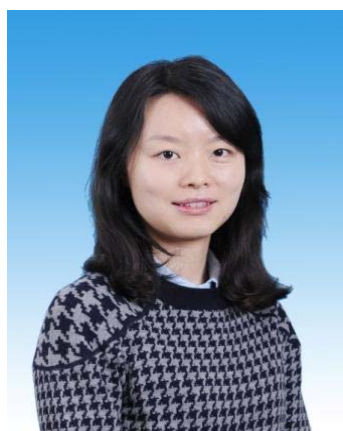




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文章来源： 发布时间：2014-10-13 【字号：大 中 小】



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教育经历	2000.09-2004.06	北京大学生命科学学院	学士
	2004.08-2006.06	美国科罗拉多大学医学院免疫学系	硕士
	2007.09-2010.06	武汉大学生命科学学院	博士

工作经历	2006.08-2010.10	武汉大学生命科学学院	讲师
	2010.11-2012.02	武汉大学生命科学学院	副教授
	2012.03-	中科院武汉病毒所分子免疫学学科组	研究员/学科组长
	2014.07-2015.06	武昌区卫生和计划生育委员会（挂职）	副主任
	2014.09-	中科院武汉病毒所病毒病理研究中心	副主任
	2014.12-2015.12	中科院武汉病毒所	所长助理
	2015.12-	中科院武汉病毒所	副所长
学术兼职	2013.01-	中国免疫学会青年工作者委员会	副主任委员
	2013.11-	湖北省细胞生物学学会	理事
奖项与荣誉	2015.12	国家自然科学二等奖（排名第三）	
	2015.12	国家百千万人才工程 “有突出贡献中青年专家”	
	2015.05	湖北省青年五四奖章	
	2015.02	教育部自然科学奖一等奖（排名第三）	
	2013.11	第四届武汉市优秀科技工作者	
	2013.03	武汉市三八红旗手	
	2012.11	第三届武汉青年科技奖	
	2011.12	武汉大学珞珈青年学者	
	2010.10	中国免疫学青年学者奖	
	2010.10	武汉大学青年教师教学竞赛二等奖	
研究方向	1.	模式识别受体介导的信号转导及其调控的分子机制	
	2.	炎症的分子调控机制	
	3.	病原微生物与宿主相互作用的分子机制	

近3-5年的科研项目综合呈现

1. 国家自然科学基金创新研究群体科学基金项目（31621061，病毒与宿主相互作用的分子机理，2017/01-2019/12，100 万元，在研，群体骨干）
2. 中国科学院前沿科学重点研究项目（QYZDB-SSW-SMC007，DNA病毒与宿主天然免疫相互作用的分子机制，2016.01-2020.12，250万元，在研，主持）
3. 国家杰出青年科学基金（31425010，细胞抗病毒反应的分子机制，2015.01-2019.12，400万元，在研，主持）

4. 973 计划项目 (2015CB554302, 慢性丙型肝炎免疫逃逸与免疫病理研究, 2015.01-2019.12, 140.25万元, 在研, 参与)
5. 973 计划项目 (2014CB542600, 动物病毒 - 宿主相互作用机制的研究, 2014/01-2018/12, 217.5万元, 在研, 参与)
6. 国家自然科学基金创新研究群体科学基金项目 (31321001, 病毒与宿主相互作用的分子机理, 2014/01-2016/12, 100 万元, 已结题, 群体骨干)
7. 中组部首批青年拔尖人才支持计划 (抗病毒天然免疫信号转导, 2013/01-2015/12, 200 万元, 已结题, 主持)
8. 国家自然科学基金面上项目 (31270932, TRIM32 调控MITA 介导的抗病毒反应的分子机制, 2013/01-2016/12, 100 万元, 已结题, 主持)
9. 国家自然科学基金面上项目 (31170792, WWP2 调节TLR3 信号转导的机制, 2012/01-2015/12, 65 万元, 已结题, 主持)

近五年代表性论文、专利等

- (1) Nie Y, Ran Y, Zhang HY, Huang ZF, Pan ZY, Wang SY, Wang YY*.GPATCH3 negatively regulates RLR-mediated innate antiviral responses by disrupting the assembly of VISA signalosome.PLOS Pathogenes, 2017 Apr; 13(4): e1006328. (通讯作者) (IF:7.003)
- (2) Yang Y, Wang SY, Huang ZF, Zou HM, Yan BR, Luo WW, Wang YY*. The RNA-binding protein Mex3B is a coreceptor of Toll-like receptor 3 in innate antiviral response. Cell Reserch, 2016,26(3):288-303. (通讯作者) (IF:14.812)
- (3) Ran Y, Zhang J, Liu L L, Pan ZY, Nie Y, Zhang HY, Wang YY*. Autoubiquitination of TRIM26 links TBK1 to NEMO in RLR-mediated innate antiviral immune response. Journal of Molecular Cell Biology, 2016, 8(1), 31-43. Epub 2015 Nov 26. (通讯作者) (IF: 6.771)
- (4) Shu HB*, Wang YY*.Adding to the STING. Immunity, 2014, 41:871-873. (排名最后的共同通讯作者) (IF: 20.59)
- (5) Ning YJ, Wang ML, Deng MP, Shen S, Liu W,Cao WC, Deng F, Wang YY, Hu ZH*, Wang HL*.Viral suppression of innate immunity via spatial isolation of TBK1/IKK? from mitochondrial antiviral platform. JMCB,2014,6(4),324-337. (排名第八) (IF: 6.771)
- (6) Chen HH, Pei RJ, Zhu WD, Zeng R, Wang Y, Wang YY, Lu MJ, Chen XW*. An alternative splicing isoform of MITA antagonizes MITA-mediated induction of Type I IFNs. Journal of Immunology,2014,192(3):1162-1170. (排名第六) (IF:5.788)
- (7) Zhou Q, Lin H, Wang SY, Wang S, Ran Y, Liu Y, Ye W, Xiong XZ,Zhong B, Shu HB , Wang YY*.The ER-Associated protein ZDHHC1 is a positive regulator of DNA virus-triggered,MITA/STING-dependent innate immune signaling. Cell Host &Microbe,2014,16(4):450-461. (通讯作者) (IF: 13.5)
- (8) Ran Y , Shu HB, Wang YY*.MITA/STING:A central and multifaceted mediator in innate immune response. Cytokine Growth Factor Reviews,2014,25:631-639. (通讯作者) (IF:6.53)
- (9) Liu ZG, Wu SW, Lei CQ, Zhou Q, Li S, Shu HB, Wang YY*.Heat shock cognate 71 (HSC71) regulates cellular antiviral response by impairing formation of VISA aggregates. Protein & Cell,2013, 4(5):373-382. (通讯作者) (IF:3.22)
- (10) Yang Y, Liao B, Wang SY, Yan BR, Jin Y, Shu HB, Wang YY* .The E3 ligase WWP2 negatively regulates TLR3-mediated innate immune response by targeting TRIF for ubiquitination and degradation.PNAS,2013,110(13):5115-5120. (通讯作者) (IF:9.681)
- (11) Nie Y,Wang YY*.Innate immune responses to DNA viruses.Protein &Cell,2013, 4(1):1-7. (通讯作者) (IF:3.22)



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Education

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Research Interests

Innate immune response acts as the first line of host defense against viral infection. Germ line-encoded pattern-recognition receptors (PRRs) of the innate immune system recognize pathogen associated molecular patterns (PAMPs) derived from invading viruses, which triggers a series of cellular events, leading to the induction of type I interferons (IFNs) and proinflammatory cytokines. Our research is focused on molecular mechanisms of antiviral innate immunity and inflammation.

