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### EDUCATION

Ph.D. Veterinary Medicine, Huazhong Agricultural University, Wuhan, China, 9/1997 – 6/2002  
B.S. Animal Sciences, Huazhong Agricultural University, Wuhan, China, 9/1993 – 6/1997

### PROFESSIONAL EXPERIENCE

Postdoctoral Associate, College of Veterinary Medicine, Kansas State University, Manhattan, KS, 10/2004 – 4/2007

### TEACHING COURSES

Virology.  
Zoonosis.

### RESEARCH INTERESTS

I , Molecular biology and molecular pathogenesis of animal herpesviruses, such as pseudorabies virus (PRV), Bovine herpesvirus 1 (BHV-1) and Bovine herpesvirus 5 (BHV-5).

II , Intracellular survival and replication of *Brucella melitensis*.

III, Develop vaccines and diagnostic methods for PRV, swine hepatitis E virus (swine HEV), and canine parvovirus 2 (CPV2) .

### SELECTED PUBLICATIONS

(1) Zhang Wen-Jing, Wang Ren-Qi, Li Lin-Tao, Fu Wen, Chen Huan-Chun, **Liu Zheng-Fei\***. Hsp90 is involved in pseudorabies virus virion assembly via stabilizing major capsid protein VP5. *Virology*. 2021, 553:70-80.

(2) Zhang Ya-Shu#, Liu Si-Si#, Jiang Hui#, Deng Hui, Xiao Shao-Bo, **Liu Zheng-Fei\***, Wei Deng-Guo\*. G2-quadruplex in the 3'UTR of IE180 regulates Pseudorabies Virus replication by enhancing gene expression. *RNA Biology*. 2020, 17(6):816-827.

(3) Yan Kai, Liu Jie, Guan Xiang, Yin Yi-Xin, Peng Hui, Chen Huanchun, and **Liu Zheng-Fei\***. The carboxyl terminus of tegument protein pUL21 contributes to pseudorabies virus neuroinvasion. *Journal of Virology*. 2019, 93(7):e02052.1.

