

2022年度医学研究院论文集选（按发表时间排序）

1. Jiang, L., Shen, Y., Liu, Y., Zhang, L.*, and **Jiang, W.*** (2022). Making human pancreatic islet organoids: Progresses on the cell origins, biomaterials and three-dimensional technologies. **Theranostics** 12, 1537-1556. (蒋卫)
2. Zhang, Z.D., **Zhong, B.*** (2022). Regulation and function of the cGAS-MITA/STING axis in health and disease. **Cell Insight** 1(1): 100001. (钟波)
3. Wang, L., Chen, C., Song, Z., Wang, H., Ye, M., Wang, D., Kang, W., Liu, H., and **Qing, G.*** (2022). EZH2 depletion potentiates MYC degradation inhibiting neuroblastoma and small cell carcinoma tumor formation. **Nat Commun** 13, 12. (卿国良)
4. Feng, L., Li, C., Zeng, L.W., Gao, D., Sun, Y.H., Zhong, L., Lin, H., **Shu, H.B.***, and **Li, S.*** (2022). MARCH3 negatively regulates IL-3-triggered inflammatory response by mediating K48-linked polyubiquitination and degradation of IL-3Ralpha. **Signal Transduct Target Ther** 7, 21. (舒红兵、李姝)
5. Li, Q., Chen, Q., Yang, X., Zhang, Y., Lv, L., Zhang, Z., Zeng, S., Lv, J., Liu, S.*, and **Fu, B.*** (2022). Cocktail strategy based on a dual function nanoparticle and immune activator for effective tumor suppressive. **J Nanobiotechnology** 20, 84. (付碧石)
6. Lv, J., Yi, Y., Qi, Y., Yan, C., Jin, W., Meng, L., Zhang, D.*, and **Jiang, W.*** (2022). Mitochondrial homeostasis regulates definitive endoderm differentiation of human pluripotent stem cells. **Cell Death Discov** 8, 69. (蒋卫)
7. Wang, J., He, Z., Wang, G., Zhang, R., Duan, J., Gao, P., Lei, X., Qiu, H., Zhang, C., Zhang, Y., **Yin, H.*** (2022). Efficient targeted insertion of large DNA fragments without DNA donors. **Nat Methods** 19, 331-340. (殷昊)
8. Xie, F., Jiang, L., Xiao, X., Lu, Y., Liu, R.*, **Jiang, W.***, and Cai, J.* (2022). Quaternized Polysaccharide-Based Cationic Micelles as a Macromolecular Approach to Eradicate Multidrug-Resistant Bacterial Infections while Mitigating Antimicrobial Resistance. **Small** 18, e2104885. (蒋卫)
9. Yi, X.M., Li, M., Chen, Y.D., Shu, H.B., and **Li, S.*** (2022). Reciprocal regulation of IL-33 receptor-mediated inflammatory response and pulmonary fibrosis by TRAF6 and USP38. **Proc Natl Acad Sci U S A** 119, e2116279119. (李姝)
10. Lu, S., Tong, X., Han, Y., Zhang, K., Zhang, Y., Chen, Q., Duan, J., Lei, X., Huang, M., Qiu,

