个人简介

姓名：胡媛
性别: 女
出生年月：1976年7月
学位/学历：博士/研究生
职称：研究员
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办公地址：上海市黄浦区瑞金二路207号
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教育经历

1994.9-1999.6 湖北医科大学，临床医学专业，医学学士学位

2002.9-2007.6，华中科技大学同济医学院，病原生物学专业，硕博连读，医学博士学位

工作经历

1999.07-2002.08，湖北理工大学医学院，助教；

2007.7至今，中国疾病预防控制中心寄生虫病预防控制所（国家热带病研究中心）重点实验室，助理研究员、副研究员、研究员；硕士生导师、博士生导师；重点实验室副主任

社会/学术任职和活动

1.2016.10-2021.10，任中国微生物学会人兽共患病病原学专业委员会委员；

2.2017.12-2024.10，任上海市寄生虫学会第十届理事会副秘书长；

3.2025.1-至今，任上海市寄生虫学会第十一届理事会理事

研究方向/主要研究内容

1.重要寄生虫和宿主相互作用机制研究

2.寄生虫病新型疫苗的研制

主持或参加科研项目（课题）及人才计划项目情况

作为负责人先后主持国家自然科学基金、上海市自然科学基金、国家传染病重大专项任务等，参加国家自然科学基金、上海市重点学科项目等多项。

1. 上海市自然科学基金面上项目，“KLB靶向TGF-β通路下调肝脏上皮间质转化（EMT）及血吸虫病肝纤维化的机制研究”，2023-2026，23ZR1469500，主持
2. 国家自然科学基金面上项目，“cGAS靶向GSK3β调控E-cadherin表达促进血吸虫病肝纤维化的作用及机制研究”，2023-2026，82272369，参加
3. 上海市自然科学基金面上项目，“TIGIT+NK与MDSC细胞串化在血吸虫肝纤维化中的作用及其机制研究”，2019-2022，19ZR1462600，主持
4. 国家传染病重大专项 “艾滋病和病毒性肝炎等重大传染病防治”子任务，“突发急性传染病寄生虫分离培养及筛选鉴定”，2018-2020，2018ZX10102001-002-004，主持
5. 上海市自然科学基金面上项目，“巨噬细胞内TLRs-NF-kB和NLRP3炎症小体共活化在抗血吸虫病机制中的作用研究”，2014-2017，14ZR1444200，主持
6. 国家自然科学基金青年基金，“建立免疫模型研究东方田鼠对血吸虫感染的天然抗性机制”，2009-2011，30801047，主持

主要学术成果

论著

以第一或通讯作者发表论文30篇，参与发表多篇。近5年部分论文：

1.Gao Yuan; Zhang Xiaocheng; Jiang Tingting; Zhou Hao; Liu Hua; **Hu Yuan*（胡媛）**; Cao Jianping*. Inhibition of hepatic natural killer cell function via the TIGIT receptor in schistosomiasis-induced liver fibrosis, *PLoS Pathog*, 2023, 19(3): e1011242.

2.**Hu Yuan（胡媛）**; Wang Xiaoling; Wei Yuhuan; Liu Hua; Zhang Jin; Shen Yujuan; Cao Jianping*. Functional inhibition of natural killer cells in a BALB/c mouse model of liver fibrosis induced by *Schistosoma japonicum* infection, *Front Cell Infect Microbiol*, 2020, 10: 598987.

3.Jiang Tingting; Wu Xiaoying; Zhou Hao; **Hu Yuan*（胡媛）**; Cao Jianping*. Pathological Changes in Hepatic Sinusoidal Endothelial Cells in Schistosoma japonicum-Infected Mice, *Trop Med Infect Dis*, 2023, 8(2): 124.

4.Yu ZhiHao; Jiang Tingting; Xu Fangfang; Zhang Jin; **Hu Yuan*（胡媛）**; Cao Jianping*. Inhibiting liver autophagy and promoting hepatocyte apoptosis by Schistosoma japonicum infection, *Trop Med Infect Dis*, 2024, 9(2): 42.

