

个人简介

姓名：刘华
性别：女
出生年月：1986年9月
学位/学历：博士研究生
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教育经历

2012.09-2015.07, 中国疾病预防控制中心, 免疫学, 博士
2009.09-2012.07, 东北农业大学, 预防兽医学, 硕士
2005.09-2009.07, 聊城大学, 动物医学, 学士

工作经历

2015.07-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
2014.09-2015.03, 美国Creighton大学医学院访问学者

研究方向/主要研究内容

主要为病原生物学研究, 肠道原虫分子流行病学研究及棘球绦虫感染免疫研究方向。

科研/教学研究项目

1. 国家自然科学基金青年基金 1 项: 菌群重塑在细粒棘球蚴调控小鼠 T 细胞异常活化中的作用及机制研究, **主持**。
2. 上海市卫健委青年科研基金 2 项: 上海市人与宠物感染新发肠道病原微孢子虫的基因分型及遗传多样性研究、囊型包虫病 microRNA 分子标志物的筛选与应用, **主持**。
3. 中国疾病预防控制中心青年基金 1 项: 上海地区宠物和人肠道新发原虫感染及风险评估研究, **主持**。
4. 作为任务包负责人参与国家重点研发计划项目宿主抗细胞内寄生虫感染的免疫机制和病原学与防疫技术体系研究; 作为科研骨干参与上海市公共卫生提体系建设第四轮和第五轮三年行动计划重点学科项目建设、国家重点研发“潜在威胁人类病原体发现与挖掘”-啮齿目、灵长目生态圈病原体广域调查与全链条挖掘, **骨干参与**。

主要学术成果

期刊论文

1. **Liu H**, Ni H[#], Zhu N, Liu S, Wang R, Cao J, Shen Y, Yin J. Blastocystis infection among diarrhea outpatients in Ningbo, Southeast China: A potential zoonotic health threat. *Microb Pathog* 2023, **181**: 106219.
2. Wei Y, Li W, Shao C, Zhao H, Hu Y* **Liu H***, Cao J. The polymorphic analysis of cox1 and cob genes of Echinococcus granulosus in the Ngari region of Tibet in China. *ACTA TROP* 2023, **239**: 106803.
3. Zhou Y, Luo T, Gong Y, Guo Y, Wang D, Gao Z, Sun F, Fu L, **Liu H***, Pan W*, Yang X*. The non-oral infection of larval Echinococcus granulosus induces immune and metabolic reprogramming in the colon of mice. *FRONT IMMUNOL* 2022, **13**: 1084203.
4. Jiang Y, Yuan Z, **Liu H**, Yin J, Qin Y, Jiang X, Xu J, Cao J, Shen Y. Intestinal Protozoan Infections in Patients with Diarrhea - Shanghai Municipality, Zhenjiang City, and Danyang City, China, 2011-2015 and 2019-2021. *China CDC Wkly* 2022, **4**(8): 143-147.
5. Xu J, **Liu H**, Jiang Y, Jing H, Cao J, Yin J, Li T, Sun Y, Shen Y, Wang X. Genotyping and subtyping of Cryptosporidium spp. and Giardia duodenalis isolates from two wild rodent species in Gansu Province, China. *Sci Rep* 2022, **12**(1): 12178.
6. **Liu H**, Xu J, Shen Y, Cao J, Yin J. Genotyping and Zoonotic Potential of Enterocytozoon bienewsi in Stray Dogs Sheltered from Shanghai, China. *Animals (Basel)* 2021, **11**(12).
7. **Liu H**[#], Wang B[#], Yin J, Yuan Z, Jiang Y, Zhang J, Cao J, Shen Y, Liu H. Investigation of giardiasis in captive animals in zoological gardens with strain typing of assemblages in China. *PARASITOLOGY* 2021, **148**(11): 1360-1365.
8. **Liu H**[#], Ni H[#], Xu J, Wang R, Li Y, Shen Y, Cao J, Yin J. Genotyping and zoonotic potential of Cryptosporidium and Enterocytozoon bienewsi in pigs transported across regions in China. *Microb Pathog* 2021, **154**: 104823.
9. Li T, **Liu H**, Jiang N, Wang Y, Wang Y, Zhang J, Shen Y, Cao J. Comparative proteomics reveals Cryptosporidium parvum manipulation of the host cell molecular expression and immune response. *PLoS Negl Trop Dis* 2021, **15**(11): e9949.
10. Xu N, Jiang Z, **Liu H**, Jiang Y, Wang Z, Zhou D, Shen Y, Cao J. Prevalence and genetic characteristics of Blastocystis hominis and Cystoisospora belli in HIV/AIDS patients in Guangxi Zhuang Autonomous Region, China. *Sci Rep* 2021, **11**(1): 15904.
11. Yin M, Zhang HB, Tao Y, Yao JM, **Liu H**, Win HH, Huo LL, Jiang B, Chen JX. Optimization of an Evaluation Method for Anti-Babesia microti Drug Efficacy. *ACTA TROP* 2022, **225**: 106179.
12. Lu Y[#], **Liu H**[#], Yang XY, Liu JX, Dai MY, Wu JC, Guo YX, Luo TC, Sun FF, Pan W. Microarray Analysis of lncRNA and mRNA Reveals Enhanced Lipolysis Along With Metabolic Remodeling in Mice Infected With Larval Echinococcus granulosus. *FRONT PHYSIOL* 2020, **11**: 1078.
13. Zhang Y, Wu Y, **Liu H**, Gong W, Hu Y, Shen Y, Cao J. Granulocytic myeloid-derived suppressor cells inhibit T follicular helper cells during experimental Schistosoma japonicum infection. *Parasit Vectors* 2021, **14**(1): 497.
14. Xu N, **Liu H**, Jiang Y, Yin J, Yuan Z, Shen Y, Cao J. First report of Cryptosporidium

