



Shin, Dai-Lun. Ph.D.

Assistant Professor

Research Interests: Poultry diseases, Veterinary virology, Viral vector vaccine development, 3D cultures, Laboratory animals.

Courses Taught: Poultry diseases.

Tel: 04-22840368 ext 58

E-mail: dls@nchu.edu.tw

Educational Background

2000–2006 Bachelor of Veterinary Medicine, National Chung-Hsing University, Taiwan

2006–2008 Master of Veterinary Medicine, National Chung-Hsing University, Taiwan

2012–2015 Ph. D., University of Veterinary Medicine Hannover, Germany
Helmholtz Centre for Infection Research, Germany

Professional Career

2015-2016 Guest scientist,

Infection Genetics, Helmholtz Centre for Infection Research, Germany

2017-2022 **Postdoctoral Scientist & Veterinarian,**

Institute of Virology & Institute for Microbiology, University of Veterinary Medicine Hannover, Germany

2020-2022 **Research Faculty: Scientist & Veterinarian**

Research Center for Emerging Infections and Zoonoses Medicine Hannover.
University of Veterinary Medicine Hannover, Germany

Honors

2012 Studying Abroad Scholarship from Ministry of Education, Taiwan

Selected Publications 2013-2021

1. **Shin DL**, Siebert U, Lakemeyer J, Grilo M, Pawliczka I, Wu NH, Valentin-Weigand P, Haas L, Herrler G. A Highly Pathogenic Avian Influenza Virus (H5N8) isolated from a Baltic Grey Seal. *Emerging Infectious Diseases*. 2019 Dec;25(12):2295-2298. DOI: 10.3201/eid2512.181472 (SCI Impact factor: **16.126**, 2021; *Infectious Diseases* 9/94, 9.57%).
2. **Shin DL**, Chludzinski E, Wu NH, Peng JY, Ciurkiewicz M, Sawatsky B, Pfaller CK, Baechlein C, von Messling V, Haas L, Beineke A, Herrler G. Overcoming the Barrier of the Respiratory

Epithelium During Canine Distemper Virus Infection. *mBio*. 2022 Jan-Feb; 13(1): e03043-21. (SCI Impact factor: **7.786**, 2021; Microbiology 22/136, 16.17%).