Publications

1. Luo WW, Li S, Li C, Zheng ZQ, Cao P, Tong Z, Lian H, Wang SY, Shu HB, & **Wang Y Y***. IRhom2 is essential for innate immunity to RNA virus by antagonizing ER- and mitochondria-associated degradation of VISA. **PLOS Pathogenes**. November 20, 2017
2. Nie Y, Ran Y, Zhang HY, Huang ZF, Pan ZY, Wang SY, **Wang YY***. GPATCH3 negatively regulates RLR-mediated innate antiviral responses by disrupting the assembly of VISA signalosome. **PLOS Pathogenes**, 2017 Apr; 13(4): e1006328.
3. Yang Y, Wang SY, Huang ZF, Zou HM, Yan BR, Luo WW, **Wang YY***. The RNA-binding protein Mex3B is a coreceptor of Toll-like receptor 3 in innate antiviral response. **Cell Research**, 2016, 26(3):288-303.
4. Ran Y, Zhang J, Liu L L, Pan ZY, Nie Y, Zhang HY, **Wang YY***. Autoubiquitination of TRIM26 links TBK1 to NEMO in RLR-mediated innate antiviral immune response. **Journal of Molecular Cell Biology**, 2016, 8(1), 31–43. Epub 2015 Nov 26.
5. Shu HB*, **Wang YY***. Adding to the STING. **Immunity**, 2014, 41:871-873.
6. Ning YJ, Wang ML, Deng MP, Shen S, Liu W, Cao WC, Deng F, **Wang YY**, Hu ZH*, Wang HL*. Viral suppression of innate immunity via spatial isolation of TBK1/IKK γ from mitochondrial antiviral platform. **JMCB**, 2014, 6(4), 324-337.
7. Chen HH, Pei RJ, Zhu WD, Zeng R, Wang Y, **Wang YY**, Lu MJ, Chen XW*. An alternative splicing isoform of MITA antagonizes MITA-mediated induction of Type I IFNs. **Journal of Immunology**, 2014, 192(3):1162-1170.
8. Zhou Q, Lin H, Wang SY, Wang S, Ran Y, Liu Y, Ye W, Xiong XZ, Zhong B, Shu HB, **Wang YY***. The ER-Associated protein ZDHHC1 is a positive regulator of DNA virus-triggered, MITA/STING-dependent innate immune signaling. **Cell Host & Microbe**, 2014, 16(4):450-461.
9. Ran Y, Shu HB, **Wang YY***. MITA/STING: A central and multifaceted mediator in innate immune response. **Cytokine Growth Factor Reviews**, 2014, 25:631-639.
10. Liu ZG, Wu SW, Lei CQ, Zhou Q, Li S, Shu HB, **Wang YY***. Heat shock cognate 71 (HSC71) regulates cellular antiviral response by impairing formation of VISA aggregates. **Protein & Cell**, 2013, 4(5):373-382.
11. Yang Y, Liao B, Wang SY, Yan BR, Jin Y, Shu HB, **Wang YY***. The E3 ligase WWP2 negatively regulates TLR3-mediated innate immune response by targeting TRIF for ubiquitination and degradation. **PNAS**, 2013, 110(13):5115-5120.
12. Nie Y, **Wang YY***. Innate immune responses to DNA viruses. **Protein & Cell**, 2013, 4(1):1-7. Zhang J, Hu MM, **Wang YY**, Shu HB*. TRIM32 protein modulates type I interferon induction and cellular antiviral response by targeting MITA/STING protein for K63-linked ubiquitination. **J. Biol. Chem.**, 2012, 287(34):28646-28655.
13. **Wang YY***, Ran Y, and Shu HB*. Linear ubiquitination of NEMO brakes the antiviral response. **Cell Host & Microbe**, 2012, 12:129-131.
14. Liu LJ, Liu TT, Ran Y, Li Y, Zhang XD, Shu HB* and **Wang YY***. The E3 ubiquitin ligase MIB1 negatively regulates basal I κ B α level and modulates NF- κ B activation. **Cell Research**, 2012, 22:603-606.
15. Li Q, Yan J, Mao AP, Li C, Ran Y, Shu HB*, **Wang YY***. Tripartite motif 8 (TRIM8) modulates TNF α - and IL-1 β -triggered NF- κ B activation by targeting TAK1 for K63-linked polyubiquitination. **PNAS**, 2011, 108:19341-19346.
16. **Wang YY**, Liu LJ, Zhong B, Liu TT, Li Y, Yang Y, Ran Y, Li S, Tien P, Shu HB*. WDR5 is essential for assembly of the VISA-associated signaling complex and virus-triggered IRF3 and NF- κ B activation. **PNAS**, 2010, 107:815-820.

17. Zhong B, Zhang Y, Tan B, Liu TT, **Wang YY**, Shu HB*. The E3 ubiquitin ligase RNF5 targets virus-induced signaling adaptor for ubiquitination and degradation. **Journal of Immunology**, 2010,184:6249-6255.

18. Zhong B, Zhang L, Lei CQ, Li Y, Mao AP, Yang Y, **Wang YY**, Zhang XL, Shu HB*. The ubiquitin ligase RNF5 regulates antiviral responses by mediating degradation of the adaptor protein MITA. **Immunity**, 2009, 30:397-407.

19. Li Y, Li C, Xue P, Zhong B, Mao AP, Ran Y, Chen H, **Wang YY**, Yang FQ, Shu HB*. ISG56 is a negative-feedback regulator of virus-triggered signaling and cellular antiviral response. **PNAS**, 2009,106:7945-7950.

20. Zhang M, Wang RP, **Wang YY**, Diao FC, Lu F, Gao D, Chen DY, Zhai ZH, Shu HB*. The CXXC finger 5 protein is required for DNA damage-induced p53 activation. **Sci China Ser C-Life Sci**, 2009,52(6):528-538.

21. Zhong B, Yang Y, Li S, **Wang YY**, Li Y, Diao F, Lei C, He X, Zhang L, Tien P, Shu HB*. The adaptor protein MITA links virus-sensing receptors to IRF3 transcription factor activation. **Immunity**, 2008, 29:538-550.

22. Zhang B, Huang J, Li HL, Liu T, **Wang YY**, Waterman P, Mao AP, Xu LG, Zhai ZH, Liu D*, Marrack P*, Shu HB*. GIDE is a mitochondrial E3 ubiquitin ligase that induces apoptosis and slows growth. **Cell Research**, 2008, 18:900-910.

23. Tian Y, Zhang Y, Zhong B, **Wang YY**, Diao FC, Wang RP, Zhang M, Chen DY, Zhai ZH, Shu HB. RBCK1 negatively regulates tumor necrosis factor and interleukin-1-triggered NF-kappa B activation by targeting TAB2/3 for degradation. **J. Biol. Chem.**,2007,282(23):16776-16782.

24. Xu LG#, **Wang YY**#, Han KJ, Li LY, Zhai Z, Shu HB*. VISA is an adapter protein required for virus-triggered signaling. **Molecular Cell**, 2005,19:727-740.

25. **Wang YY**, Li L, Han KJ, Zhai Z, Shu HB*. A20 is a potent inhibitor of TLR3- and Sendai virus-induced activation of NF-kappaB and ISRE and IFN-beta promoter. **FEBS Lett**, 2004,576: 86-90.

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石正丽

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教育经历	1996.10-2000.05 法国蒙彼利埃第二大学，博士研究生 1987.09-1990.07 中国科学院武汉病毒研究所，硕士研究生 1983.09-1987.07 武汉大学生物系遗传专业，理学学士
工作经历	2007.01-至今 中国科学院武汉病毒研究所，研究员 2006.09-2006.10 法国里昂P4实验室，访问学者 2006.02-2006.05 澳大利亚动物健康研究室，高级访问学者 2000.10-2006.12 中国科学院武汉病毒研究所，研究员

学术兼职	2011-至今 中国微生物学会病毒专业委员会委员 2013-至今 湖北微生物学会常务理事 2016-2018 Virology Journal 责任编辑 2017-2019 Virology编委 2017-2020 Virologica Sinica 主编
奖项与荣誉	奖项： 2003年 湖北省自然科学奖二等奖 2004年 教育部科技进步奖二等奖 2006年 湖北省自然科学优秀学术论文一等奖 2008年 湖北省自然科学优秀学术论文一等奖 2009年 教育部自然科学奖二等奖 2012年 湖北省自然科学优秀学术论文，三等奖 2014年 湖北省自然科学优秀学术论文特等奖 2017年 湖北省自然科学奖一等奖 荣誉： 2004年 被评为湖北省优秀研究生导师 2007年 获全国“五一”劳动奖章 2011年 获中国科学院“朱李月华优秀教师”奖 2014年 湖北省有突出贡献中青年专家 2014年 获国务院政府特殊津贴 2015年 获中国科学院“优秀研究生指导教师”奖 2016年 获“法国棕榈教育骑士荣誉勋章” 所指导的博士研究生和硕士研究生在学期间多次获教育部国家奖学金、中科院院长奖学金优秀奖、湖北省优秀博士学位
研究方向	1. 蝙蝠携带的、与人畜健康相关的新发传染病病毒的分子流行病学和跨物种感染的分子机理； 2. 蝙蝠抗病毒免疫研究。

近3-5年的科研项目综合呈现

1. 国家自然科学基金委重大项目
2. 科技基础性工作专项
3. 国家科技重大专项传染病防治重大专项
4. 中国科学院境外机构建设项目
5. 国家自然科学基金委面上项目
6. 国家自然科学基金委重大科研仪器研制项目

近五年代表性论文、专利等

1. Zhou, P#, Fan, H#, Lan, T#, Yang, X-L, Shi, W-F, Zhang, W., Zhu, Y., Zhang, Y-W., Xie, Q-M., Mani, S., Zheng, X-S., Li, B., Li, J-M., Guo, H., Pei, G-Q., An, X-P., Chen J-W., Zhou, L., Mai, K-J., Wu, Z-X., Li, D., Anderson, D.E., Zhang, L-B., Li, S-Y., Mi, Z-Q., He, T-T., Cong, F., Guo, P-J., Huang, R., Luo, Y., Liu, X-L., Chen, J., Huang, Y., Sun, Q., Zhang, X-L-L., Wang, Y-Y., Xing, S-Z., Chen, Y-S., Sun, Y., Li, J., Daszak, P.*, Wang, L-F.*, Shi, Z-L.*, Tong, Y-G.*, Ma, J-Y.* (2018). Fatal Swine Acute Diarrhea Syndrome caused by an HKU2-related Coronavirus of Bat Origin. Nature. DOI:10.1038/s41586-018-0010-9.
2. Xie, J.Z., Li, Y., Shen, X., Goh, G., Zhu, Y., Wang, L-F., Cui, J., Shi, Z-L.,* Zhou, P.* (2018). Dampened STING-Dependent Interferon Activation in Bats. Cell Host & Microbe. 23(3):297-301.

