

Resume of Binlei LIU

Basic Information



School :	School of Economics and Management
Gender:	Male
Date of Birth:	196212
Title:	Professor
Education:	Ph.D
Tutor:	Doctor degree
E-mail:	1836035949@qq.com
Interest of research:	Molecular mechanism and clinical application of oncolytic virus

Academic Background

From September 1978 to July 1983, Huazhong University of Science and Technology, Bachelor's degree;

From September 1986 to July 1989, Chinese Center for Disease Control and Prevention, Master's degree

From September 1993 to July 1996, University of Southampton, Ph.D.

From September 1997 to July 2000, University of Southampton, Postdoc.

Oversea visiting

From September 2000 to July 2009, BIOVEX Biopharmaceuticals United Kingdom, Chief Scientist.

Enrollment Information

1. Enrollment Discipline: Bioengineering
2. Research direction: Immunotherapy, Biopharmaceuticals, Oncolytic virotherapy
3. Enrollment Year: 2023-2024

Representative Projects

1. 2018-2020, National Major New Drug Development Project, "Preclinical and Clinical Research of Gene Therapy Oncolytic Virus Class 1 New Drugs", Grant No. 2018ZX09733002, sub-project leader
2. 2015-2018, National Natural Science Foundation of China, "Detection of Circulating Tumor Cells by Herpes Simplex Virus Selective Tumor Multiplication and Expression of Green Fluorescent Protein", Grant No.: 81472013, Project Leader
3. 2014-2017, "Twelfth Five-Year Plan" National Science and Technology Support Program, "Translational Medicine Platform such as Malignant Tumor Target Gene Capture Technology", Grant No.: 2014BAI09B04, sub-project leader

4. 2012-2015, 973, Project "Negative Immune Regulatory Network of Malignant Tumors", Grant No. 2012CB917104, sub-project leader
5. 2012-2015, 863, Project "Key Technologies and Product Development of Vaccine R&D", Grant No. 2012AA02A407, Principal Investigator

Representative Articles

1. Wen Zhang, Xiao Hu, Jing Liang, Yujie Zhu, Beibei Zeng, Lin Feng, Changyun Zhao, Shangmei Liu, Binlei Liu*, and Kaitai Zhang. oHSV2 Can Target Murine Colon Carcinoma by Altering the Immune Status of the Tumor Microenvironment and Inducing Antitumor Immunity. *Molecular Therapy Oncolytics*, 2020, vol. 16
2. Han Hu, Ziyi Zhang, Runyang Wang, Yang Wang, Jing Jin, Linkang Cai, Junhan Yang, Haixiao Duan, Zhen Wu, Zhizheng Fang, Binlei Liu*. BGC823 Cell Line with the Stable Expression of iRFP720 Retains Its Primary Properties with Promising Fluorescence Imaging Ability. *DNA and Cell Biology*, 2020, DOI: 10.1089/dna.2019.5057
3. Linkang Cai, Han Hu, Haixiao Duan, Yuying Li, Zongxing Zou, Kailun Luo, Ziyi Zhang, Junhan Yang, Jing Jin, Ying Chen, Zonghuang Ke, Zongyao Fang, Qiong Liu, Xiaoqian Hong, Sheng Hu, Binlei Liu*. The construction of a new oncolytic herpes simplex virus expressing murine interleukin-15 with gene-editing technology. *Journal of Medical Virology*, 2020, DOI: 10.1002/jmv.25691
4. Yujie Zhu, Xiao Hu, Lin Feng, Zhenrong Yang, Lulin Zhou, Xinchun Duan, Shujun Cheng, Wen Zhang, Binlei Liu*, Kaitai Zhang. Enhanced therapeutic efficacy of a novel oncolytic herpes simplex virus type 2 encoding an antibody against programmed cell death 1. *Molecular Therapy: Oncolytics*, 2019, 15: 201-213. <https://doi.org/10.1016/j.omto.2019.10.003>.
5. Han Hu, Runyang Wang, Ziyi Zhang, Haixiao Duan, Yang Wang, Jing Jin, Ying Chen, Zhen Wu, Zhizheng Fang, Binlei Liu*. PiggyBac-modified CD19-expressing 4T1 cell line for the evaluation of CAR construct. *Int J Clin Exp Pathol.*, 2019, 12(7):
6. Wen Zhang*, Feifei Wang*, Xiao Hu, Jing Liang, Binlei Liu, Qi Guan, Shangmei Liu. Inhibition of colorectal cancer liver metastasis in BALB/c mice following intratumoral injection of oncolytic herpes simplex virus type 2 for the induction of specific antitumor immunity. *Oncology Letters*, 2019, 17: 815-822.
7. Preclinical safety evaluation of oncolytic herpes simplex virus type 2. Wang Yang, Zhou Xiaobing, Wu Zhen, Hu Han, Jin Jing, Hu Yanping, Dong Yuting, Zou Jianwen, Mao Zeyong, Shi Xiaotai, Huo Yan, Lyu Jianjun, Fang Zhizheng, Zhang Wen, Zhu Yujie, Li Bo, Liu Binlei*. *Human Gene therapy*, 2018, DOI: 10.1089/hum.2018.170.
8. Stability and anti-tumor effect of oncolytic herpes simplex virus type 2. Wang Yang, Jing Jin, Zhen Wu, Sheng Hu, Han Hu, Zhifeng Ning, Yanfei Li, Yuting Dong, Jianwen Zou, Zeyong Mao, Xiaotai Shi, Huajun Zheng, Shuang Dong, Fuxing Liu, Zhizheng Fang, Jiliang Wu and Binlei Liu*. *Oncotarget*, 2018, 9:24672-24683.
9. Yang HB, Peng T, Li J, Zhang W, Zhang P, Peng S, Du T, Li YF, Yan Q, Liu BL*; Treatment of colon cancer with oncolytic herpes simplex virus in preclinical models. *Gene Therapy* 2016, 23(5):450.

