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学科专业：病毒学

研究方向：肿瘤病毒感染与致瘤机制

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教育经历/Education:

1989-1994 重庆医科大学临床医学专业，获医学学士学位

1995-1998 重庆医科大学病理生理学专业，获医学硕士学位

1998-2001 中南大学湘雅医学院病理生理学专业，获医学博士学位

工作经历与任职/Professional Experience:

1994-1995 四川省屏山县人民医院，住院医师

2002-2006 美国宾夕法尼亚大学医学院，博士后

2006-2016 中国科学院上海巴斯德研究所研究员，博士生导师，肿瘤病毒研究组组长，病原诊断技术研发中心主任

2011-2016 中国科学院上海巴斯德研究所副所长，纪委书记

2017-至今 武汉大学病毒学国家重点实验室主任，生命科学学院教授、博士生导师

学术兼职：中国病理生理学会肿瘤专业委员会常委

中国微生物学会病毒专业委员会理事

Journal of Virology编委

Journal of Medical Virology副主编

获奖及荣誉：国家万人计划领军人才（2016年）

上海市先进工作者（2015年）

上海领军人才（2015年）

国家创新人才推进计划中青年科技创新领军人才（2015年）

国家杰出青年科学基金获得者（2014年）

药明康德生命化学研究奖（2012年）

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上海市浦江人才计划入选者（2008年）

中科院百人计划入选者（2006年）

美国白血病和淋巴瘤学会Special Fellow Award（2006年）

研究概述/Research Description:

主要从事肿瘤疱疹病毒感染及致瘤机理研究，在卡波氏肉瘤疱疹病毒(KSHV)潜伏感染与致瘤机理研究方面做出了系统性、原创性的研究工作：曾揭示KSHV关键开关分子RTA的表达调控机理，提出RTA-LANA负反馈调控工作模型，得到领域内的广泛认可，对阐明KSHV潜伏感染的形成机制有重要的指导意义；曾利用KSHV作为工作模型，率先发现病毒包装自身及宿主miRNA，不仅揭示了病毒粒子一种新的构成成分，也鉴定了胞外游离型miRNA的一种新的存在形式，具有重要的学术价值；曾阐明KSHV通过操控Notch及BMP等重要信号转导通路参与致瘤的新机制，为发展相关肿瘤有效的治疗手段奠定了重要基础。

代表性论文/Publications:

1. Sun R, Tan X, Wang X, Wang X, Yang L, Robertson ES, Lan K\*. Epigenetic Landscape of Kaposi's Sarcoma-Associated Herpesvirus Genome in Classic Kaposi's Sarcoma Tissues. *PLoS Pathog.* 2017 Jan 24;13(1):e1006167. doi: 10.1371/journal.ppat.1006167.
2. Li S, Hu H, He Z, Liang D, Sun R, Lan K\*. Fine-Tuning of the Kaposi's Sarcoma-Associated Herpesvirus Life Cycle in Neighboring Cells through the RTA-JAG1-Notch Pathway. *PLoS Pathog.* 2016 Oct 19;12(10):e1005900. doi: 10.1371/journal.ppat.1005900.
3. Yang Y, Zhang J, Xia T, Li G, Tian T, Wang M, Wang R, Zhao L, Yang Y, Lan K\*, Zhou W\*. MicroRNA-210 promotes cancer angiogenesis by targeting fibroblast growth factor receptor-like 1 in hepatocellular carcinoma. *Oncol Rep.* 2016 Nov;36(5):2553-2562. doi: 10.3892/or.2016.5129.
4. Dong W, Chen Q, Hu Y, He D, Liu J, Yan H, Lan K\*, Zhang C\*. Epidemiological and clinical characteristics of respiratory viral infections in children in Shanghai, China. *Arch Virol.* 2016 Jul;161(7):1907-13. doi: 10.1007/s00705-016-2866-z.
5. Hu H, Dong J, Liang D, Gao Z, Bai L, Sun R, Hu H, Zhang H, Dong Y, Lan K\*. Genome-Wide Mapping of the Binding Sites and Structural Analysis of Kaposi's Sarcoma-Associated Herpesvirus Viral Interferon Regulatory Factor 2 Reveal that It Is a DNA-Binding Transcription Factor. *J Virol.* 2015 Nov 4;90(3):1158-68. doi: 10.1128/JVI.01392-15.
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7. Zhao Q, Liang D, Sun R, Jia B, Xia T, Xiao H, Lan K\*. Kaposi's Sarcoma-Associated Herpesvirus-Encoded Replication and Transcription Activator Impairs Innate Immunity via Ubiquitin-Mediated Degradation of Myeloid Differentiation Factor 88. *J Virol.* 2015 Jan 1;89(1):415-27. doi: 10.1128/JVI.02591-14. Epub 2014 Oct 15.
8. Liang D, Hu H, Li S, Dong J, Wang X, Wang Y, He L, He Z, Gao Y, Gao S, Lan K\*. Oncogenic Herpesvirus KSHV Hijacks BMP-Smad1-Id Signaling to Promote Tumorigenesis. *PLoS Pathog.* 2014 Jul 10;10(7):e1004253.
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10. Sun R, Liang D, Gao Y, Lan K\*. Kaposi's Sarcoma-Associated Herpesvirus-Encoded LANA Interacts with Host KAP1 To Facilitate Establishment of Viral Latency. *J Virol.* 2014 Jul 1;88(13):7331-7344.
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12. Wang X, He Z, Xia T, Li X, Liang D, Lin X, Wen H, Lan K\*. Latency-Associated Nuclear Antigen of Kaposi Sarcoma-Associated Herpesvirus Promotes Angiogenesis through Targeting Notch Signaling Effector Hey1. *Cancer Res.* 2014 Apr 1;74(7):2026-37.
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14. Xia T, Lévy L, Levillayer F, Jia B, Li G, Neuveut C, Buendia MA, Lan K\*, Wei Y\*. The Four and a Half LIM-only Protein 2 (FHL2) Activates Transforming Growth Factor  $\beta$  (TGF- $\beta$ ) Signaling by Regulating Ubiquitination of the E3 Ligase Arkadia. *J Biol Chem.* 2013 Jan 18;288(3):1785-94.
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