

Biosketch



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Dr. Jieliang Chen obtained his M.B. and M.D./Ph.D. degrees from Shanghai Medical College, Fudan University in 2008 and 2013, respectively. He used to be a visiting scientist at Institute for Virology, University of Duisburg-Essen (2013), and worked as a post-doctoral fellow in Fudan University (2014-2015). In 2016, he became a tenure-tracked assistant professor in Fudan University, and was promoted to a tenured associate professor in 2018.

He is mainly engaged in the research of persistent viral infections and antiviral strategies, particularly focusing on hepatitis B virus (HBV) and interferons (IFNs). He has revealed a role of the epigenetic machinery in regulating the activity and stability of the HBV 'engine' (the cccDNA minichromosome), and has uncovered the mechanism of IFN antagonism by HBV polymerase and viral spliced RNAs-encoded proteins. His goal is to develop new approaches targeting key viral and host factor(s) to eliminate or control the viral reservoir and to improve IFN-based therapies.

He has been the principal investigator for a number of research projects and published over thirty papers in virology, immunology and hepatology. He is a recipient of the NSFC National Outstanding Youth Science Fund, the Shanghai Rising-Star Program and APASL Young Investigator Award. He is a member of the International Cytokine & Interferon Society, and currently serves as the youth board member of the Chinese Society of Medical Virology and the deputy director of the youth board of the Medical Virology Branch of Shanghai Medical Association.

Research Project Funded by:

Selected Publications:

1. **Chen J**, Li Y, Lai F, Wang Y, Sutter K, Dittmer U, Ye J, Zai W, Liu M, Shen F, Wu M, Hu K, Li B, Lu M, Zhang X, Zhang J, Li J, Chen Q, Yuan Z. 2021. Functional Comparison of Interferon-alpha Subtypes Reveals Potent Hepatitis B Virus Suppression by a Concerted Action of Interferon-alpha and Interferon-gamma Signaling. *Hepatology* 73:486-502.
2. Yi Z, Ling Y, Zhang X, **Chen J**, Hu K, Wang Y, Song W, Ying T, Zhang R, Lu H, Yuan Z. 2020. Functional mapping of B-cell linear epitopes of SARS-CoV-2 in COVID-19 convalescent population. *Emerg Microbes Infect* 9:1988-1996.

3. Wang F, Shen F, Wang Y, Li Z, **Chen J**, Yuan Z. 2020. Residues Asn118 and Glu119 of hepatitis B virus X protein are critical for HBx-mediated inhibition of RIG-I-MAVS signaling. *Virology* 539:92-103.
4. **Chen J**. 2020. Pathogenicity and transmissibility of 2019-nCoV-A quick overview and comparison with other emerging viruses. *Microbes Infect* 22:69-71.
5. Yao Z, Jia X, Megger DA, **Chen J**, Liu Y, Li J, Sitek B, Yuan Z. 2019. Label-Free Proteomic Analysis of Exosomes Secreted from THP-1-Derived Macrophages Treated with IFN-alpha Identifies Antiviral Proteins Enriched in Exosomes. *Journal of proteome research* 18:855-864.
6. Yao Z, Qiao Y, Li X, **Chen J**, Ding J, Bai L, Shen F, Shi B, Liu J, Peng L, Li J, Yuan Z. 2018. Exosomes Exploit the Virus Entry Machinery and Pathway To Transmit Alpha Interferon-Induced Antiviral Activity. *J Virol* 92.
7. Wu M, Li J, Yue L, Bai L, Li Y, **Chen J**, Zhang X, Yuan Z. 2018. Establishment of Cre-mediated HBV recombinant cccDNA (rcccDNA) cell line for cccDNA biology and antiviral screening assays. *Antiviral Res* 152:45-52.
8. Shen F, Li Y, Wang Y, Sozzi V, Revill PA, Liu J, Gao L, Yang G, Lu M, Sutter K, Dittmer U, **Chen J**, Yuan Z. 2018. Hepatitis B virus sensitivity to interferon-alpha in hepatocytes is more associated with cellular interferon response than with viral genotype. *Hepatology* 67:1237-1252.
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10. Zhang W, **Chen J**, Wu M, Zhang X, Zhang M, Yue L, Li Y, Liu J, Li B, Shen F, Wang Y, Bai L, Protzer U, Levrero M, Yuan Z. 2017. PRMT5 restricts hepatitis B virus replication through epigenetic repression of covalently closed circular DNA transcription and interference with pregenomic RNA encapsidation. *Hepatology* 66:398-415.
11. Kosinska AD, Pishraft-Sabet L, Wu W, Fang Z, Lenart M, **Chen J**, Dietze KK, Wang C, Kemper T, Lin Y, Yeh SH, Liu J, Dittmer U, Yuan Z, Roggendorf M, Lu M. 2017. Low hepatitis B virus-specific T-cell response in males correlates with high regulatory T-cell numbers in murine models. *Hepatology* 66:69-83.
12. Jia X, **Chen J**, Megger DA, Zhang X, Kozlowski M, Zhang L, Fang Z, Li J, Chu Q, Wu M, Li Y, Sitek B, Yuan Z. 2017. Label-free Proteomic Analysis of Exosomes Derived from Inducible Hepatitis B Virus-Replicating HepAD38 Cell Line. *Mol Cell Proteomics* 16:S144-S160.
13. Yi Z, **Chen J**, Kozlowski M, Yuan Z. 2015. Innate detection of hepatitis B and C virus and viral inhibition of the response. *Cell Microbiol* 17:1295-1303.
14. Liu Y, Li J, **Chen J**, Li Y, Wang W, Du X, Song W, Zhang W, Lin L, Yuan Z. 2015. Hepatitis B virus polymerase disrupts K63-linked ubiquitination of STING to block innate cytosolic DNA-sensing pathways. *J Virol* 89:2287-2300.
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19. Wang S, Chen Z, Hu C, Qian F, Cheng Y, Wu M, Shi B, **Chen J**, Hu Y, Yuan Z. 2013. Hepatitis B Virus Surface Antigen Selectively Inhibits TLR2 Ligand-Induced IL-12 Production in Monocytes/Macrophages by Interfering with JNK Activation. *J Immunol* 190:5142-5151.
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21. **Chen J**, Wu M, Zhang X, Zhang W, Zhang Z, Chen L, He J, Zheng Y, Chen C, Wang F, Hu Y, Zhou X, Wang C, Xu Y, Lu M, Yuan Z. 2013. Hepatitis B virus polymerase impairs interferon-alpha-induced STAT activation through inhibition of importin-alpha5 and protein kinase C-delta. *Hepatology* 57:470-482.
22. Yu S, **Chen J**, Wu M, Chen H, Kato N, Yuan Z. 2010. Hepatitis B virus polymerase inhibits RIG-I- and Toll-like receptor 3-mediated beta interferon induction in human hepatocytes through interference with interferon regulatory factor 3 activation and dampening of the interaction between TBK1/IKKepsilon and DDX3. *J Gen Virol* 91:2080-2090.

Research Group

Staffs:

MS and MD/PhD Students: