



Chang, Poa-Chun

Lifetime Distinguished Professor

Research Interests: Vaccinology, Bacteriology, and Biotechnology

Courses Taught: Advanced Microbiology, Applied Molecular Genetics, Advanced Molecular Biology, Protein Structure and Function, Advanced Vaccinology

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Educational Background

1. Postdoctoral Fellow, Department of Genetics, Stanford University School of Medicine (1992-1995)
2. PhD, National Yang Ming Medical University, Biochemistry (1991)

Professional Career

1. Lifetime Distinguished Professor, National Chung Hsing University (since 2018)
2. Distinguished Professor and Director, Graduate Institute of Microbiology and Public Health, National Chung Hsing University (2009-2018)
3. Director, Graduate Institute of Veterinary Microbiology, National Chung Hsing University (2005-2008)

Honors

1. Excellent Professor of Industry-University Cooperation. National Chung Hsing University (2019-2022)
2. Ministry of Science and Technology Outstanding Technology Transfer Contribution Award (2021)

Selected Publications

1. K.-P. Li, D.-H. Tan, S.-J. Ou, Y.-S. Gong, J.-H. Shien, P.-C. Chang*. 2023. Regions Important for Hemagglutination Activity and Serotypes of Avibacterium paragallinarum HMTp210 Protein. Avian Diseases. 67(2), 153-159. (SCIE, 43/141, VETERINARY SCIENCES). MOST 110-2313-B-005-039 and 111-2313-B-005-044
2. C.-H. Lai, Y.-S. Lin, C.-M. Wang, P.-C. Chang, Y.-W. Shia*. 2023. A Novel 16S rRNA PCR-Restriction Fragment Length Polymorphism Assay to Accurately Distinguish Zoonotic Capnocytophaga canimorsus and C. cynodegmi. Microbiol Spectr. 11(3):e0291622.

3. 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*. 65(3), 339-334. (SCIE, 43/141, VETERINARY SCIENCES). MOST 109-2313-B-005 -011.
4. 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.
5. 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).
6. 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).
7. 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).
8. C.-C. Liu, S.-C. Ou, D.-H. Tan, M.-K. Hsieh, P.-C. Chang* (2018, Mar). Length of polycytidine 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.
9. 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).
10. 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.

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