10. Zhang W, Bao L, Yang SX, Qian ZY, Dong M, Yin LY, Zhao Q, Ge KL, Deng ZL, Zhang J, Qi F, An ZX, Yu Y, Wang QB, Wu RH, Fan F, Zhang LF, Chen XP, Na YJ, Feng L, Li J, Zhang Y, Dong Y, Zhang SR, Zhang YH, Zhang XQ, Wang J, Yi X, Zou L, Xin HW, Ditzel HJ, Gao H, Zhang KT, Liu BL*, Cheng SJ; Tumor-selective replication herpes simplex virus-based technology significantly improves clinical detection and prognostication of viable circulating tumor cells. *Oncotarget* 2016, 7(26):39768.
11. Zhang W, Ge K, Zhao Q, Li J, Zhang Y, Dong Y, Zhang S, Liu B*; A novel oncolytic herpes simplex virus type-1 targeting telomerase reverse transcriptase-positive cancer cells via tumor-specific promoters regulating the expression of ICP4. *Oncotarget*, 2015, 6: 20345-20355.
12. Zhao Q, Zhang W, Zhuang X, Li J, Zhang Y, Dong Y, Zhang Y, Zhang S, Liu S, Liu B*; A novel oncolytic herpes simplex virus type 2 has potent anti-tumor activity. *PLOS ONE* 2014, 9(3):e93103.
13. Guilan Shi, Chunxia Zhou, Dongmei Wang, Wenbo Ma, Binlei Liu*, Shuren Zhang; Antitumor enhancement by adoptive transfer of tumor antigen primed, inactivated MHC-haploidentical lymphocyte. *Cancer Letter* 2014, 343:42-50.
14. Zhuang X, Wen Zhang, Chen Y, Han X, Li J, Zhang Y, Zhang Y, Zhang S, Liu B*; Doxorubicin-enriched, ALDH^{br} mouse breast cancer stem cells are treatable to oncolytic herpes simplex virus type 1. *BMC Cancer* 2012, 12:549.
15. Tang Y-S, Wang D, Zhou C, Ma W, Zhang Y-Q, Liu B* and Zhang S; Bacterial magnetic particles as a novel and efficient gene vaccine delivery system. *Gene Therapy* 2012 Dec;19(12):1187-1195. IF4.538
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- bacterium *Chlamydia abortus*. *J Bacteriol.* 2002 May; 184(10):2748-54
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- 29.Liu, B-L., Clarke, I.N., and Lambden, P.R.; Polyprotein processing in Southampton Virus: Identification of 3C protease cleavage sites by in vitro mutagenesis *Journal of Virology.* 70, 2605-2610 (1996).
- 30.Liu, B-L., Clarke, I.N., Caul, E.O. and Lambden, P.R.; Human enteric caliciviruses have a unique genome structure and are distinct from the Norwalk-like viruses. *Archives of Virology* 140, 1345-1356 (1995).
- 31.Lambden, P.R., Liu, B-L., and Clarke, I.N.; A conserved sequence motif at the 5' terminus of the Southampton virus genome is characteristic of the Caliciviridae. *Virus Genes* 10:2, 149-152 (1995).