



MING-KUN HSIEH

Associate Professor

Research Interests: Poultry diseases,
Poultry vaccines,
Pathogen detection

Courses Taught: Poultry diseases,
Veterinary immunology,
Advanced microbiology,
Advanced Vaccine Technology

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Educational Background

Ph.D. Purdue University, School of Veterinary Medicine, Department of Comparative Pathobiology, West Lafayette, IN, USA

M.S. University of Nebraska-Lincoln, Department of Veterinary and Biomedical Science, Lincoln, NE, USA

B.S. National Chung Hsin University, Department of Veterinary Medicine, Taichung, Taiwan

Professional Career

Associate Professor, Graduate Institute of Microbiology and Public Health, College of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan

Assistant Professor, Graduate Institute of Microbiology and Public Health, College of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan

Postdoctoral, Dept. of Comparative Pathobiology, School of Veterinary Medicine, Purdue University, and Animal Disease Diagnostic Laboratory, West Lafayette, IN

Technician, Animal Disease Diagnostic Laboratory, West Lafayette, IN

Veterinarian, Te-Yih Pet Hospital, Taipei, Taiwan

Selected Publications

(Journals)

- Effects of Temperature on the Pharmacokinetics, Optimal Dosage, Tissue Residue, and Withdrawal Time of Florfenicol in Asian Seabass (*Lates calcarifer*). Rairat T, Hsieh MK, Ho WC, Lu YP, Fu ZY, Chuchird N, Chou CC. Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2023 Feb; 40(2):235-246.
- Effects of Starvation on the Pharmacokinetics and Optimal Dosages of Florfenicol and Associated Serum Biochemistry in Asian Seabass (*Lates calcarifer*). Rairat T, Hsieh MK, Lu YP, Ho WC, Wu HC, Chou CC. J Vet Pharmacol Ther. 2023 Mar;46(2):136-143.
- Electromagnetic Force-Driven Needle-Free in Ovo Injection Device. Huang KJ, Li CH, Tsai PK, Lai CC, Kuo YR, Hsieh MK, Cheng CW. Vet Sci. 2022 Mar 21;9(3):147.

- Antiviral Properties of *Pennisetum purpureum* Extract against Coronaviruses and Enteroviruses. Chen YN, Kao WMW, Lee SC, Wu JM, Ho YS, Hsieh MK. *Pathogens*. 2022 Nov 17;11(11):1371.
- Capsaicin Exerts Therapeutic Effects by Targeting tNOX-SIRT1 Axis and Augmenting ROS-Dependent Autophagy in Melanoma Cancer Cells. Islam A, Hsieh PF, Liu PF, Chou JC, Liao JW, Hsieh MK, Chueh PJ. *Am J Cancer Res*. 2021 Sep 15;11(9):4199-4219.
- 1-Nitropyrene Induced Reactive Oxygen Species-Mediated Apoptosis in Macrophages through AIF Nuclear Translocation and AMPK/Nrf-2/HO-1 Pathway Activation. Su CH, Ho YC, Lee MW, Tseng CC, Lee SS, Hsieh MK, Chen HH, Lee CY, Wu SW, Kuan YH. *Oxid Med Cell Longev*. 2021 Jul 13;2021:9314342.
- The Impacts of Reassortant Avian Influenza H5N2 Virus NS1 Proteins on Viral Compatibility and Regulation of Immune Responses. Wang WC, Kuan CY, Tseng YJ, Chang CH, Liu YC, Chang YC, Hsu YC, Hsieh MK, Ou SC, Hsu WL. *Front Microbiol*. 2020 Mar 12;11:280.
- Prevalence and Genotyping of *Chlamydia psittaci* from Domestic Waterfowl, Companion Birds, and Wild Birds in Taiwan. Liu SY, Li KP, Hsieh MK, Chang PC, Shien JH, Ou SC. *Vector Borne Zoonotic Dis*. 2019 Sep;19(9):666-673.
- Preparation of Chicken Anemia Virus (CAV) Virus-Like Particles and Chicken Interleukin-12 for Vaccine Development Using a Baculovirus Expression System. Tseng TY, Liu YC, Hsu YC, Chang PC, Hsieh MK, Shien JH, Ou SC. *Pathogens*. 2019 Nov 23; 8(4):262.
- Immune Response Evoked by Tumor-associated NADH Oxidase (tNOX) Confers Potential Inhibitory Effect on Lung Carcinoma in A Mouse Model. Pei-Fang Hsieh PF, Chueh PJ, Liu PF, Liao JW, Hsieh MK. *Am J Cancer Res*. 2019 Apr 1; 9(4):740-751.
- Identification and Characterization of Infectious Bursal Disease Virus Subviral Particles by Capillary Zone Electrophoresis: Potential Application for Vaccine Production and Quality Control. Hsieh MK, Sung CH, Hsieh PF, Hsiao PF, Wu PY, Chou CC. *Poult Sci*. 2019 Apr 1; 98(4):1658-1663.
- Reduced Resident Time and Tissue Residues of Synergistic Florfenicol-Thiamphenicol Combination in Leghorn Chickens. Rairat T, Hsieh MK, Vickroy TW, Chou CC. *Pak Vet J*. 2019; 39(02):310-312.
- Length of Poly-cytidine Repeats Controls the Phase-Variable Expression of The Fimbrial Protein in *Avibacterium Paragallinarum*. Liu CC, Ou SC, Tan DH, Hsieh MK, Chang PC. *Taiwan Vet. J*. 2018. 44 (1) 27–32.

(Books)

- Yi Ning Chen, Mohamed Abdelwahab, Chien Chang Loa, Ming-Kun Hsieh, Ching Ching Wu, and Tsang Long Lin (2022). Antibody-Capture Enzyme-Linked Immunosorbent Assay for Detecting Protective Antibodies to Turkey Coronavirus Based on Recombinant Spike Protein Segment with Neutralizing Epitope. In Leyi Wang (Ed.), *Animal Coronaviruses* (Springer Protocols Handbooks). (pp. 185-195) New York, NY: Humana Press Inc.