viatorum and *Cryptosporidium occultus* in humans in China, and of the unique novel *C. viatorum* subtype XVaA3h. *BMC INFECT DIS* 2020, **20**(1): 16.

15. **Liu H**, Xu N, Yin J, Yuan Z, Shen Y, Cao J. Prevalence and multilocus genotyping of potentially zoonotic *Giardia duodenalis* in pigs in Shanghai, China. *PARASITOLOGY* 2019, **146**(9): 1199-1205.

专利

1. 沈玉娟; 曹建平; **刘华**; 袁忠英; 姜岩岩; 尹建海; 王燕娟. 多重PCR检测肠道新发原虫试剂盒及检测方法, ZL 201510093500.9, 2017.3.2
2. 曹建平; 李腾; 沈玉娟; **刘华**; 江楠 ; 一种诊断隐孢子虫感染的试剂盒、药物靶点、靶向试剂及其应用, 2021-10-30, 中国, 202111273974.3

荣誉及奖项

1. 我国重要新发肠道原虫病原和分子检测关键技术研究及应用, 上海市人民政府, 上海市科技进步奖二等奖, 2020 (曹建平; 沈玉娟; 刘爱芹; 尹建海; 张唯哲; 姜岩岩; 杨凤坤; **刘华**; 袁忠英; 凌虹)
2. 我国重要新发肠道原虫病原和分子检测关键技术研究及应用, 中华医学会, 中华医学科技奖二等奖, 2019 (曹建平; 沈玉娟; 刘爱芹; 尹建海; **刘华**; 张唯哲; 姜岩岩; 凌虹; 曹胜魁; 袁忠英)
3. 我国重要新发肠道原虫病原和分子检测关键技术研究及应用, 中国医疗保健国际交流促进会, 华夏医学科技奖三等奖, 2019 (曹建平; 沈玉娟; 刘爱芹; 尹建海; **刘华**; 张唯哲; 姜岩岩; 凌虹; 曹胜魁; 袁忠英; 杨凤坤; 孙磊)
4. 我国隐孢子虫核酸检测和基因分型技术的研究及应用, 中华预防医学, 中华预防医学科技奖三等奖, 2015 (曹建平; 沈玉娟; 尹建海; 姜岩岩; 刘爱芹; 袁忠英; **刘华**; 汤林华)

Profile

Name: Liu Hua
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Degree: PhD
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Address: 207 Ruijin Er Road, Shanghai, China
Office Tel:



Education

2012.09-2015.07, Chinese Center for Disease Control and Prevention, Immunology, PhD;
2009.09-2012.07, Northeast Agricultural University, Preventive Veterinary medicine; MD;
2005.09-2009.07, Liaocheng University, Animal Medicin; bachelor.