- Y., Zhang, D.Y., Zhou, X., **Zhang, Y.***, Yin, H.* (2022). Fast and sensitive detection of SARS-CoV-2 RNA using suboptimal protospacer adjacent motifs for Cas12a. **Nat Biomed Eng** 6, 286-297. (张榓、殷昊)
11. Wang, Q., Hu, J., Han, G., Wang, P., Li, S., Chang, J., Gao, K., Yin, R., Li, Y., Zhang, T., ..., **Zhang, H.*** (2022). PTIP governs NAD(+) metabolism by regulating CD38 expression to drive macrophage inflammation. **Cell Rep** 38, 110603. (张好建)
 12. Xiong, W., Gao, X., Zhang, T., Jiang, B., Hu, M.M., Bu, X., Gao, Y., Zhang, L.Z., Xiao, B.L., He, C., ..., **Zhang, J.*** (2022). USP8 inhibition reshapes an inflamed tumor microenvironment that potentiates the immunotherapy. **Nat Commun** 13, 1700. (张金方)
 13. Yang, W., Dong, H.P., Wang, P., Xu, Z.G., Xian, J., Chen, J., Wu, H., Lou, Y., Lin, D.*, and **Zhong, B.*** (2022). IL-36gamma and IL-36Ra Reciprocally Regulate Colon Inflammation and Tumorigenesis by Modulating the Cell-Matrix Adhesion Network and Wnt Signaling. **Adv Sci (Weinh)** 9, e2103035. (钟波)
 14. Zhao, Y., Yue, S., Zhou, X., Guo, J., Ma, S., and **Chen, Q.*** (2022). O-GlcNAc transferase promotes the nuclear localization of the focal adhesion-associated protein Zyxin to regulate UV-induced cell death. **J Biol Chem** 298, 101776. (陈强)
 15. Qiu, Y., Yu, S., Wang, Y., Xiao, L., Pei, L., **Pu, Y.***, and Zhang, Y.* (2022). Photothermal therapy may be a double-edged sword by inducing the formation of bacterial antibiotic tolerance. **Biomater Sci** 10, 1995-2005. (普颖颖)
 16. Li, X., Li, J., Xu, L., Wei, W., Cheng, A., Zhang, L., Zhang, M., Wu, G.*, and **Cai, C.*** (2022). CDK16 promotes the progression and metastasis of triple-negative breast cancer by phosphorylating PRC1. **J Exp Clin Cancer Res** 41, 149. (蔡车国)
 17. Su, S., Hua, D., Li, J.P., Zhang, X.N., Bai, L., Cao, L.B., Guo, Y., Zhang, M., Dong, J.Z., Liang, X.W., ..., **Hu, M.M.***, **Shu, H.B.*** (2022). Modulation of innate immune response to viruses including SARS-CoV-2 by progesterone. **Signal Transduct Target Ther** 7, 137. (胡明明、舒红兵)
 18. Zhang, P., Qiu, Y., Wang, Y., Xiao, L., Yu, S., Shi, M., Ni, Y., Miron, R.J., **Pu, Y.***, and Zhang, Y.* (2022). Nanoparticles Promote Bacterial Antibiotic Tolerance via Inducing Hyperosmotic Stress Response. **Small** 18, e2105525. (普颖颖)
 19. Zhang, Z.D., Li, H.X., Gan, H., Tang, Z., Guo, Y.Y., Yao, S.Q., Liuyu, T., **Zhong, B.***, and