- (4) Liu Fang, Zheng Ke, Chen Huan-Chun, **Liu Zheng-Fei\***. Capping-RACE: a simple, accurate, and sensitive 5' RACE method for use in prokaryotes. *Nucleic Acids Research*. 2018, 46(21): e129.
- (5) Wu Chang-Xian, **Liu Zheng-Fei\***. Proteomic profiling of sweat exosome suggests its involvement in skin immunity. *Journal of Investigative Dermatology*. 2018, 138(1): 89-97.
- (6) Zheng Ke, Wang Yang, Li Na, Jiang Fang-Fang, Wu Chang-Xian, Liu Fang, Chen Huan-Chun, **Liu Zheng-Fei\***. Highly efficient base editing in bacteria using a Cas9-cytidine deaminase fusion. *Communications Biology*. 2018, 1: 32.
- (7) Ahmed Waqas, **Liu Zheng-Fei\***. Long non-coding RNAs: novel players in regulation of immune response upon herpesvirus infection. *Frontiers in Immunology*. 2018, 9:761.
- (8) Wang Xin, Zhang Mei-Mei, Yan Kai, Tang Qi, Wu Yi-Quan, He Wen-Bo, Chen Huan-Chun, **Liu Zheng-Fei\***. The full-length microRNA cluster in the intron of large latency transcript is associated with the virulence of pseudorabies virus. *Virology*. 2018, 520:59-66.
- (9) Guan Xiang, Liu Jie, Jiang Hui, Wu Chang-Xian, Chen Huan-Chun, **Liu Zheng-Fei\***. Expression of pseudorabies virus-encoded long noncoding RNAs in epithelial cells and neurons. *Journal of NeuroVirology*. 2018, 24(5): 597–605.
- (10) Ahmed Waqas, Zheng Ke, Wu Chang-Xian, **Liu Zheng-Fei\***. Small non-coding RNA AbcR1 address multiple target mRNAs from transcriptional factor and two component response regulator of *Brucella melitensis*. *Jundishapur Journal of Microbiology*. 2018, 11(1): e60269.
- (11) Wang Xin, Wu Chang-Xian, Song Xian-Rong, Chen Huan-Chun, **Liu Zheng-Fei\***. Comparison of pseudorabies virus China reference strain with emerging variants reveals independent virus evolution within specific geographic regions. *Virology*. 2017, 506: 92-98.
- (12) Ahmed Waqas, Zheng Keng and **Liu Zheng-Fei\***. Small non-coding RNAs: new insights in modulation of host immune response by intracellular bacterial pathogens. *Frontiers in Immunology*. 2016, 7:431.
- (13) Ahmed Waqas, Zheng Ke and **Liu Zheng-Fei\***. Establishment of chronic infection: *Brucella*'s stealth strategy. *Frontiers in Cellular and Infection Microbiology*. 2016, 6: 30.
- (14) Wu Chang-Xian<sup>#</sup>, Xu Xian-Jin<sup>#</sup>, Zheng Ke, Liu Fang, Yang Xu-Dong, Chen Chuang-Fu, Chen Huan-Chun, **Liu Zheng-Fei\***. Characterization of ribonuclease III from *Brucella*. *Gene*. 2016, 579(2): 183-192.
- (15) Hu Rui-Ming, Zhou Qing, Song Wen-Bo, Sun Er-Chao, Zhang Mei-Mei, He Qi-Gai, Chen Huan-Chun, Wu Bin\*, **Liu Zheng-Fei\***. Novel pseudorabies virus variant with defects in TK, gE and gI protects growing pigs against lethal challenge. *Vaccine*. 2015, 33(43): 5733-5740.
- (16) Yao Lan<sup>#</sup>, Wu Chang-Xian<sup>#</sup>, Zheng Ke, Xu Xian-Jin, Zhang Hui, Chen Chuang-Fu, **Liu Zheng-Fei\***. Immunogenic response to a recombinant pseudorabies virus carrying bp26 gene of *Brucella melitensis* in mice. *Research in Veterinary Science*. 2015, 100: 61-67.
- (17) Tang Qi<sup>#</sup>, Wu Yi-Quan<sup>#</sup>, Chen Dong-Sheng, Zhou Qing, Chen Huan-Chun, and **Liu Zheng-Fei\***. Bovine herpesvirus 5 encodes a unique pattern of microRNAs compared with *Bovine herpesvirus 1*. *Journal of General Virology*. 2014, 95(3): 671-678.
- (18) Wu Yi-Quan<sup>#</sup>, Chen Di-Jun<sup>#</sup>, He Hua-Bin<sup>#</sup>, Chen Dong-Sheng, Chen Ling-Ling, Chen Huan-Chun, **Liu Zheng-Fei\***. Pseudorabies virus infected porcine epithelial cell line generates a diverse set of host microRNAs and a special cluster of viral microRNAs. *PLoS ONE*. 2012, 7(1): : e30988.

- (19) Zheng Ke<sup>#</sup>, Chen Dong-Sheng<sup>#</sup>, Wu Yi-Quan, Xu Xian-Jin, Zhang Hui, Chen Chuang-Fu, Chen Huan-Chun, **Liu Zheng-Fei\***. MicroRNA expression profile in RAW264.7 cells in response to *Brucella melitensis* infection. *International Journal of Biological Sciences*. 2012; 8(7): 1013- 1022.
- (20) Fan Qiang, Yao Lan, Ding Ming, Wang Dan-Jing, Chen Huan-Chun, and **Liu Zheng-Fei\***. Development of latex agglutination test for rapid detection of antibodies against *Bovine herpesvirus 1* and *Bovineherpesvirus 5* in cattle. *Journal of Veterinary Diagnostic Investigation*. 2012, 24(6): 1162-1165.
- (21) Zhang Hou-Yong<sup>#</sup>, Chen Dong-Sheng<sup>#</sup>, Wu Yi-Quan, He Qi-Gai, Chen Huan-Chun, and **Liu Zheng-Fei\***. Both swine and human cells are capable to support the replication of swine hepatitis E virus type 4 in vitro. *Virus Research*. 2011, 158: 289-293.
- (22) **Liu ZF**, Brum MCS, Doster A, Jones C, and Chowdhury SI\*. A Bovine herpesvirus type 1 (BHV-1) mutant virus specifying a carboxyl terminal truncation of glycoprotein E (gE) is defective in anterograde neuronal transport in rabbits and calves. *Journal of Virology*. 2008, 82(15): 7432-7442.