Appointments

- 2015.07-National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention (Chinese Center for Tropical Diseases Research), Key Laboratory of parasitic pathogens and vector biology;
- 2014.09-2015.03, School of Medicine, Creighton University (USA), Visiting Scholar.

Research Interest

Mainly engaged in pathogenic biology research, focused on molecular epidemiological research on intestinal protozoa, and the immunity of echinococcus infection.

Projects

- Youth fund of National Natural Science Foundation of China: Study on the role and mechanism of gut microbiota remodeling in the regulation of abnormal activated T cells in mice infected by *Echinococcus granulosus*, **Project leader**;
- The Foundation of Shanghai Municipal Commission of Health and Family Planning: Genotyping and genetic diversity of Microsporidia infection of people and pets in Shanghai、 Screening and application of microRNA molecular markers for cystic echinococcosis, **Project leader**;
- Youth fund of Chinese Center for Disease Control and Prevention: Study on the infection and risk assessment of emerging intestinal protozoa in pets and people in Shanghai, **Project leader**;
- National Key R&D Program of China, Study on the immune mechanism, etiology, and epidemic prevention technology system of host resistance to intracellular parasitic infections, The Four and Fifth Round of Three-Year Public Health Action Plan of Shanghai and Wide area investigation and full chain mining of rodent and primate ecosystem pathogens. National key

research and development “discovery and mining of potential threats to human pathogens”,
Principal Investigator.

Publications

1. **Liu H**, Ni H[#], Zhu N, Liu S, Wang R, Cao J, Shen Y, Yin J. Blastocystis infection among diarrhea outpatients in Ningbo, Southeast China: A potential zoonotic health threat. *Microb Pathog* 2023, **181**: 106219.
2. Wei Y, Li W, Shao C, Zhao H, Hu Y* **Liu H***, Cao J. The polymorphic analysis of *cox1* and *cob* genes of *Echinococcus granulosus* in the Ngari region of Tibet in China. *ACTA TROP* 2023, **239**: 106803.
3. Zhou Y, Luo T, Gong Y, Guo Y, Wang D, Gao Z, Sun F, Fu L, **Liu H***, Pan W*, Yang X*. The non-oral infection of larval *Echinococcus granulosus* induces immune and metabolic reprogramming in the colon of mice. *FRONT IMMUNOL* 2022, **13**: 1084203.
4. Jiang Y, Yuan Z, **Liu H**, Yin J, Qin Y, Jiang X, Xu J, Cao J, Shen Y. Intestinal Protozoan Infections in Patients with Diarrhea - Shanghai Municipality, Zhenjiang City, and Danyang City, China, 2011-2015 and 2019-2021. *China CDC Wkly* 2022, **4**(8): 143-147.
5. Xu J, **Liu H**, Jiang Y, Jing H, Cao J, Yin J, Li T, Sun Y, Shen Y, Wang X. Genotyping and subtyping of *Cryptosporidium* spp. and *Giardia duodenalis* isolates from two wild rodent species in Gansu Province, China. *Sci Rep* 2022, **12**(1): 12178.
6. **Liu H**, Xu J, Shen Y, Cao J, Yin J. Genotyping and Zoonotic Potential of *Enterocytozoon bieneusi* in Stray Dogs Sheltered from Shanghai, China. *Animals (Basel)* 2021, **11**(12).
7. **Liu H**[#], Wang B[#], Yin J, Yuan Z, Jiang Y, Zhang J, Cao J, Shen Y, Liu H. Investigation of giardiasis in captive animals in zoological gardens with strain typing of assemblages in China. *PARASITOLOGY* 2021, **148**(11): 1360-1365.
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10. Xu N, Jiang Z, **Liu H**, Jiang Y, Wang Z, Zhou D, Shen Y, Cao J. Prevalence and genetic characteristics of *Blastocystis hominis* and *Cystoisospora belli* in HIV/AIDS patients in Guangxi Zhuang Autonomous Region, China. *Sci Rep* 2021, **11**(1): 15904.
11. Yin M, Zhang HB, Tao Y, Yao JM, **Liu H**, Win HH, Huo LL, Jiang B, Chen JX. Optimization of an Evaluation Method for Anti-*Babesia microti* Drug Efficacy. *ACTA TROP* 2022, **225**: 106179.
12. Lu Y[#], **Liu H**[#], Yang XY, Liu JX, Dai MY, Wu JC, Guo YX, Luo TC, Sun FF, Pan W. Microarray Analysis of lncRNA and mRNA Reveals Enhanced Lipolysis Along With Metabolic Remodeling in Mice Infected With Larval *Echinococcus granulosus*. *FRONT PHYSIOL* 2020, **11**: 1078.
13. Zhang Y, Wu Y, **Liu H**, Gong W, Hu Y, Shen Y, Cao J. Granulocytic myeloid-derived suppressor cells inhibit T follicular helper cells during experimental *Schistosoma japonicum* infection. *Parasit Vectors* 2021, **14**(1): 497.

