

Shitao Li, Ph.D.

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Office: Rm 157B, McElroy Hall, Oklahoma State University, Stillwater, OK 74078

Education:

1990-1994: B.S., Biology, Wuhan University, China

1994-1997: M.S., Biology, Wuhan University, China

1997-2000: Ph.D., Developmental Biology, Wuhan University, China

Academic Appointments:

2013-2015: Instructor, Harvard Medical School, MA

2015-present: Assistant Professor, Department of Physiological Sciences, Center for Veterinary Health Sciences, Oklahoma State University (OSU)

2015-present: Investigator, Oklahoma Center for Respiratory and Infectious Diseases

Honors and Awards

2016: AAI Early Career Faculty Travel Grant

2013-present: Associate Editor, Gene

2012: John and Virginia Kaneb Immunology Fellowship

2010: AAI Abstract Trainee Award

Research Support:

Current

- 2017-2020: "Role of Plakophilin 2 in Limiting Influenza A Virus Infection". OCAST HR17-045. Role: PI
- 2017-2020: "Taxilin Alpha Regulates DNA-Mediated and Interferon-Dependent Innate Immunity". NIH R15AI126360. Role: PI.
- 2016-2020: "Interferon-induced IFITM recruitment of ZMPSTE24 blocks viral endocytic entry". NIH R01AI121288. Role: Co-I.

Past

- 2017-2018: "Evasion of Host RNA Decay Machinery by the NS1 Protein of 2009 Pandemic Flu". OCRID pilot grant. Role: PI.
- 2016-2017: "Plakophilin 2 controls the polymerase activity of influenza A virus". OCRID pilot grant. Role: PI.
- 2015-2016: "Influenza-Host Protein Interactions Control Viral Infection and Pathogenesis". OCRID pilot grant. Role: PI.
- 2015-2016: "TXLNA restricts DNA virus infection by modulating TBK1-mediated innate immunity". RAC Fund. Role: PI.

Selected Publications:

1. Zhao M, Wang L, Li S (2017) Influenza A virus-host protein interactions control viral pathogenesis. *International Journal of Molecular Sciences*, 2017, 18(8), 1673; doi:10.3390/ijms18081673
2. Li S, Fu B, Wang L, Dorf ME (2017). ZMPSTE24 is downstream effector of IFITM antiviral activity. *DNA and Cell Biology*, doi: 10.1089/dna.2017.3791

3. Fu B, Zhao M, Wang L, Li W, Patil G, Smith JA, Juncadella IJ, Zuvela-Jelaska L, Dorf ME, Li S (2017). RNAi Screen and Proteomics Reveal NXF1 as a Novel Regulator of IRF5 Signaling. *Scientific Reports*, 7(1):2683. doi:10.1038/s41598-017-02857-z
4. Fu B, Wang L, Li S#, Dorf ME# (2017). ZMPSTE24 defends against influenza and other pathogenic viruses. *Journal of Experimental Medicine*, 214(4):919-929. doi: 10.1084/jem.20161270 (#co-corresponding author)
5. Wang L, Fu B, Li W, Patil G, Liu L, Dorf ME, Li S (2017). Comparative influenza protein interactomes identify the role of plakophilin 2 in virus restriction. *Nature Communications* (8) 13876 doi: 10.1038/ncomms13876
6. Wang L, Li W, Li S (2016). A high throughput assay for screening host restriction factors and antivirals targeting influenza A virus. *Frontiers in Microbiology*, 7:858. doi: 10.3389/fmicb.2016.00858
7. Fu B, Wang L, Ding H, Schwamborn JC, Li S#, and Dorf ME#. (2015) TRIM32 senses and restricts influenza A virus by ubiquitination of PB1 polymerase. *PLoS Pathogens*, DOI: 10.1371/journal.ppat.1004960 (#co-corresponding author)
8. Greenfeld H, Takasaki K, Walsh MJ, Ersing I, Bernhardt K, Ma Y, Fu B, Ashbaugh CW, Cabo J, Mollo SB, Zhou H, Li S, Gewurz BE. (2015) TRAF1 Coordinates Polyubiquitin Signaling to Enhance Epstein-Barr Virus LMP1-Mediated Growth and Survival Pathway Activation. *PLoS Pathogens*, 11(5):e1004890.
9. Li S, Wang L, Fu B, and Dorf ME. (2014) TRIM65: A cofactor for regulation of the microRNA pathway. *RNA Biology*, 11(9):1113-21
10. Li S#, Wang LW, Fu B, Berman M and Dorf ME#. (2014) TRIM65 regulates microRNA activity by ubiquitination of TNRC6. *PNAS*, 111(19):6970-5. (#co-corresponding author)
11. Fu B, Li S, Wang L, Berman M and Dorf ME. (2014) The Ubiquitin Conjugating Enzyme UBE2L3 Regulates TNF α -induced Linear Ubiquitination. *Cell Research* 24, 376-379
12. Wang L, Wang L, Zhang S, Qu G, Zhang D, Li S#, Liu S#. (2013) Downregulation of ubiquitin E3 ligase TNF receptor-associated factor 7 leads to stabilization of p53 in breast cancer. *Oncol Rep.* 29(1):283-7. (#co-corresponding author)
13. Wang L, Li S# and Dorf ME#. (2012) NEMO binds ubiquitinated TANK-binding kinase 1 (TBK1) to regulate innate immune responses to RNA viruses. *PLoS One*, 7(9):e43756 (#co-corresponding author)
14. Li S#, Wang L, Berman M, Kong YY and Dorf ME#. (2011) Mapping a dynamic innate immunity protein interaction network regulating type I interferon production. *Immunity*, 35(3):426-40. (Featured Article) (#co-corresponding author)
15. Li S, Wang L and Dorf ME. (2009) PKC phosphorylation of TRAF2 mediates IKK α /b recruitment and K63-linked polyubiquitination. *Molecular Cell*, 33: 30-42.
16. Li S, Wang L, Berman MA, Zhang Y and Dorf ME. (2006) RNAi screen in mouse astrocytes identifies phosphatases that regulate NF- κ B signaling. *Molecular Cell*, 24: 497-509
17. Zeng X, Tamai K, Doble B, Li S, Huang H, Habas R, Okamura H, Woodgett J, and He X. (2005) A dual-kinase mechanism for Wnt coreceptor phosphorylation and activation. *Nature*, 438(7069): 873-877