. Ou, D.-H. Tan, M.-K. Hsieh, J.-H. Shien, **P.-C. Chang*** (2016, Sep). The fimbrial protein is a virulence factor and potential vaccine antigen of *Avibacterium paragallinarum*. *Avian Diseases*, 60(3), 649-655. (SCIE, 43/141, VETERINARY SCIENCES). MOST 103-2313-B-005-041-MY3.
 8. K.-P. Li, S.-C. Ou, J.-H. Shien, **P.-C. Chang*** (2015, Dec). Detection and differentiation of the vaccine strain and field isolates of duck hepatitis A virus type 1 using real-time RT-PCR and high resolution melting assays. *Taiwan Veterinary Journal*, 41(4), 229-235.
 9. T.-Y. Yen, K.-P. Li, S.-C. Ou, J.-H. Shien, **P.-C. Chang*** (2015, Jun). The white Roman goose as host for infection and viral shedding of Muscovy duck parvovirus. *Taiwan Veterinary journal*, 41(2), 85-89. 本人為通訊作者。
 10. T.-Y. Yen, K.-P. Li, S.-C. Ou, J.-H. Shien, H.-M. Lu, **P.-C. Chang*** (2015, Apr). Construction of an infectious plasmid clone of Muscovy duck parvovirus by TA-cloning and creation of a partially attenuated strain. *Avian Pathology*, 44(2):124-128. (SCIE, 13/141, VETERINARY SCIENCES).
 11. C.-H. Yang, D.-H. Tan, T.-T. Jong, C.-L. Wen, S.-L. Hsu, **P.-C. Chang*** (2015, Mar). In vitro anti-viral activity of ethanol extract from *Ixeris chinensis* against influenza virus. *Taiwan Veterinary Journal*, 41(1), 11-19.
 12. T.-Y. Tu, M.-K. Hsieh, D.-H. Tan, S.-C. Ou, J.-H. Shien, T.-Y. Yen, **P.-C. Chang*** (2015, Mar). Loss of the capsule increases the adherence activity but decreases the virulence of *Avibacterium paragallinarum*. *Avian Diseases*, 59(1), 87-93. (SCIE, 43/141, VETERINARY SCIENCES). MOST 103-2313-B-005-041-MY3.

Technology transfers

1. Monoclonal antibody against avian influenza virus of the H5 subtype
2. Recombinant subunit vaccine for the control of fowl cholera
3. Recombinant subunit vaccine for the control of infectious coryza