3. Hu B, Zeng LP, Yang XL, Ge XY, Zhang W, Li B, Xie JZ, Shen XR, Zhang YZ, Wang N, Luo DS, Zheng XS, Wang MN, Daszak P, Wang LF, Cui J*, Shi ZL*. (2017). Discovery of a rich gene pool of bat SARS-related Coronaviruses provides new insights into the origin of SARS coronavirus. *PloS Pathogens*. 13(11):e1006698.
4. Zeng, L.P., Ge, X.Y., Peng, C., Tai, W., Jiang, S., Du, L., and Shi, Z.L. (2017). Cross-neutralization of SARS coronavirus-specific antibodies against bat SARS-like coronaviruses. *Sci China Life Sci*. 60(12):1399-1402.
5. Zhang, Q., Zeng, L.P., Zhou, P., Irving, A.T., Li, S., Shi, Z.L.*, Wang, L.F. (2017). IFNAR2-dependent gene expression profile induced by IFN- α in *Pteropus alecto* bat cells and impact of IFNAR2 knockout on virus infection. *PLOS ONE*. 12(8):e0182866.
6. Ge, X.Y., Yang, W.H., Zhou, J.H., Li, B., Zhang, W., Shi, Z.L.* & Zhang, Y.Z.* (2017). Detection of alpha- and betacoronaviruses in rodents from Yunnan, China. *Virology Journal*. 14:98.
7. Tan, B., Yang, X.L., Ge, X.Y., Peng, C., Liu, H.Z., Zhang, Y.Z., Zhang, L.B., Shi, Z.L.* (2017). Novel bat adenoviruses with low G+C content shed new light on the evolution of adenoviruses. *Journal of General Virology*. 98(4):739-748.
8. Yang, X.L., Zhang, Y.Z., Jiang, R.D., Guo, H., Zhang, W., Li, B., Wang, N., Wang, L., Waruhiu, C., Zhou, J.H., Li, S.Y., Daszak, P., Wang, L.F., Shi, Z.L. (2017). Genetically Diverse Filoviruses in *Rousettus* and *Eonycteris* spp. Bats, China, 2009 and 2015. *Emerging Infectious Disease*. 23(3): 482-486.
9. Wang, B., Yang, X.L., Li, W., Zhu, Y., Ge, X.Y., Zhang, L.B., Zhang, Y.Z., Bock, C.T., Shi, Z.L. (2017). Detection and genome characterization of four novel bat hepadnaviruses and a hepevirus in China. *Virology Journal*. 14(1): 40.
10. Tan, B., Wu, L.J., Yang, X.L., Li, B., Zhang, W., Lei, Y.S., Yang, G.X., Chen, J., Chen, G., Wang, H.Z., Shi, Z.L.*. (2016). Isolation and characterization of adenoviruses infecting endangered golden snub-nosed monkeys (*Rhinopithecus roxellana*). *Virology Journal*. 13:190.
11. Zeng, L.P., Gao, Y.T., Ge, X.Y., Zhang, Q., Peng, C., Yang, X.L., Tan, B., Chen, J., Chmura, A. A., Daszak, P. & Shi, Z.L.* (2016). Bat Severe Acute Respiratory Syndrome-Like Coronavirus WIV1 Encodes an Extra Accessory Protein, ORFX, Involved in Modulation of the Host Immune Response. *Journal of Virology*. 90(14): 6573-6582.
12. Tan, B., Yang, X.L., Ge, X.Y., Peng, C., Zhang, Y.Z., Zhang, L.B. & Shi, Z.L.*. (2016). Novel bat adenoviruses with an extremely large E3 gene. *Journal of General Virology*. 97: 1625-1635.
13. Yang, X.L., Hu, B., Wang, B., Wang, M.N., Zhang, Q., Zhang, W., Wu, L.J., Ge, X.Y., Zhang, Y.Z., Daszak, P., Wang, L.F. & Shi, Z.L. * (2016). Isolation and Characterization of a Novel Bat Coronavirus Closely Related to the Direct Progenitor of Severe Acute Respiratory Syndrome Coronavirus. *Journal of Virology*. 90(6): 3253-3256.
14. Ge, X. Y., Yang, W. H., Pan, H., Zhou, J. H., Han, X., Zhu, G. J., Desmond, J. S., Daszak, P., Shi, Z. L. & Zhang, Y. Z. * (2016). Fugong virus, a novel hantavirus harbored by the small oriental vole (*Eothenomys eleusis*) in China. *Virology Journal*. 13:27.
15. Yang XL, Tan B, Wang B, Li W, Wang N, Luo CM, Wang MN, Zhang W, Li B, Peng C, Ge XY, Zhang LB, Shi Z. (2015). Isolation and identification of bat viruses closely related to human, porcine, and mink orthoreoviruses. *J Gen Virol*. 96(12):3525-3531.
16. Hu B, Ge X, Wang LF, Shi Z. (2015). Bat origin of human coronaviruses. *Virol J*. 12(1): 221
17. Hu, B., Chmura, A. A., Li, J., Zhu, G., Desmond, J. S., Zhang, Y., Zhang, W., Epstein, J. H., Daszak, P. & Shi, Z. (2014). Detection of diverse novel astroviruses from small mammals in China. *J Gen Virol* 95, 2442-2449.
18. Ge X-Y., Li J-L., Yang X-L., Chmura A, Epstein J. H., Hu B., Zhang W., Peng C., Zhang Y-J., Luo C-M, Tang B., Wang N., Zhu Y., Cramer G., Zhang S-Y., Wang L-F, Daszak P., Shi Z-L. (2013). Isolation and characterization of bat SARS-like Coronaviruses that use the ACE2 receptor. *Nature* 503(7477):535-538.
19. Zhang, G., Cowled, C., Shi, Z., Huang, Z., Bishop-Lilly, K. A., Fang, X., Wynne, J. W., Xiong, Z., Baker, M. L., Zhao, W., Tachedjian, M., Zhu, Y., Zhou, P., Jiang, X., Ng, J., Yang, L., Wu, L., Xiao, J., Feng, Y., Chen, Y., Sun, X., Zhang, Y., Marsh, G. A., Cramer, G., Broder, C. C., Frey, K. G., Wang, L. F. & Wang, J. (2013). Comparative Analysis of Bat Genomes Provides Insight into the Evolution of Flight and Immunity. *Science* 339 (6118):456-460.



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Education

1987, B.S. Genetics, Department of Biology, Wuhan University
1990, M.Sc. Virology, Wuhan Institute of Virology, Chinese Academy of Sciences
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Research Interests

For more than a decade, Prof Shi has been working on epidemiology and interspecies mechanism of emerging viruses of wildlife origin, especially bats and rodents. She has gained rich research experiences in discovery and characterization of viruses from bats. In the past 12 years, her research group has discovered a wide range of novel viruses or viral antibodies in bats, including coronaviruses, adenoviruses, orthoreoviruses, circoviruses, paramyxoviruses, filoviruses, hepatitis viruses, etc. Her group has highlighted findings on the animal origin of SARS-CoV. Their long-term surveillance of SARS-like coronaviruses in bat populations in China led to the new recognition of genetically diverse SARS-like coronaviruses, including strains not only sharing very high sequence similarity to SARS-CoV but also able to use the human ACE2 as an entry receptor. Their findings provide unequivocal evidence that bats are natural reservoir of SARS-CoV and reveal the origin of pandemic SARS-CoV from these bat CoVs.