14. Xu N, **Liu H**, Jiang Y, Yin J, Yuan Z, Shen Y, Cao J. First report of *Cryptosporidium viatorum* and *Cryptosporidium occultus* in humans in China, and of the unique novel *C. viatorum* subtype XVaA3h. *BMC Infect Dis* 2020, **20**(1): 16.
15. **Liu H**, Xu N, Yin J, Yuan Z, Shen Y, Cao J. Prevalence and multilocus genotyping of potentially zoonotic *Giardia duodenalis* in pigs in Shanghai, China. *Parasitology* 2019, **146**(9): 1199-1205.

Patents

1. 沈玉娟; 曹建平; **刘华**; 袁忠英; 姜岩岩; 尹建海; 王燕娟. 多重PCR检测肠道新发原虫试剂盒及检测方法, ZL 201510093500.9, 2017.3.2
2. 曹建平; 李腾; 沈玉娟; **刘华**; 江楠 ; 一种诊断隐孢子虫感染的试剂盒、药物靶点、靶向试剂及其应用, 2021-10-30, 中国, 202111273974.3

Honors and Awards

1. Research and application of key technologies for pathogenic and molecular detection of important new intestinal protozoa in China, Shanghai Municipal People's government, scientific and technological progress, second prize of provincial and ministerial awards, 2020 (Caojianping; shenyujuan; Liu Aiqin; Yin Jianhai; Zhang weizhe; Jiang Yanyan; Yang Fengkun; **Liu Hua**; Yuan Zhongying; Ling Hong)
2. Research and application of key technologies for pathogenic and molecular detection of important new intestinal protozoa in China, Chinese Medical Association, second prize of Chinese medical science and technology award, 2020 (Caojianping; Shenyujuan; Liu Aiqin; Yin Jianhai; **Liu Hua**; Zhang weizhe; Jiang Yanyan; Ling Hong; Cao Shengkui; Yuan Zhongying)
3. Research and application of key technologies for pathogenic and molecular detection of important new intestinal protozoa in China, third prize of Huaxia Medical Science and technology award, 2019 (Caojianping; Shen Yujuan; Liu Aiqin; Yin Jianhai; **Liu Hua**; Zhang weizhe; Jiang Yanyan; Ling Hong; Cao Shengkui; Yuan Zhongying; Yang Fengkun; Sun Lei)
4. Research and application of *Cryptosporidium* nucleic acid detection and genotyping technology in China, third prize of science and technology award of Chinese Preventive Medicine Association, 2015 (Caojianping; Shenyujuan; Yinjianhai; Jiang Yanyan; Liu Aiqin; Yuan Zhongying; **Liu Hua**; Tang Linhua)