# Resume of Wang Yang

### **Basic Information**



School : Gender: Date of Birth: Title: Education: Tutor: E-mail: Interest of research:

School of Life and Health Sciences Male 198311 Professor Ph.D Doctoral Supervisor wangyang@mail.hbut.edu.cn Research on the molecular mechanisms of oncolytic viruses in anti-tumor activity

## Academic Background

From September 2003 to July 2007, Yangtze University, Bachelor's degree in Bioengineering;

From September 2007 to July 2012, Huazhong Agricultural University, Ph.D of Preventive Veterinary Medicine;

### **Enrollment Information**

1. Enrollment Discipline: Light Industry Technology and Engineering, Biology and Medicine

- 2. Research direction: Tumor biotherapy
- 3. Enrollment Year: 2024-2025

#### **Representative Projects**

1. "Key Technologies and Product Development for Viral Vector Gene Therapy in Industry-Academia-Medicine-Inspection Collaboration," National Key R&D Program, 2023YFC3403300, December 2023 to November 2028, Principal Investigator, 3.05 million RMB

2. "Study on the Mechanism of VP5 Protein Regulating NK Cell Anti-Tumor Mechanism Induced by Oncolytic Virus oHSV2 through Immune Checkpoint HLA-E," National Natural Science Foundation General Project, 32270969, January 2023 to December 2026, Principal Investigator, 540,000 RMB

3. "Study on the Molecular Mechanism of Mycoplasma Bovis Lipid-Associated Membrane Proteins (LAMPs) Inducing IL-1β Release from Fetal Bovine Lung Cells," National Natural Science Foundation Youth Fund, 31502090, January 2016 to December 2018, Principal Investigator, 200,000 RMB

4. "Research and Application of Innovative Drugs for Major Diseases," Major Science and Technology Project of Hubei Province, 2022ACA001, January 2023 to December 2026, Subproject Leader, 2 million RMB 5. "Development of Therapeutic Vaccine for Lung Cancer Using Oncolytic Type II Herpes Simplex Virus," Horizontal Project, 2016229, January 2016 to December 2017, Principal Investigator, 300,000 RMB

6. "Development of a Detection Kit for Circulating Tumor Cells Using Recombinant Type II Herpes Simplex Virus Selectively Replicating and Expressing Green Fluorescent Protein," Horizontal Project, 2016278, January 2016 to December 2017, Principal Investigator, 200,000 RMB

7. "Development of Tumor Immunotherapy Technology Using Virus-Activated Immune Cells (VAK)," Horizontal Project, 2017232, January 2017 to December 2018, Principal Investigator, 1.5 million RMB

Preclinical and Clinical Research of Class I New Drug for Gene Therapy Oncolytic Virus," National Major Science and Technology Projects for New Drug Creation, 2018ZX09733002, January 2018 to December 2020, Participant, 3.03 million RMB
"Expression of Bispecific Protein Promoting T Cell Tumor Penetration Based on Type II Oncolytic Virus Platform," National Natural Science Foundation General Project, 81972308, January 2020 to December 2023, Participant, 550,000 RMB

#### **Representative Articles**

1) Yang Wang, Jing Jin , Yuying Li, Qin Zhoua, Ruoyi Yao, Zhen Wu, Han Hu, Zhizheng Fang, Shuang Dong, Qian Cai, Sheng Hu, Binlei Liu. NK cell tumor therapy modulated by UV-inactivated oncolytic herpes simplex virus type 2 and checkpoint inhibitors. Transl Res, 2022;240:64-86.

2) Jing Jin, Runyang Wang, Junhan Yang, Han Hu, Di Wang, Linkang Cai, Zhizheng Fang, Shuang Dong, Sheng Hu\*, Yang Wang\*, Binlei Liu\*. Bispecific antibody expressed by an oncolytic herpes simplex virus type 2 can transform heterologous T cells into uniform tumor killer cells. Hum Gene Ther. 2022; 33:649-663.