Publications

1. Hu B, Zeng LP, Yang XL, Ge XY, Zhang W, Li B, Xie JZ, Shen XR, Zhang YZ, Wang N, Luo DS, Zheng XS, Wang MN, Daszak P, Wang LF, Cui J, **Shi ZL**. (2017). Discovery of a rich gene pool of bat SARS-related coronaviruses provides new insights into the origin of SARS coronavirus. PLoS Pathogens. 13(11):e1006698.
2. Zeng LP, Ge XY, Peng C, Tai W, Jiang S, Du L, **Shi ZL**. (2017). Cross-neutralization of SARS coronavirus-specific antibodies against bat SARS-like coronaviruses. Sci China Life Sci. doi: 10.1007/s11427-017-9189-3.
3. Zhang Q, Zeng LP, Zhou P, Irving AT, Li S, **Shi ZL**, Wang LF. (2017). IFNAR2-dependent gene expression profile induced by IFN- α in *Pteropus alecto* bat cells and impact of IFNAR2 knockout on virus infection. PLoS One. 12(8):e0182866.
4. Wang B, Cai CL, Li B, Zhang W, Zhu Y, Chen WH, Zhuo F, **Shi ZL**, Yang XL. (2017). Detection and characterization of three zoonotic viruses in wild rodents and shrews from Shenzhen city, China. Virol Sin. 32(4):290-297.
5. Liang J, Yang XL, Li B, Liu Q, Zhang Q, Liu H, Kan HP, Wong KC, Chek SN, He X, Peng X, **Shi ZL**, Wu Y, Zhang L. (2017). Detection of diverse viruses in alimentary specimens of bats in Macau. Virol Sin. 32(3):226-234.
6. Ge XY, Yang WH, Zhou JH, Li B, Zhang W, **Shi ZL**, Zhang YZ. (2017). Detection of alpha- and betacoronaviruses in rodents from Yunnan, China. Virol J. 14(1):98.
7. Tan B, Yang XL, Ge XY, Peng C, Liu HZ, Zhang YZ, Zhang LB, **Shi ZL**. (2017). Novel bat adenoviruses with low G+C content shed new light on the evolution of adenoviruses. J Gen Virol. 98(4):739-748.
8. Waruhiu C, Ommeh S, Obanda V, Agwanda B, Gakuya F, Ge XY, Yang XL, Wu LJ, Zohaib A, Hu B, **Shi ZL**. (2017). Molecular detection of viruses in Kenyan bats and discovery of novel astroviruses, caliciviruses and rotaviruses. Virol Sin. 32(2):101-114.
9. Wang B, Yang XL, Li W, Zhu Y, Ge XY, Zhang LB, Zhang YZ, Bock CT, **Shi ZL**. (2017). Detection and genome characterization of four novel bat hepadnaviruses and a hepevirus in China. Virol J. 14(1):40.
10. Yang XL, Zhang YZ, Jiang RD, Guo H, Zhang W, Li B, Wang N, Wang L, Waruhiu C, Zhou JH, Li SY, Daszak P, Wang LF, **Shi ZL**. (2017). Genetically Diverse Filoviruses in *Rousettus* and *Eonycteris* spp. Bats, China, 2009 and 2015. Emerg Infect Dis. 23(3):482-486.
11. Tan B, Wu LJ, Yang XL, Li B, Zhang W, Lei YS, Li Y, Yang GX, Chen J, Chen G, Wang HZ, **Shi ZL**. (2016). Isolation and characterization of adenoviruses infecting endangered golden snub-nosed monkeys (*Rhinopithecus roxellana*). Virol J. 13(1):190.
12. Zeng LP, Gao YT, Ge XY, Zhang Q, Peng C, Yang XL, Tan B, Chen J, Chmura AA, Daszak P, **Shi ZL**. (2016). Bat SARS-like coronavirus WIV1 encodes an extra accessory protein ORFX involved in modulation of host immune response. J Virol. 90(14):6573-82.
13. Tan B, Yang XL, Ge XY, Peng C, Zhang YZ, Zhang LB, **Shi ZL**. (2016). Novel bat adenoviruses with an extremely large E3 gene. J Gen Virol. 97(7):1625-35.