5.Sun Lei; Gong Wenci; Shen Yujuan; Liang Le; Zhang Xiaofan; Li Teng; Chen Tuwen; **Hu Yuan*（胡媛）**; Cao Jianping*. IL-17A-producing γδ T cells promote liver pathology in acute murine schistosomiasis, *Parasit Vectors*, 2020, 13(1): 334.

6.Liang Le; Shen Yujuan; **Hu Yuan（胡媛）**; Liu Hua; Cao Jianping*. cGAS exacerbates Schistosoma japonicum infection in a STING-type I IFN-dependent and independent manner, *PLoS Pathog*, 2022, 18(2): e1010233.

7.Wang Yiluo; Gong Wenci; Zhou Hao; **Hu Yuan（胡媛）**; Wang Lan; Shen Yujuan; Yu Guoying*; Cao Jianping*. A Novel miRNA From Egg-Derived Exosomes of Schistosoma japonicum Promotes Liver Fibrosis in Murine Schistosomiasis, *Front Immunol*, 2022, 13: 860807.

8.Chen Yang; **Hu Yuan（胡媛）;** Zhou Hao; Jiang Nan; Wang Yiluo; Zhang Jing; Shen Yujuan; Yu Guoying*; Cao Jianping*. Induction of hepatic fibrosis in mice with schistosomiasis by extracellular microRNA-30 derived from Schistosoma japonicum eggs, *Front Immunol*, 2024, 15: 1425384.

近五年出版专著

1.《临床微生物学手册》（第12版），参译，中华医学电子音像出版社，北京，2021.

2.《曼氏热带病》（第23版），参译，上海科学技术出版社，上海，2020.

3.《当代新疫苗》（第2版），参编，高等教育出版社，北京，2020.

授权发明专利

1.曹建平；**胡媛**；吴晓莹. 一种抗原多肽及其应用[P]，2023.12.06，中国，CN. 2023116641334.

2.曹建平；王伊洛；巩文词；**胡媛**；沈玉娟；周浩. 促日本血吸虫肝脏纤维化的miRNA分子及miRNA拮抗剂和应用[P]，2022.07.22，中国，CN202210392910.

荣誉及奖项

“血吸虫寄生与致病关键分子机制”成果，获得上海市自然科学二等奖（2023，申请人排名第三）。

Profile

Name：Yuan Hu
Gender：Femal
Date of birth：1976.7
Degree：PhD
Title：Professor, Doctoral Supervisor
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Education

1994.9-1999.6 Hubei Medical University, clinical medicine, bachelor

2002.9-2007.6 Tongji Medical College, Huazhong University of Science and Technology, Pathogen biology, Ph.D

Appointments

1.Jul 1999 to Aug 2002, Medical School of Hubei Polytechnic University, assistant teacher

2.Jul 2007 to present, National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention (Chinese Center for Tropical Diseases Research)

Academic Participation and Activities

1.Oct 2016 to Oct 2021, member, Committee on Aetiology of Zoonoses, Chinese Society for Microbiology;

2.Dec 2017 to Oct 2024, deputy secretary general, Shanghai Association for Parasitology;

3.Jan 2025 to present, member, Shanghai Association for Parasitology

Research Interest

1. Mechanisms involved in the interaction between parasite and the host;

2. Development of novel vaccines against parasitic diseases

Projects

1. The mechanism of KLB targeting epithelial interstitial transformation (EMT) through blocking TGF-β pathway against liver fibrosis in schistosomiasis. The Natural Science Foundation of Shanghai. No 23ZR1469500, 2023-2026. Project leader.

2. The role and mechanism of Cgas targeting GSK3β in regulating E-cadherin expression and promoting liver fibrosis in schistosomiasis. The Natural Science Foundation of China. No 82272369, 2023-2026. Backbone.

3. The mechanism of TIGIT+NK and MDSC cell cross-linking in schistosomiasis liver fibrosis. The National Natural Science Foundation of Shanghai. No. 19ZR1462600, 2019-2022. Project leader.

4. Prevention and control of AIDS, viral hepatitis and other major infectious diseases. The National Key Program for Infectious Diseases of China. No2018ZX10102001-002-004, 2018-2020. Task Leader.

5. The mechanism of co-activation of TLRs-NF-kB and NLRP3 inflammasome in macrophages against *Schistosoma japonicum* infection. The Natural Science Foundation of Shanghai. No 14ZR1444200, 2014-2017. Project leader.

6. The mechanism of natural resistance of Microtus fortis against schistosomiasis infection through immune models. The National Natural Science Foundation of China. No. 30801047, 2009-2011. Project leader.

Publications

1.Gao Yuan; Zhang Xiaocheng; Jiang Tingting; Zhou Hao; Liu Hua; **Hu Yuan**[*]; Cao Jianping[*]. Inhibition of hepatic natural killer cell function via the TIGIT receptor in schistosomiasis-induced liver fibrosis, *PLoS Pathog*, 2023, 19(3): e1011242.

2.**Hu Yuan**; Wang Xiaoling; Wei Yuhuan; Liu Hua; Zhang Jin; Shen Yujuan; Cao Jianping[*]. Functional inhibition of natural killer cells in a BALB/c mouse model of liver fibrosis induced by *Schistosoma japonicum* infection, *Front Cell Infect Microbiol*, 2020, 10: 598987.

3.Jiang Tingting; Wu Xiaoying; Zhou Hao; **Hu Yuan**[*]; Cao Jianping[*]. Pathological Changes in Hepatic Sinusoidal Endothelial Cells in Schistosoma japonicum-Infected Mice, *Trop Med Infect Dis*, 2023, 8(2): 124.

4.Yu ZhiHao; Jiang Tingting; Xu Fangfang; Zhang Jin; **Hu Yuan**[*]; Cao Jianping[*]. Inhibiting liver autophagy and promoting hepatocyte apoptosis by Schistosoma japonicum infection, *Trop Med Infect Dis*, 2024, 9(2): 42.

5.Sun Lei; Gong Wenci; Shen Yujuan; Liang Le; Zhang Xiaofan; Li Teng; Chen Tuwen; **Hu Yuan***; Cao Jianping*. IL-17A-producing γδ T cells promote liver pathology in acute murine schistosomiasis, *Parasit Vectors*, 2020, 13(1): 334.

6.Liang Le; Shen Yujuan; **Hu Yuan**; Liu Hua; Cao Jianping*. cGAS exacerbates Schistosoma japonicum infection in a STING-type I IFN-dependent and independent manner, *PLoS Pathog*, 2022, 18(2): e1010233.

7.Wang Yiluo; Gong Wenci; Zhou Hao; **Hu Yuan**; Wang Lan; Shen Yujuan; Yu Guoying*; Cao Jianping*. A Novel miRNA From Egg-Derived Exosomes of Schistosoma japonicum Promotes Liver Fibrosis in Murine Schistosomiasis, *Front Immunol*, 2022, 13: 860807.

8.Chen Yang; **Hu Yuan**; Zhou Hao; Jiang Nan; Wang Yiluo; Zhang Jing; Shen Yujuan; Yu Guoying*; Cao Jianping*. Induction of hepatic fibrosis in mice with schistosomiasis by extracellular microRNA-30 derived from Schistosoma japonicum eggs, *Front Immunol*, 2024, 15: 1425384.

Books

1. 《Manual of Clinical Microbiology》 (12th Edition), Interpreter, Chinese Medical Multimedia Press, Beijing, 2021.

2. 《Manson's Tropical Diseases》 (23rd Edition), Interpreter, Shanghai Science & Technology Press, Shanghai, 2020.

3. 《Novel Vaccines》 (2nd Edition), Interpreter, Higher Education Press, Beijing, 2020.

Patents

1.Jianping Cao;**Yuan Hu**; Xiaoying Wu. An antigen polypeptide and its application. ZL. 2023116641334. 2023.

2. Jianping Cao; Yiluo Wang; Wenci Gong; **Yuan Hu**; Yujuan Shen; Hao Zhou. The miRNA molecules and miRNA antagonists promoting liver fibrosis in Schistosoma japonicum and their application. ZL202210392910. 2022.

Honors and Awards

The Key molecular mechanisms of schistosoma parasitism and pathogenesis. Second Prize of Shanghai Natural Science Award in 2019