SIWEN LONG

0767056310

siwen.long@ki.se

Stockholm, SE-11364

Awards

- 2019 Excellent Graduate
- 2017 Excellent Postgraduate
- 2016 Excellent Postgraduate; The second one in talent show.
- 2015 Excellent Prize in Academic Performance Award
- 2014 Second Prize in Academic Performance Award; Excellent Student Award
- 2013 Excellent Student Award
- 2012 Excellence award in Karaoke competition and the 8th campus singer competition

Scholarship & grant

- CSC Scholarship (CSC No: 201906760008)
- Karolinska Institutet Research Grant – Virus Research (2021-00176)
- Karolinska Institutet Research Grant – Virus Research (2023-00395)

Language

Chinese: Native

English: IELTS 7.0

Summary

Experienced professional with a strong background in molecular virology, specializing in viral-host interactions. Proven ability to manage projects, collaborate with cross-disciplinary teams, and advance research goals. Seeking a postdoctoral position to apply my expertise and contribute to gene editing and immunotherapy.

Education

PhD | Department of Microbiology, Tumor and Cell Biology
karolinaks Institutet
expected in April 2025

Master | Preventive Veterinary Medicine
Huazhong Agriculture University
June 2019

Bachelor | Animal Science
Huazhong Agriculture University
June 2016

Skills

- Cell Culture
- Virus Infection and Titration
- Molecular Cloning
- CRISPR-Cas9 Genome Editing
- Lentiviral Packaging
- Protein-Protein Interaction Assays
- Western Blotting
- Protein Purification and LLPS
- Fluorescence Microscopy
- Transmisson Electron Microscopy
- Dual Luciferase Assays
- Flow Cytometry
- Bioinformatics Skills for RNA-seq

Conferences

- Nobel Symposium, Medicne (May 22-25, 2022)
- RNA Granules 2023 (October 9-11, 2023)
- Nordic HIV & Virology Conference 2024
- Positive Strand RNA Viruses: Interdisciplinary Advances in Virology, Pathogenesis, Immunology, and Technology (2024)

Publications

1. **Long, S**., Guzyk, M., Perez Vidakovics, L., Han, X., Sun, R., Wang, M., Panas, M. D., Urgard, E., Coquet, J. M., Merits, A., Achour, A., & McInerney, G. M. (2024). SARS-CoV-2 N protein recruits G3BP to double membrane vesicles to promote translation of viral mRNAs. Nature communications, 15(1), 10607.
2. Jing, X., Wu, J., Dong, C., Gao, J., Seki, T., Kim, C., Urgard, E., Hosaka, K., Yang, Y., **Long, S**., Huang, P., Zheng, J., Szekely, L., Zhang, Y., Tao, W., Coquet, J., Ge, M., Chen, Y., Adner, M., & Cao, Y. (2022). COVID-19 instigates adipose browning and atrophy through VEGF in small mammals. Nature metabolism, 4(12), 1674–1683.
3. Rani, R., **Long, S**., Pareek, A., Dhaka, P., Singh, A., Kumar, P., McInerney, G., & Tomar, S. (2022). Multi-target direct-acting SARS-CoV-2 antivirals against the nucleotide-binding pockets of virus-specific proteins. Virology, 577, 1–15.
4. Ke, W., Zhou, Y., Lai, Y., **Long, S**., Fang, L., & Xiao, S. (2022). Porcine reproductive and respiratory syndrome virus nsp4 positively regulates cellular cholesterol to inhibit type I interferon production. Redox biology, 49, 102207.
5. Khorsand Kheirabad, A., Pan, X., **Long, S**., Kochovski, Z., Zhou, S., Lu, Y., McInerney, G., & Yuan, J. (2022). Colloidal dispersion of poly(ionic liquid)/Cu composite particles for protective surface coating against SAR-CoV-2. Nano select : open access, 3(1), 227–232.
6. Merkl, P. †, **Long, S. †**, McInerney, G. M., & Sotiriou, G. A. (2021). Antiviral Activity of Silver, Copper Oxide and Zinc Oxide Nanoparticle Coatings against SARS-CoV2. Nanomaterials (Basel, Switzerland), 11(5), 1312.
7. Zhu, X., Chen, J., Tian, L., Zhou, Y., Xu, S., **Long, S**., Wang, D., Fang, L., & Xiao, S. (2020). Porcine Deltacoronavirus nsp5 Cleaves DCP1A To Decrease Its Antiviral Activity. Journal of virology, 94(15), e02162-19.
8. **Long, S**., Zhou, Y., Bai, D., Hao, W., Zheng, B., Xiao, S., & Fang, L. (2019). Fatty Acids Regulate Porcine Reproductive and Respiratory Syndrome Virus Infection via the AMPK-ACC1 Signaling Pathway. Viruses, 11(12), 1145.
9. Zheng, B., Wang, X., Liu, Y., Li, Y., **Long, S**., Gu, C., Ye, J., Xie, S., & Cao, S. (2019). Japanese Encephalitis Virus infection induces inflammation of swine testis through RIG-I-NF-κB signaling pathway. Veterinary microbiology, 238, 108430.
10. Ke, W., Fang, L., Jing, H., Tao, R., Wang, T., Li, Y., **Long, S**., Wang, D., & Xiao, S. (2017). Cholesterol 25-Hydroxylase Inhibits Porcine Reproductive and Respiratory Syndrome Virus Replication through Enzyme Activity-Dependent and -Independent Mechanisms. Journal of virology, 91(19), e00827-17.
11. Ding, Z., Fang, L., Yuan, S., Zhao, L., Wang, X., **Long, S**., Wang, M., Wang, D., Foda, M. F., & Xiao, S. (2017). The nucleocapsid proteins of mouse hepatitis virus and severe acute respiratory syndrome coronavirus share the same IFN-β antagonizing mechanism: attenuation of PACT-mediated RIG-I/ MDA5 activation. Oncotarget, 8(30), 49655–49670.

† equal contribution

Referees

Gerald McInerney
Professor at Karolinska Institutet
Phone: 0852486811
Email : gerald.mcinerney@ki.se

Andres Merits
Professor at University of Tartu
Phone: +372 737 5007
Email : andres.merits@ut.ee

Shaobo Xiao
Professor at Huazhong Agriculture University
Phone: +86 13886083725
Email : vet@mail.hzau.edu.cn