3) Yang Wang, Runyang Wang, Han Hu, Jing Jin, Linkang Cai, Siqi Zhang, Fan Yi, Yanxia Li, Zhiqiang Zheng, Qin Zhou, Zhizheng Fang, Binlei Liu\*. Preclinical safety assessment of an oncolytic herpes simplex virus type 2 expressed PD-L1/CD3 bispecific antibody. Int Immunopharmacol. 2023,124: 110975.

4) Lingjuan Chen, Mengsi Zou, Qin Zhou, Yang Wang\*. Oncolytic virotherapy in cancer treatment: challenges and optimization prospects. Front Immunol. 2023, 14: 1308890.

5) Yang Wang, Xiaobing Zhou, Zhen Wu, Han Hu, Jing Jin, Yanping Hu, Yuting Dong, Jianwen Zou, Zeyong Mao, Xiaotai Shi, Yan Huo, Jianjun Lyu, Zhizheng Fang, Wen Zhang, Yujie Zhu, Bo Li, Binlei Liu. Preclinical safety evaluation of oncolytic herpes simplex virus type 2. Hum Gene Ther, 2019, 30: 651-660.

6) Yang Wang, Jing Jin, Zhen Wu, Sheng Hu, Han Hu, Zhifeng Ning, Yanfei Li, Yuting Dong, JianwenZou, Zeyong Mao, Xiaotai Shi, Huajun Zheng, Shuang Dong, Fuxing Liu, Zhizheng Fang, Jiliang Wu and Binlei Liu. Stability and anti-tumor effect of oncolytic herpes simplex virus type 2. Oncotarget, 2018, 9:24672-24683.

7) Yang Wang, Suli Liu, Yuan Li, Qi Wang, Jiari Shao, Ying Chen, Jiuqing Xin, Mycoplasma bovis-derived lipid-associated membrane proteins activate IL-1 $\beta$  production through the NF- $\kappa$ B pathway via Toll-like receptor 2 and MyD88. Dev

Comp Immunol, 2016, 55: 111-118

8) Yang Wang, Qi Wang, Yuan Li, Ying Chen, Jiari Shao, Nick Nwankpa, Chunyan Li, Jiuqing Xin.Mmm-derived lipid-associated membrane proteins activate IL-1b production through the NF-κB pathway via TLR2, MyD88, and IRAK4. Sci Rep-UK, 2017,7:4349.

9) Yuan Li#, Yang Wang #, Wang Rui, Yongqiang Zhu, Suli Liu, Qi Wang, Jiari Shao, Ying Chen, Liping Gao, Changping Zhou, Henggui Liu1, Xiumei Wang, Huajun Zheng and Jiuqing Xin. Changes in pathogenicity and immunogenicity of Mycoplasma mycoides subsp. mycoides strains revealed by comparative. Sci Rep-UK, 2016,6:19081.

10) Yumei Zhou #, Yang Wang#, Yuan Li, Nwankpa Nick, Xiaohui Zou 1, Fan Bai, Jindi Wu, Jiuqing Xin. P19 contribute to Mycoplasma mycoides subsp. mycoides adhesion to EBL cells. Microb Pathogenesis. 2016, 93:13-21

11) H Yang, T Peng, J Li, Yang W, W Zhang, P Zhang, S Peng, T Du, Y Li, Q Yan and B Liu. Treatment of colon cancer with oncolytic herpes simplex virus in preclinical models. Gene Ther, 2016,23: 450-459

12) Han H, Ziyi Z, Runyang W, Yang W, Jing J, Linkang C, Junhan Yang, Haixiao D, Zhen W, Zhizheng F and Binlei L. BGC823 Cell Line with the Stable Expression of iRFP720 Retains Its Primary Properties with Promising Fluorescence Imaging Ability. Dna Cell Biol, 2020, DOI:10.1089/dna.2019.5057