14. Ge, X. Y., Yang, W. H., Pan, H., Zhou, J. H., Han, X., Zhu, G. J., Desmond, J. S., Daszak, P., **Shi, Z. L.** & Zhang, Y. Z. (2016). Fugong virus, a novel hantavirus harbored by the small oriental vole (*Eothenomys eleusis*) in China. *Virology journal* 13, 27.
15. Pan, X., Cao, Z., Yuan, J., **Shi, Z.**, Yuan, X., Lin, L., Xu, Y., Yao, J., Hao, G. & Shen, J. (2016). Isolation and Characterization of a Novel Dicitrovirus Associated with Mortalities of the Great Freshwater Prawn, *Macrobrachium rosenbergii*. *International journal of molecular sciences* 17.
16. Yang XL, Hu B, Wang B, Wang MN, Zhang Q, Zhang W, Wu LJ, Ge XY, Zhang YZ, Daszak P, Wang LF, **Shi ZL**. (2016). Isolation and characterization of a novel bat coronavirus closely related to the direct progenitor of SARS coronavirus. *J Virol*, 90(6):3253-3256.
17. Wang MN, Zhang W, Gao YT, Hu B, Ge XY, Yang XL, Zhang YZ, **Shi ZL**. (2016). Longitudinal surveillance of SARS-like coronaviruses in bats by quantitative real-time PCR. *Virol Sin.* 31(1):78-80.
18. Ge XY, Wang N, Zhang W, Hu B, Li B, Zhang YZ, Zhou JH, Luo CM, Yang XL, Wu LJ, Wang B, Zhang Y, Li ZX, **Shi ZL**. (2016). Coexistence of multiple coronaviruses in several bat colonies in an abandoned mineshaft. *Virol Sin.* 31(1):31-40.
19. **Shi ZL**, Guo D, Rottier PJ. (2016). Coronavirus: epidemiology, genome replication and the interactions with their hosts. *Virol Sin.* 31(1):1-2.
20. Yang XL, Tan B, Wang B, Li W, Wang N, Luo CM, Wang MN, Zhang W, Li B, Peng C, Ge XY, Zhang LB, **Shi Z**. 2015. Isolation and identification of bat viruses closely related to human, porcine, and mink orthoreoviruses. *J Gen Virol.* 96(12):3525-3531.
21. Hu B, Ge X, Wang LF, **Shi Z**. (2015). Bat origin of human coronaviruses. *Virol J.* 12(1): 221
22. Liang YZ, Wu LJ, Zhang Q, Zhou P, Wang MN, Yang XL, Ge XY, Wang LF, **Shi ZL**. (2015). Cloning, expression, and antiviral activity of interferon beta from the Chinese microbat, *Myotis davidii*. *Virol Sin.* 30 (6): 425-432.
23. Wang MN, Ge XY, Wu YQ, Yang XL, Tan B, Zhang YJ, **Shi ZL**. (2015). Genetic diversity and temporal dynamics of phytoplankton viruses in East Lake, China. *Virol Sin.* 30: 290-300.
24. Wang Y, Sun Y, Wu A, Xu S, Pan R, Zeng C, Jin X, Ge X, **Shi Z**, Ahola T, Chen Y, Guo D. (2015). Coronavirus nsp10/ns16 methyltransferase can be targeted by nsp10-derived peptide in vitro and in vivo to reduce replication and pathogenesis. *J Virol*, 89: 8416-8427.
25. Yang Y, Liu C, Du L, Jiang S, **Shi Z**, Baric RS, Li F. (2015). Two mutations were critical for bat-to-human transmission of Middle East respiratory syndrome coronavirus. *J Virol*, 89: 9119-9123.
26. Menachery VD, Yount Jr BL, Debbink K, Agnihothram S, Gralinski LE, Plante JA, Graham RL, Scobey T, Ge X-Y, Donaldson EF, Randell SH, Lanzavecchia A, Marasco WA, **Shi Z-L**, Baric RS. (2015). A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence. *Nat Med* 21:1508-1513.
27. Mazet JK., Wei Q, Zhao GP, Cummings DT, Desmond JS, Rosenthal J, King CH., Cao WC, Chmura AA, Hagan EA, Zhang SY, Xiao XM, Xu JG, **Shi Z**, Feng F, Liu XP, Pan WQ, Zhu GJ, Zuo LY & Daszak P. (2015). Joint China-US Call for Employing a Transdisciplinary Approach to Emerging Infectious Diseases. *EcoHealth*, DOI: 10.1007/s10393-015-1060-1.
28. Hu, B., Chmura, A. A., Li, J., Zhu, G., Desmond, J. S., Zhang, Y., Zhang, W., Epstein, J. H., Daszak, P. & **Shi, Z.** (2014). Detection of diverse novel astroviruses from small mammals in China. *J Gen Virol* 95, 2442-2449.
29. Ge X-Y., Li J-L., Yang X-L., Chmura A, Epstein J. H., Hu B., Zhang W., Peng C., Zhang Y-J., Luo C-M, Tang B., Wang N., Zhu Y., Cramer G., Zhang S-Y., Wang L-F, Daszak P., **Shi Z-L**. (2013). First isolation and characterization of bat SARS-like Coronaviruses that use the ACE2 receptor. *Nature* 503(7477):535-538.
30. Zhang, G., Cowled, C., **Shi, Z.**, Huang, Z., Bishop-Lilly, K. A., Fang, X., Wynne, J. W., Xiong, Z., Baker, M. L., Zhao, W., Tachedjian, M., Zhu, Y., Zhou, P., Jiang, X., Ng, J., Yang, L., Wu, L., Xiao, J., Feng, Y., Chen, Y., Sun, X., Zhang, Y., Marsh, G. A., Cramer, G., Broder, C. C., Frey, K. G., Wang, L. F. & Wang, J. (2013). Comparative Analysis of Bat Genomes Provides Insight into the Evolution of Flight and Immunity. *Science* (New York, N.Y.). *Science* 339 (6118):456-460. (co-first author).
31. Wu, L., Zhou, P., Ge, X., Wang, L. F., Baker, M. L. & **Shi, Z.** (2013). Deep RNA sequencing reveals complex transcriptional landscape of a bat adenovirus. *J Virol* 87, 503-511.
32. **Shi, Z.** Emerging infectious diseases associated with bat viruses. (2013). *Sci China Life Sci.* 56: 678-682.
33. Zhou, P., Han, Z., Wang, L. and **Shi, Z.** (2013). Identification of Immunogenic Determinants of the Spike Protein of SARS-like Coronavirus. *Virol Sin* 28, (2):92-96.
34. Xia, H., Wang, M., Ge, X., Wu, Y., Yang, X., Zhang, Y., Li, T. and **Shi, Z.** (2013). Study of the Dynamics of Microcystis aeruginosa and its Cyanophage in East Lake using quantitative PCR. *Virol Sin* 28 (5): 309-311.
35. Ge, X., Wu, Y., Wang, M., Wang, J., Wu, L., Yang, X., Zhang, Y. and **Shi, Z.** (2013). Viral Metagenomics Analysis of Planktonic Viruses in East Lake, Wuhan, China. *Virol Sin* 28 (5): 280-290.
36. Yuan, J., Zhang, Y., Li, J., Zhang, Y., Wang, L. F. & **Shi, Z.** (2012). Serological evidence of ebolavirus infection in bats, China. *Virology journal* 9, 236.
37. Ge, X., Li, Y., Yang, X., Zhang, H., Zhou, P., Zhang, Y. & **Shi, Z.** (2012). Metagenomic analysis of viruses from bat fecal samples reveals many novel viruses in insectivorous bats in China. *J Virol* 86, 4620-4630.
38. Yang, X., Zhang, Y., Ge, X., Yuan, J. & **Shi, Z.** (2012). A novel totivirus-like virus isolated from bat guano. *Arch Virol*, 157:1093-1099.
39. Yuan, J., Su, N., Wang, M., Xie, P., **Shi, Z.** & Li, L. (2012). Down-regulation of heme oxygenase-1 by SVCV infection. *Fish & shellfish immunology* 32, 301-306.
40. Zhou, P., Li, H., Wang, H., Wang, L. F. & **Shi, Z.** (2012). Bat severe acute respiratory syndrome-like coronavirus ORF3b homologues display different interferon antagonist activities. *J Gen Virol* 93, 275-281.
41. Zhou, P., Cowled, C., Marsh, G. A., **Shi, Z.**, Wang, L. F. and Baker, M. L. (2011). Type III IFN Receptor Expression and Functional Characterisation in the Pteropid Bat, *Pteropus alecto*. *PLoS one* 6, e25385.
42. Zhou, P., Cowled, C., Todd, S., Cramer, G., Virtue, E. R., Marsh, G. A., Klein, R., **Shi, Z.**, Wang, L. F. and Baker, M. L. (2011). Type III IFNs in pteropid bats: differential expression patterns provide evidence for distinct roles in antiviral immunity. *J Immunol* 186:3138-47.
43. Ge, X., Li, J., Peng, C., Wu, L., Yang, X., Wu, Y., Zhang, Y. and **Shi, Z.** (2011). Genetic diversity of novel circular ssDNA viruses in bats in China. *J Gen Virol.*, 92:2646-53.
44. Bai, H., Wang, Y., Li, X., Mao, H., Li, Y., Han, S., **Shi, Z.** and Chen, X. (2011). Isolation and characterization of a novel alphavirus. *Virol J* 8:311.
45. Tan, Y. W., and **Shi, Z.** (2011). Genotyping of white spot syndrome virus in Chinese cultured shrimp during 1998-1999. *Virol Sin* 26:123-30.