3. Meyer zu Natrup C, Tscherne A, Dahlke C, Ciurkiewicz M, **Shin DL**, Fathi A, Rohde C, Kalodimou G, Halwe S, Limpinsel L, Schwarz JH, Klug M, Esen M, Schneiderhan-Marra N, Dulovic A, Kupke A, Brosinski K, Clever S, Schünemann LM, Beythien G, Armando F, Mayer L, Weskamm LM, Jany S, Freudenstein A, Tuchel T, Baumgärtner W, Kreamsner P, Fendel R, Addo MM, Becker S, Sutter G, Volz A. Stabilized SARS-CoV-2 Spike Antigen Enhances Vaccinia Virus MVA Vector Vaccine Immunogenicity and Protective Capacity. *JCI*. 2022 Dec; 132(24):e159895 (SCI Impact factor: **19.456**, 2021, Medicine, Research & Experimental 2/139, 1.43%).
4. **Shin DL**, Siebert U, Haas L, Valentin-Weigand P, Herrler G, Wu NH. Primary Harbour Seal (*Phoca vitulina*) Airway Epithelial Cells Show High Susceptibility to Infection by a Seal-Derived Influenza A Virus (H5N8). *Transbound Emerg Dis*. 2022 May 3. doi: 10.1111/tbed.14580. (SCI Impact factor: **4.521**, 2021; Veterinary Sciences 7/144, 4.86%).
5. **Shin DL**, Yang W, Peng JY, Sawatsky B, von Messling V, Herrler G, Wu NH. Avian Influenza A Virus Infects Swine Airway Epithelial Cells Without Prior Adaptation. *Viruses*. 2020 May 28;12(6): E589. DOI: 10.3390/v12060589 (SCI Impact factor: **5.818**, 2021; Virology 14/37, 37.83%).
6. Bošnjak B, Odak I, Barros-Martins J, Sandrock I, Hammerschmidt SI, Permanyer M, Patzer GE, Greorgiev H, Jauregui RG, Tscherne A, Schwarz JH, Kalodimou G, Ssebyatika G, Ciurkiewicz M, Willenzon S, Bubke A, Ristenpart J, Ritter C, Tuchel T, Meyer zu Natrup C, **Shin DL**, Clever S, Limpinsel L, Baumgärtner W, Krey T, Volz A, Sutter G, and Förster R. Intranasal Delivery of MVA Vector Vaccine Induces Effective Pulmonary Immunity Against SARS-CoV-2 in Rodents. *Frontier Immunology*. 2021 12:772240. doi:10.3389/fimmu.2021.772240. (SCI Impact factor: **8.786**, 2021; Immunology 33/161, 20.49%).
7. Peng JY, **Shin DL**, Li GX, Wu NH, Herrler G. Time-Dependent Viral Interference Between Influenza Virus and Coronavirus in the Infection of Differentiated Porcine Airway Epithelial Cells. *Virulence*, 12:1, 1111-1121, DOI: 10.1080/21505594.2021.1911148 (SCI Impact factor: **5.428**, 2021; Microbiology 43/137, 31.38%).
8. Peng JY, Punyadarsaniya D, **Shin DL**, Pavasutthipaisit S, Beineke A, Li GX, Wu NH, Herrler G. The Cell Tropism of Porcine Respiratory Coronavirus for Airway Epithelial Cells Is Determined by the Expression of Porcine Aminopeptidase N. *Viruses*. 2020, 12, 1211; doi:10.3390/v12111211 (SCI Impact factor: **5.818**, 2021; Virology 14/37, 37.831%).
9. Chludzinski E, Klemens J, Ciurkiewicz M, Geffers R, Pöpperl P, Stoff M, **Shin DL**, Herrler G, Beineke A. Phenotypic and Transcriptional Changes of Pulmonary Immune Responses in Dogs Following Canine Distemper Virus Infection. *Int J Mol Sci*. 2022 Sep 2;23(17):10019. doi: 10.3390/ijms231710019. (SCI Impact factor: **6.208**, 2021; Biochemistry & Molecular Biology 69/296, 23.31%)
10. **Shin DL**, Hatesuer B, Bergmann S, Nedelko T, Schughart K. Protection from Severe Influenza Virus Infections in Mice Carrying the *Mx1* Influenza Virus Resistance Gene Strongly Depends on

Genetic Background. *J Virol*. 2015 Oct;89(19):9998-10009. DOI: 10.1128/JVI.01305-15. Epub 2015 Jul 22 (SCI Impact factor: **6.549**, 2021; Virology 11/37, 29.73%).

11. **Shin DL**, Pandey AK, Ziebarth JD, Mulligan MK, Williams RW, Geffers R, Hatesuer B, Schughart K, Wilk E. Segregation of a Spontaneous *Klrkl1* (CD94) Mutation in DBA/2 Mouse Substrains. *G3 (Bethesda)*. 2015 May;5(2):235-9. DOI: 10.1534/g3.114.015164 (SCI Impact factor: **3.542**, 2021; Genetics & Heredity 86/175, 40.36%).
12. Dengler L, Kühn N, **Shin DL**, Hatesuer B, Schughart K, Wilk E. Cellular Changes in Blood Indicate Severe Respiratory Disease During Influenza Infections in Mice. *PLoS One*. 2014 Jul 24;9(7):e103149. DOI: 10.1371/journal.pone.0103149. eCollection 2014 (SCI Impact factor: **3.752**, 2021; Multidisciplinary Sciences 29/74, 39.19%).