- Lin, D.* (2022). RNF115 Inhibits the Post-ER Trafficking of TLRs and TLRs-Mediated Immune Responses by Catalyzing K11-Linked Ubiquitination of RAB1A and RAB13. **Adv Sci (Weinh)** 9, e2105391. (钟波)
20. Wang, F., Liu, X., Li, S., Zhao, C., Sun, Y., ..., Li, Z.*, **Liu, Y.***, **Zhou, Y.*** (2022). Resolving the lineage relationship between malignant cells and vascular cells in glioblastomas. **Protein Cell.** (刘颖、周严)
21. Zhang, T., Zheng, R., Li, M., Yan, C., Lan, X., Tong, B., Lu, P., and **Jiang, W.*** (2022). Active endogenous retroviral elements in human pluripotent stem cells play a role in regulating host gene expression. **Nucleic Acids Res** 50, 4959-4973. (蒋卫)
22. Yi, X.M., Lian, H., **Li, S.*** (2022). Signaling and functions of interleukin-33 in immune regulation and diseases. **Cell Insight** 1(4): 100042. (李姝)
23. Zhang, Y., Hong, X., Hua, S., and **Jiang, K.*** (2022). Reconstitution and mechanistic dissection of the human microtubule branching machinery. **J Cell Biol** 221. (姜恺)
24. An, R., Wang, P., Guo, H., Liuyu, T., **Zhong, B.***, Zhang, Z.-D.* (2022). USP2 promotes experimental colitis and bacterial infections by inhibiting the proliferation of myeloid cells and remodeling the extracellular matrix network. **Cell Insight** 1(4): 100047. (钟波)
25. Yin, R., Li, Y., Tian, W., Zhou, F., and **Zhang, H.*** (2022). RNA m(6)A modification: Mapping methods, roles, and mechanisms in acute myeloid leukemia. **Blood Sci** 4, 116-124. (张好建)
26. Zhang, N., Gao, Y., Huang, Z., Dai, P., Luo, Y., Wu, Q., Jiang, X., Sun, W., Zhang, J., Han, L., **Zhang, J.***, Gong, Y.* , Xie, C.* (2022). PARP inhibitor plus radiotherapy reshapes an inflamed tumor microenvironment that sensitizes small cell lung cancer to the anti-PD-1 immunotherapy. **Cancer Lett** 545, 215852. (张金方)
27. Jin, W., and **Jiang, W.*** (2022). Stepwise differentiation of functional pancreatic beta cells from human pluripotent stem cells. **Cell Regen** 11, 24. (蒋卫)
28. Wang, J., Wang, A., Tian, K., Hua, X., Zhang, B., Zheng, Y., Kong, X., Li, W., Xu, L., Wang, J., Li, Z., **Liu, Y.***, **Zhou, Y.*** (2022). A Ctnnb1 enhancer regulates neocortical neurogenesis by controlling the abundance of intermediate progenitors. **Cell Discov** 8, 74. (刘颖、周严)
29. Lan, X., Ding, S., Zhang, T., Yi, Y., Li, C., Jin, W., Chen, J., Liang, K., Wang, H., and **Jiang, W.*** (2022). PCGF6 controls neuroectoderm specification of human pluripotent stem cells by

- activating SOX2 expression. **Nat Commun** 13, 4601. (蒋卫)
30. Chen, Y., Xu, W., Chen, Y., Han, A., Song, J., Zhou, X., and **Song, W.*** (2022). Renal NF-kappaB activation impairs uric acid homeostasis to promote tumor-associated mortality independent of wasting. **Immunity**. (宋威)
31. Zeng, L.W., Feng, L., Liu, R., Lin, H., Shu, H.B., and **Li, S.*** (2022). The membrane-associated ubiquitin ligases MARCH2 and MARCH3 target IL-5 receptor alpha to negatively regulate eosinophilic airway inflammation. **Cell Mol Immunol**. (李姝)
32. Xu, M., Cheng, A., Yu, L., Wei, W., Li, J.*, and **Cai, C.*** (2022). AHNAK2 is a biomarker and a potential therapeutic target of adenocarcinomas. **Acta Biochim Biophys Sin (Shanghai)**. (蔡车国)
33. Zhang, M., Zhang, L., Geng, A., ..., Zeng, Y.A.*, Li, J.*., **Cai, C.*** (2022). CDK14 inhibition reduces mammary stem cell activity and suppresses triple negative breast cancer progression. **Cell Rep** 40, 111331. (蔡车国)
34. Zhang, W., Guo, J., and **Chen, Q.*** (2022). Role of PARP-1 in Human Cytomegalovirus Infection and Functional Partners Encoded by This Virus. **Viruses** 14. (陈强)
35. **Zhong, B.***, **Shu, H.B.*** (2022). MITA/STING-mediated antiviral immunity and autoimmunity: the evolution, mechanism, and intervention. **Curr Opin Immunol** 78, 102248. (钟波、舒红兵)
36. Wang, G., Cheng, R., ..., **Yin, H.***, Xia, H.* (2022). mRNA produced by VSV-3 RNAP has high-level translation efficiency with low inflammatory stimulation. **Cell Insight** 1(5): 100056. (殷昊)
37. Liu, M., Liu, J., Zhang, T., **Wang, L.*** (2022). Direct cardiac reprogramming: Toward the era of multi-omics analysis. **Cell Insight** 1(6): 100058. (王丽)
38. **Yu, Y.V.***, Xue, W., and Chen, Y. (2022). Multisensory Integration in *Caenorhabditis elegans* in Comparison to Mammals. **Brain Sci** 12. (俞雁寻)
39. Xiong, T.C., Wei, M.C., Li, F.X., Shi, M., Gan, H., Tang, Z., Dong, H.P., Liuyu, T., Gao, P., **Zhong, B.***, Zhang, Z.D.*., Lin, D.* (2022). The E3 ubiquitin ligase ARIH1 promotes antiviral immunity and autoimmunity by inducing mono-ISGylation and oligomerization of cGAS. **Nat Commun** 13, 5973. (钟波)
40. Shi, Y.J., Duan, M., Ding, J.M., Wang, F.Q., Bi, L.L., Zhang, C.X., Zhang, Y.Z., Duan, J.Y.,