46. Xing, Y., and **Shi, Z.** (2011). Nucleocapsid protein VP15 of White spot syndrome virus colocalizes with the nucleolar proteins nucleolin and fibrillarin. *Can J Microbiol.*, 57:759-64.
47. Yuan, J., Marsh, G., Khetawat, D., Broder, C. C., Wang, L. F. and **Shi, Z.** (2011). Mutations in the G-H loop region of ephr in-B2 can enhance Nipah virus binding and infection. *J Gen Virol* 92:2142-52.
48. Zhang, Y., Yuan, J., Yang, X., Zhou, J., Yang, W., Peng, C., Zhang, H. L. and **Shi, Z.** (2011). A novel hantavirus detected in Yunnan red-backed vole (*Eothenomys miletus*) in China. *J Gen Virol* 92:1454-7.
49. Zhou B., Y. Li, J. Belser, M. Pearce, M. Schmolke, A. Subba, **Z. Shi**, S. Zaki, D. Blau, A. Sastre, T. Tumpey, D. Wentworth*. NS deletions convert the 2009-H1N1 pandemic virus into a live attenuated vaccine. *Influenza and Other Respiratory Viruses* 5:388-391, 2011.
50. Hou, Y., Peng, C., Yu, M., Li, Y., Han, Z., Wang, L-F., Li, F., **Shi, Z.** (2010). Bat Angiotensin Converting Enzyme-2 Displays Different Receptor Activity to Severe Acute Respiratory Syndrome Coronavirus Entry. *Arch Virol* 155, 1563-1569.
51. Li, Y., Ge X., Hon C. C., Zhang H., Zhou P., Zhang Y., Wang L. F. and **Shi Z.** (2010). Prevalence and Genetic Diversity of Adeno-Associated Viruses in Bats, China. *J Gen Virol* 91: 2601-2609.
52. Li, Y., Ge X., Zhang H., Zhou P., Zhu Y., Zhang Y., Yuan J., Wang L-F., **Shi Z.** (2010). Host Range, Prevalence and Genetic Diversity of Adenoviruses in Bats. *J Virol* 84, (8):3889-3897.
53. Zhang Y., Zhang H., Dong X., Yuan J., Zhang H., Yang X., Zhou P., Ge X., Li Y., Wang -F, and **Shi Z** (2010). Hantavirus Outbreak Associated with Laboratory Rats in Yunnan, China. *Infection, Genetics and Evolution* (10): 638–644.
54. Yuan, J., Hon, C. C., Li, Y., Wang, D., Xu, G., Zhang, H., Zhou, P., Poon, L. M., Lam, T. T. Leung, F. C. and **Shi, Z.** (2010). Intra-species Diversity of SARS-Like Coronaviruses (CoVs) in *Rhinolophus sinicus* and Its Implications on the Origin of SARS-CoVs in human. *J Gen Virol* 91(4):1058-1062.
55. Liao, M., Cheng, K., Yang, J., Zhao, Y., **Shi, Z.** (2010). Assessment of UV-B damage in cyanophage PP. *Aquat Microb Ecol* 58: 323–328.
56. Shi, Z. (2010) Bat and virus. *Protein Cell* 1(2): 109–114.
57. Hou, Y., P., Han, Z., Zhou, P., Chen, J. and **Shi, Z.** Immunogenicity of the Spike Glycoprotein of Bat SARS-like Coronavirus. *Virol Sinica*, 2010, 25 (1):36-44.
58. Li, H., Zheng, Z., Zhou, P., Zhang, B., **Shi, Z.**, Hu, Q. & Wang, H. (2010). The cysteine protease domain of porcine reproductive and respiratory syndrome virus nonstructural protein 2 antagonizes IRF-3 activation. *J Gen Virol* 91:2974-2958.
59. Yu, M., Tachedjian, M., Crameri, G., **Shi, Z.** & Wang, L. F. (2010). Identification of key amino acid residues required for horseshoe bat angiotensin-I converting enzyme 2 to function as a receptor for severe acute respiratory syndrome coronavirus. *J Gen Virol* 91, 1708-1712.
60. Zhou B., Y. Li, J. Belser, M. Pearce, M. Schmolke, A. Subba, Z. Shi, S. Zaki, D. Blau, A. Sastre, T. Tumpey, D. Wentworth h*. NS-based live attenuated H1N1 pandemic vaccines protect mice and ferrets. *Vaccine*. 28(50):8015-8025, 2010.
61. Tang, X. C. ? Li, G. ? Vasilakis, N. ? Zhang, Y. ? **Shi, Z.L** ? Zhong, Y. ? Wang, L.F. ? Zhang, S. Y. (2009) Differential stepwise evolution of SARS Coronavirus functional proteins in different host species. *BMC Evol Biol* 9: 52.
62. Zhou, P., Han, Z., Wang, L.F. and **Shi, Z.** (2009) Immunogenicity difference between the SARS coronavirus and the bat SARS-like coronavirus spike (S) proteins. *Biochem Biophys Res Commun* 387(2), 326-329.
63. Tan, Y., Xing, Y., Zhang, H., Feng, Y., Zhou, Y. and **Shi, Z.** (2009) Molecular detection of three shrimp viruses and genetic variation of white spot syndrome virus in Hainan province, China, in 2007. *J Fish Dis*, 32: 777-784.
64. Yuan, J., Li, Y., Zhang, H., Zhou, P., Ke, Z., Zhang, Y. and **Shi, Z.** (2009) Indirect enzyme-linked immunosorbent assay based on the nucleocapsid protein of SARS-like coronaviruses. *Virol Sinica* 24 (2): 146-151.
65. Wang, J., Zhang, H. and **Shi, Z.** (2008) Expression and assembly mechanism of the capsid proteins of a satellite virus (XSV) associated with *Macrobrachium rosenbergii* nodavirus. *Virol Sinica* 23 (1):73-77.
66. Tang, Y., **Shi, Z.** (2008) Proteomic analyses of the shrimp white spot syndrome virus. *Virol Sinica* 23 (3):157-166.
67. Bai, B., Hu, Q., Hu, H., Zhou, P., **Shi, Z.**, Meng, J., Huang, Y., Lu, B., Mao, P., Wang, H. (2008) Virus-like particles of SARS-like coronavirus formed by membrane proteins from different origins demonstrate stimulating activity in human dendritic cells. 3(7), e2685.
68. Li, Y., Wang, J., Hickey, A. C., Zhang, Y., Li, Y., Wu, Y., Zhang, H., Yuan, J., Han, Z., McEachern, J., Broder, C. C., Wang, L. F. and **Shi, Z.** (2008) Potential nipah virus infection in Chinese bats. *Emerg Infect Dis* 14(12):1974-1976.
69. Wang, J., Wang, L-F. and **Shi, Z.** (2008) Construction of a non-infectious SARS coronavirus replicon for application in drug screening and analysis of viral protein function. *Biochem Biophys Res Commun* 374(1):138-142.
70. Yu, M., Stevens, V., Berry, J. D., Crameri, G., McEachern, J., Tu, C., **Shi, Z.**, Liang, G., Weingart, H., Cardosa, J., Eaton, B. T., Wang, L. F. (2008) Determination and application of immunodominant regions of SARS coronavirus spike and nucleocapsid proteins recognized by sera from different animal species. *J Immunol Methods* 331(1-2):1–12.
71. Hon, C. C., Lam, T. Y., **Shi, Z.**, Drummond, A. J., Yip, C. W., Zeng, F., Lam, P. Y. and Leung, F. C.. (2008) Evidence of the recombinant origin of a bat severe acute respiratory syndrome (SARS)-like coronavirus and its implications on the direct ancestor of SARS coronavirus. *J Virol* 82(4): 1819-1826.
72. Ren, W., Qu, X., Li, W., Han, Z., Yu, M., Zhang, S., Wang, L. F., Deng, H., **Shi, Z.** (2008) Difference in receptor usage between SARS coronavirus and SARS-like coronavirus of bat origin. *J Virol* 82(4): 1899–1907.
73. **Shi, Z.** and Hu, Z. (2008) A review of studies on animal reservoirs of the SARS coronavirus. *Virus research* 133:74–87.
74. Cheng, K., Zhao, Y., Du, X., Zhang, Y., Lan, S., **Shi, Z.** (2007) Solar radiation-driven decay of cyanophage infectivity, and photoreactivation of the cyanophage by host cyanobacteria. *Aquatic Microbial Ecology* 48(1): 13-18.
75. Cui, J., Han, N., Streicker, D., Li, G., Tang, X., **Shi, Z.**, Hu, Z., Zhao, G., Fontanet, A., Guan, Y., Wang, L., Jones, G., Field, H. E., Daszak, P. and Zhang, S. (2007) Evolutionary relationships among bat coronaviruses and their hosts. *Emerg Infect Dis* 13(10):1526-1532.
76. Zhang, C., Yuan, J, **Shi, Z.** (2007) Molecular epidemiological investigation of infectious hypodermal and hematopoietic necrosis virus and taura syndrome virus in *Penaeus vannamei* cultured in China. *Virol Sinica* 22(5): 380-388.
77. Gu, W., Yuan, J., Xu, G., Li, L., Liu, N., Zhang, C., Zhang, J. and **Shi, Z.** (2007) Production and characterization of monoclonal antibody of shrimp white syndrome virus envelope protein VP28. *Virol Sinica* 22(1): 21-25.
78. Wang, L. F., **Shi, Z.**, Zhang, S., Field, H., Daszak, P. and Eaton B. T. (2006) A review of bats and SARS: virus origin and genetic diversity. *Emerg Infect Dis* 12(12): 1834-1840.
79. Ren, W., Li, W., Yu, M., Hao, P., Zhang, Y., Zhou, P., Zhang, S., Zhao, G., Zhong, Y., Wang, S., Wang, L. F. and **Shi, Z.** (2006) Full genome sequences of two SARS-like coronaviruses in horseshoe bats and genetic variation analysis. *J Gen Virol* 87(11): 3355-3359.

80. Zhang, H., Wang, J., Yuan, J., Li, L., Zhang, J., Bonami, J. R. and **Shi, Z.** (2006) Quantitative relationship of two viruses (*MrNV* and *XSV*) in white tail disease of *Macrobrachium rosenbergii* de Man. *Dis Aquat Org* 71(1): 11-17.
81. Li, L., Yuan, J., Cai, C., Gu, W. and **Shi, Z.** Multiple envelope proteins are involved in white spot syndrome virus (WSSV) infection in crayfish. *Arch Virol*, 2006, 151(7): 1309-1317.
82. Li, W., **Shi Z.**, Yu M., Ren W., Smith C., Epstein H. J., Zhang S., Wang H., Crameri G., Hu Z., Zhang H., Zhang J., Mceachern J., Field H., Daszak P., Eaton T.B. and Wang L. F. (2005) Bats are natural reservoirs of SARS-like coronaviruses. *Science* 310(5748): 676-679.

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Missings from the page: Huang Yanling and Zhang Yun



黄燕玲 2012级硕士研究生

张云 2011级硕士研究生



课题组现有研究人员6人，在学学生13人。



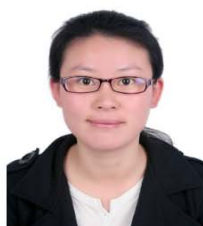
副研究员:



余军平

杨航

实验员:



李俊花

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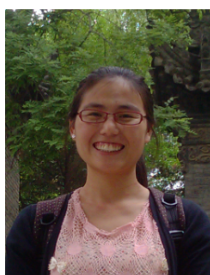
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莫燕玲 2012级硕士研究生



王孟月 2013级硕士研究生



魏翠华 2013级硕士研究生

P4 laboratory is part of the Wuhan Institute of Virology

Franco-Chinese cooperation, with Institut Mérieux, France, Lyon

2004 debut de la coopération du laboratoire P4 entre la France et la Chine, Labo Mérieux de Lyon et l'Institut de Virologie de Wuhan

2011 première pierre

2017 certification P4



une collaboration franco-chinoise.

"La France et la Chine conduiront des recherches conjointes de pointe sur les maladies infectieuses et émergentes, en s'appuyant sur le laboratoire P4 de Wuhan." 10 janvier 2018 notre président, **Emmanuel Macron**, et **Xi Jinping**, dans une déclaration conjointe

Le 23 février 2017, **Bernard Cazeneuve**, alors Premier ministre avait visité le laboratoire P4. accompagné par **Marisol Touraine**, alors ministre de la santé et **Mathias Fekl**, alors secrétaire d'Etat au Commerce Extérieur.

Bernard Cazeneuve : "La Chine a placé les questions environnementales au cœur de son projet de développement" © GouvernementFR



中国科学院武汉病毒研究所

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EXCHANGES

Foreign Visits

Seminars

International Conferences

Foreign Visits

Foreign experts under the EMERGENGES 2016 Program paid visits to WIV

Date: 27-02-2017 | 【Print】 【close】

On Dec.12, 2016, Dr. Maria Dolores Fernandez-GARCIA from Institut Pasteur de Dakar (Senegal) visited WIV and gave an academic presentation.

In her report, Dr. Maria Dolores Fernandez-GARCIA talked about the frontline experience of the Pasteur Institute of Dakar during viral outbreaks, Ebola, Zika, Yellow Fever, Polio and non-polio enteroviruses as examples. According to her, from 2014 to 2016, the laboratory supported local governments during the infectious disease outbreaks including Ebola, Zika and Yellow Fever, coordinated the collection, analysis of microbiological and epidemiological data, developed molecular and serological diagnostic tools, traced the evolutionary history of the viruses, sequenced the genomes, and paved the way for ambitious research projects that will support the management of health crises and the development of future strategies for prevention.

On Dec. 16, 2016, Dr. Herve Bourhy from Institut Pasteur paid a visit to WIV. He talked about the bat lyssaviruses in Europe. In his report, bats are reservoir hosts of numerous emerging viruses that can cross the species barrier to infect other wild and domestic animals, and also humans. These include lyssaviruses, the agents of rabies, that probably originated in bats and progressively diverged from a common ancestor to infect many recipient host species. To date, bats were found to serve as reservoirs of 13 of the 15 lyssavirus species described so far. In Europe, four of these lyssavirus species, namely European bat lyssavirus types 1 and 2 (EBLV-1 and EBLV-2, respectively), Bokeloh bat lyssavirus (BBLV), West Caucasian bat virus (WCBV) and one tentative species, Lleida bat lyssavirus, circulate among several bat species.

The EMERGENGES 2016 Program launched by the French Embassy in China supports French-Chinese cooperation in emergent infectious diseases. The two scientists are selected as French representatives under this program to visit China.