Huang, A.H., Lei, X.L., Yin, H.*, **Zhang, Y.*** (2022). DNA topology regulates PAM-Cas9 interaction and DNA unwinding to enable near-PAMless cleavage by thermophilic Cas9. **Mol Cell.** (张楹)

41. Yang, Y.L., Cao, L.B., He, W.R., Zhong, L., Guo, Y., Yang, Q., Shu, H.B., and **Hu, M.M.*** (2022). Endocytosis triggers V-ATPase-SYK-mediated priming of cGAS activation and innate immune response. **Proc Natl Acad Sci U S A** 119, e2207280119. (胡明明)
42. **Zhang, H.***, and Qian, P. (2022). Editorial: Characteristics and behaviors of hematopoietic stem cells and leukemia stem cells in hematologic malignancies. **Front Oncol** 12, 1037202. (张好建)
43. Zhao, Q., Yu, Z., Zhang, S., Shen, X.R., Yang, H., Xu, Y., Liu, Y., Yang, L., Zhang, Q., Chen, J., ..., **Wang, L.***, Su, L.* , Zhang, Z.* , Cheng, L.* (2022). Metabolic modeling of single bronchoalveolar macrophages reveals regulators of hyperinflammation in COVID-19. **iScience** 25, 105319. (王丽、程亮)
44. Qiu, H.Y., Ji, R., **Zhang, Y.*** (2022). Current advances of CRISPR-Cas technology in cell therapy. **Cell Insight** 1(6): 100067. (张楹)
45. Liu, J., Huang, H., Zhang, M., Qing, G., **Liu, H.*** (2022). Intertwined regulation between the RNA m6A modification and cancer metabolism. **Cell Insight** 2(1): 100075. (刘胡丹)
46. Chai, J., Wang, Q., Qiu, Q., Han, G., Chen, Y., Li, W., and **Zhang, H.*** (2022). YBX1 regulates the survival of chronic myeloid leukemia stem cells by modulating m(6)A-mediated YWHAZ stability. **Cell Oncol (Dordr).** (张好建)
47. Cheng, Y., Gao, Z., Zhang, T., Wang, Y., Xie, X., Han, G., Li, Y., Yin, R., ..., **Zhang, H.*** (2022). Decoding m(6)A RNA methylome identifies PRMT6-regulated lipid transport promoting AML stem cell maintenance. **Cell Stem Cell.** (张好建)
48. Su, W., Qiu, W., Li, S.J., Wang, S., Xie, J., Yang, Q.C., Xu, J., **Zhang, J.***, Xu, Z.* , and Sun, Z.J.* (2022). Dual-Responsive STAT3 Inhibitor Nanoprodrug Combined with Oncolytic Virus Elicits Synergistic Antitumor Immune Responses by Igniting Pyroptosis. **Adv Mater**, e2209379. (张军杰)