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| **个人简介** | 中国疾控中心寄生虫病所-曹建平.jpg |
| **姓名：曹建平****性别: 男****出生年月：1964年10月****学位/学历：博士研究生/博士****职称：（二级） 研究员****电子邮件：caojp@chinacdc.cn, caojpcdc@163.com****办公地址：上海市黄浦区瑞金二路207号**  |
| **教育经历** |
| 1982.09—1987.07，南京医科大学，临床医疗专业，大学本科，学士学位；1989.09—1992.07，南京医科大学，基础医学专业，硕士研究生，硕士学位；1995.09—1998.07，中国预防医学科学院（中国疾病预防控制中心），病原生物学，博士研究生，博士学位。 |
| **工作经历** |
| 1987.08—1999.12 江苏大学医学院，历任助教、讲师、副教授，教研室主任；2000年1月至今 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）研究员，博士生导师。历任免疫研究室副主任、重点实验室主任、所长助理、副所长、纪委书记、党委副书记、党委书记，现任中国疾病预防控制中心流行病学首席专家。2019年兼聘上海交通大学医学院博士生导师。 |
| **社会/学术任职和活动** |
| 上海市科学技术协会第十一届委员会委员、中华医学科技奖第二届和第三届评审委员会委员、上海科技发展重点领域技术预见专家、上海市寄生虫学会第九届和第十届理事长、中华医学会热带病与寄生虫学分会第八届副主任委员、中国微生物学会人兽共患病病原学专业委员会副主任委员、中华预防医学会寄生虫分会第五届常委等，《中国寄生虫学与寄生虫病杂志》主编，《疾病监测》副主编。 |
| **研究方向/主要研究内容** |
| 1.寄生虫与宿主相互作用机制；2.寄生虫感染免疫及疫苗研制；3.新发寄生虫病病原学、分子流行病学、致病机制与跨种传播、监测与风险评估关键技术研究。 |
| **科研/教学研究项目** |
| 1. 作为负责人先后承担科研项目/课题26项，其中国家级16项,包括国家“863”计划（3项）、国家科技重大专项（5项）、国家科技攻关计划、国家自然科学基金（6项）和国家卫生行业科研专项等。
2. 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，国家自然科学基金面上项目，No. 82272369，2023-2026；
3. 日本血吸虫虫卵外泌体源microRNA-1促进肝脏纤维化的作用及其机制研究，国家自然科学基金面上项目，No.81971969，2020-2023；
4. Vγ2γδT细胞促日本血吸虫感染小鼠肝纤维化作用机制研究，国家自然科学基金面上项目，No.81772225，2018-2021；
5. 日本血吸虫感染晚期小鼠脾脏淋巴滤泡再形成及机制研究，国家自然科学基金面上项目，No.81371841，2014-2017；
6. 日本血吸虫致宿主脾脏淋巴滤泡破坏相关虫源分子的研究，国家自然科学基金面上项目，No.30872212，2009-2011；
7. 日本血吸虫免疫逃避机制相关分子的研究，国家自然科学基金面上项目，No.30371262，2004-2006；
8. 肉源性、水源性寄生虫病监测和风险评估关键技术研究及应用，国家卫生行业科研专项，201502021，2016-2018；
9. 我国未来病原体战略研究（寄生虫分课题），中国工程院与国家自然基金委中长期发展战略研究，L1522033，2015-2017；
10. 日本血吸虫病基因工程多价疫苗的研究，国家“863”计划，2006AA02Z444，2006-2010；
11. 日本血吸虫基因工程疫苗的研究，国家“863”计划，2001AA215151，2001-2003；2004AA215240，2004-2005；
12. 日本血吸虫病基因工程多价疫苗和DNA疫苗的研究，国家科技重大专项，2004AA2Z3520，2004-2005；
13. 隐孢子虫病快速检测方法及虫株鉴别的研究，国家科技攻关计划，2003BA712A03-06，2003-2005；
14. 野生动物与媒介携带的病原微生物种群、分布特征及其发生规律研究（寄生虫子课题），国家重点研发计划，2016YFC1201900，2016-2019；
15. 自然疫源性传染病病原谱流行规律及变异研究（寄生虫子课题），国家传染病重大专项，2012ZX10004-201-004，2012-2015；
16. 特殊传染病诊断试剂企业研发/产品评价用参考品的研制（寄生虫子课题），国家科技重大专项，2013ZX10004-805，2012-2015；
17. 自然疫源性传染病病原谱流行规律及变异研究（寄生虫子课题），国家传染病重大专项，2009ZX10004-201-004，2009-2011；
18. 寄生虫病与病媒控制，上海市公共卫生体系建设三年行动计划（2020-2022）重点学科项目，No.GWV-10.1-XK13，2020-2022；
19. 重点学科-热带病学，上海市公共卫生体系建设三年行动计划重点学科项目，15GWZK0101，2016-2019；
20. 日本血吸虫病基因工程疫苗临床前研究，上海市生物医药重点项目，064319026，2007-2009；
21. 抗日本血吸虫雌雄虫合抱基因工程疫苗的研究，上海市科技攻关重大计划，03DZ19231，2004-2006；
22. 舌尖上的寄生虫“系列科普活动”，上海市科学技术委员会，22DZ2300500，2022-2023；
23. 隐孢子虫病的诊断，国家卫生行业标准，20131601，2013-2015；
24. 贾第虫病的诊断，国家卫生行业标准，JK2024-424，2024.12-2025.12。
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| **主要学术成果** |
| **期刊论文**发表学术论文300余篇，其中SCI论文160余篇。近5年作为通讯作者的部分论文有：1. [Past, present and future epidemiology of echinococcosis in China based on nationwide surveillance data 2004-2022.](https://pubmed.ncbi.nlm.nih.gov/39956527/) J Infect. 2025;90(3):106445.
2. [Intestinal protozoan infections among schoolchildren in China.](https://pubmed.ncbi.nlm.nih.gov/39871046/) Infection. 2025;53(4):1531-1533.
3. Single-cell sequencing reveals the heterogeneity of hepatic natural killer cells and identifies the cytotoxic natural killer subset in schistosomiasis mice. Int J Mol Sci. 2025;26(7):3211.
4. STAT1-IFITM3 promotes autophagy in epithelial cells to control *Cryptosporidium parvum* infection. Life Sci Alliance. 2025;8(9):e202503200.
5. Eggs of *Schistosoma japonicum* deposited in the spleen induce apoptosis of splenic T cells in C57BL/6 mice. Parasitol Res. 2025;124(3):31.
6. [High genotype diversity and zoonotic potential of *Enterocytozoon bieneusi* in laboratory mice from two medical experimental animal centers.](https://pubmed.ncbi.nlm.nih.gov/40097037/) Acta Trop. 2025;264:107585.
7. Effects of latent infection of *Toxoplasma gondii* strains with different genotypes on mouse behavior and brain transcripts. Parasit Vectors. 2025 May 26;18(1):190.
8. Species-level taxonomy and diversity of freshwater and terrestrial snails, and first report of *Pseudonapaeus pretiosus* and *Succinea putris* in Azad Jammu and Kashmir, Pakistan, and evaluation of their role as hosts of trematode-borne infections. Pakistan J Zool. 2025;57(5):2107-2118.
9. Proteomic analysis of mouse liver lesions at all three stages of *Echinococcus granulosus* infection. PLoS Negl Trop Dis. 2024;18(12): e0012659.
10. Inhibiting liver autophagy and promoting hepatocyte apoptosis by *Schistosoma japonicum* infection. Trop Med Infect Dis. 2024;9:42.
11. Mosquito Gut Microbiota: A Review. Pathogens. 2024;13(8):691.
12. Brown rats (*Rattus norvegicus*) as potential reservoirs of *Enterocytozoon bieneusi* in Heilongjiang Province, China: high prevalence, genetic heterogeneity, and potential risk for zoonotic transmission. Front Vet Sci. 2024;11:1426384.
13. [Wastewater-based intestinal protozoa monitoring in Shanghai, China.](https://pubmed.ncbi.nlm.nih.gov/39315819/) Microbiol Spectr. 2024;12(11):e0403223.
14. [Molecular identification and subtyping of *Cryptosporidium* spp. in laboratory mice and rats.](https://pubmed.ncbi.nlm.nih.gov/39637311/) Parasite. 2024;31:75.
15. Induction of hepatic fibrosis in mice with schistosomiasis by extracellular microRNA-30 derived from *Schistosoma japonicum* eggs. Front Immunol. 2024;15:1425384.
16. Gut microbiota mediates anxiety-like behaviors induced by chronic infection of *Toxoplasma gondii* in mice. Gut Microbes. 2024;16(1):2391535.
17. [Molecular discrimination of G1 and G3 genotypes of *Echinococcus granulosus* sensu stricto obtained from human, cattle, and sheep using the mitochondrial NADH dehydrogenase subunit 5 marker.](https://pubmed.ncbi.nlm.nih.gov/38262573/) Acta Trop. 2024;252:107124.
18. Epidemiological characteristics and spatiotemporal patterns of visceral leishmaniasis in Xinjiang, China, during 2004–2021.Trop Med Infect Dis. 2024;9:153.
19. MicroRNAs in opisthorchiids and their definitive hosts: Current status and perspectives. Mol Biochem Parasitol. 2024;260:111636.
20. Mothers' knowledge, attitudes, and practices regarding the prevention and management of diarrhea among children in Pakistan: A cross-sectional study. Am J Trop Med Hyg. 2024;111(3):682-693.
21. Incidence of cutaneous leishmaniasis in humans during the COVID-19 pandemic in Baluchistan Province, Pakistan. J Infect Dev Ctries. 2024;18(6):862-869.
22. [Environmental Factors Associated with *Cryptosporidium* and *Giardia*.](https://pubmed.ncbi.nlm.nih.gov/36986342/) Pathogens. 2023;12(3):420.
23. [Inhibition of hepatic natural killer cell function via the TIGIT receptor in schistosomiasis-induced liver fibrosis.](https://pubmed.ncbi.nlm.nih.gov/36930687/) PLoS Pathog. 2023;19(3):e1011242.
24. [Cryptosporidiosis threat under climate change in China: prediction and validation of habitat suitability and outbreak risk for human-derived *Cryptosporidium* based on ecological niche models.](https://pubmed.ncbi.nlm.nih.gov/37041630/) Infect Dis Poverty. 2023;12(1):35.
25. Prevalence of different tick species on livestock and associated equines and canine from different agro-ecological zones of Pakistan. Front Vet Sci. 2023;9:1089999.
26. An inventory of anthelmintic plants across the globe. Pathogens. 2023;12:131.
27. [Knowledge, attitudes and practices related to neglected tropical diseases (schistosomiasis and fascioliasis) of public health importance: A cross-sectional study.](https://pubmed.ncbi.nlm.nih.gov/36925606/) Front Vet Sci. 2023;10:1088981.
28. [Pathological changes in hepatic sinusoidal endothelial cells in *Schistosoma japonicum*-infected mice.](https://pubmed.ncbi.nlm.nih.gov/36828540/) Trop Med Infect Dis. 2023;8(2):124.
29. [An epidemiological survey to investigate the prevalence of cystic echinococcosis in slaughtered bovine hosts in Punjab, Pakistan.](https://pubmed.ncbi.nlm.nih.gov/36669040/) Vet Sci. 2023;10(1):40.
30. [Comparative analysis of different ELISA methods for the serodiagnosis of *Przhevalskiana* *silenus* infestation in goats.](https://pubmed.ncbi.nlm.nih.gov/37368782/) Vet Sci. 2023;10(6):396.
31. [Knowledge, attitudes and practices regarding taeniasis in Pakistan.](https://pubmed.ncbi.nlm.nih.gov/37489447/) Diseases. 2023;11(3):95.
32. Bioinformatics-based prediction and screening of immunogenic epitopes of *Toxoplasma gondii* rhoptry proteins 7, 21 and 22 as candidate vaccine target. Heliyon. 2023; 9(7): e18176.
33. Molecular epidemiology and the control and prevention of cystic echinococcosis in China: what is known from current research. Zoonoses. 2023;3:24.
34. [cGAS exacerbates *Schistosoma japonicum* infection in a STING-type I IFN-dependent and independent manner.](https://pubmed.ncbi.nlm.nih.gov/35108342/) PLoS Pathog. 2022;18(2):e1010233.
35. A novel miRNA from egg-derived exosomes of *Schistosoma japonicum* promotes liver fibrosis in murine schistosomiasis. Front Immunol. 2022;13:860807.
36. The single-cell landscape of cystic echinococcosis in different stages provided insights into endothelial and immune cell heterogeneity. Front. Immunol. 2022;13:1067338.
37. Analysis of gene expression profile of peripheral blood in alveolar and cystic echinococcosis. Front Cell Infect Microbiol. 2022;12:913393.
38. Proteomic profiling of serum extracellular vesicles identifies diagnostic markers for echinococcosis. PLoS Negl Trop Dis. 2022;16(10):e0010814.
39. *Echinococcus granulosus* protoscoleces-derived exosome-like vesicles and Egr-miR-277a-3p promote dendritic cell maturation and differentiation. Cells. 2022;11:3220.
40. In silico evaluation of the haplotype diversity, phylogenetic variation and population structure of human *E. granulosus* *sensu stricto* (G1 genotype) sequences. Pathogens 2022;11:1346.
41. [Detection of anti-*Echinococcus granulosus* antibodies in humans: An update from Pakistan.](https://pubmed.ncbi.nlm.nih.gov/35055977/) Pathogens. 2021;11(1):29.
42. [Evaluation of household preparedness and risk factors for cutaneous leishmaniasis (CL) using the community assessment for public health emergency response (CASPER) method in Pakistan.](https://pubmed.ncbi.nlm.nih.gov/35564462/) Int J Environ Res Public Health. 2022;19(9):5068.
43. [Genetic diversity and haplotype analysis of cattle hydatid cyst isolates using mitochondrial markers in Turkey.](https://pubmed.ncbi.nlm.nih.gov/35631040/) Pathogens. 2022 Apr 28;11(5):519.
44. [Epidemiology of toxoplasmosis among the Pakistani population: A systematic review and meta-analysis.](https://pubmed.ncbi.nlm.nih.gov/35745528/)  Pathogens. 2022;11(6):675.
45. Prevalence of fascioliasis in livestock and humans in Pakistan: A systematic review and meta-analysis. Trop Med Infect Dis. 2022;7: 126.
46. [First molecular evidence of *Clostridium perfringens* in adult *Fasciola* spp. isolates in cattle hosts.](https://pubmed.ncbi.nlm.nih.gov/36118337/)  Front Vet Sci. 2022;9:967045.
47. Prevalence of toxoplasmosis in sheep and goats in Pakistan: a systematic review and meta-analysis. Pathogens. 2022;11:1331.
48. [Genetic, haplotype and phylogenetic analysis of *Ligula intestinalis* by using mt-CO1 gene marker: ecological implications, climate change and eco-genetic diversity.](https://pubmed.ncbi.nlm.nih.gov/35703625/) Braz J Biol. 2022;84:e258626.
49. Comparative proteomics analysis for elucidating the interaction between host cells and *Toxoplasma gondii*. Front Cell Infect Microbiol. 2021;11:643001.
50. [High frequency mutations in *pfdhfr* and *pfdhps* of *Plasmodium falciparum* in response to sulfadoxine-pyrimethamine: a cross-sectional survey in returning Chinese migrants from Africa.](https://pubmed.ncbi.nlm.nih.gov/34568082/) Front Cell Infect Microbiol. 2021;11:673194.
51. [Comparative proteomics reveals *Cryptosporidium parvum* manipulation of the host cell molecular expression and immune response.](https://pubmed.ncbi.nlm.nih.gov/34818332/) PLoS Negl Trop Dis. 2021;15(11):e0009949.
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53. [Prevalence and genetic characteristics of *Blastocystis hominis* and *Cystoisospora belli* in HIV/AIDS patients in Guangxi Zhuang Autonomous Region, China.](https://pubmed.ncbi.nlm.nih.gov/34354101/) Sci Rep. 2021;11(1):15904.
54. [Granulocytic myeloid-derived suppressor cells inhibit T follicular helper cells during experimental *Schistosoma japonicum* infection.](https://pubmed.ncbi.nlm.nih.gov/34565440/) Parasit Vectors. 2021;14(1):497.
55. Higher frequency of circulating Vδ1 γδ T cells in patients with advanced schistosomiasis. Parasite Immunol. 2021; 43(10-11):e12871.
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59. Detection of anti-*Echinococcus granulosus* antibodies in humans: an update from Pakistan. Pathogens 2022;11, 29.
60. Epidemiology of ectoparasites (ticks, lice, and mites) in the livestock of Pakistan: a review. Front Vet Sci. 2021;8:780738.
61. A cross-sectional study on the association between risk factors of toxoplasmosis and One Health knowledge in Pakistan. Front Vet Sci. 2021;8:751130.
62. Demographic attributes of knowledge, attitude, practices, and One Health perspective regarding diarrhea in Pakistan. Front. Public Health. 2021;9:731272.
63. Haplotype comparisons of *Echinococcus granulosus sensu lato* via mitochondrial gene sequences (co1, cytb, nadh1) among Pakistan and its neighbouring countries. Parasitology. 2021;148(9):1019-1029.
64. Community based assessment of behavior and awareness of risk factors of cystic echinococcosis in major cities of Pakistan: a one health perspective. Front Public Health. 2021;9:648900.
65. 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.
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67. [Identification and genotyping of *Enterocytozoon bieneusi* in wild Himalayan marmots (Marmota himalayana) and Alashan ground squirrels (*Spermophilus alashanicus*) in the Qinghai-Tibetan Plateau area (QTPA) of Gansu Province, China.](https://pubmed.ncbi.nlm.nih.gov/32698833/) Parasit Vectors. 2020;13(1):367.
68. [IL-17A-producing γδ T cells promote liver pathology in acute murine schistosomiasis.](https://pubmed.ncbi.nlm.nih.gov/32611373/) Parasit Vectors. 2020;13(1):334.
69. Molecular characterization of human *Echinococcus* isolates and the first report of *E. canadensis* (G6/G7) and *E. multilocularis* from the Punjab Province of Pakistan using sequence analysis. BMC Infect Dis. 2020;20:262.
70. [Spread of cystic echinococcosis in Pakistan due to stray dogs and livestock slaughtering habits: research priorities and public health importance.](https://www.ncbi.nlm.nih.gov/pubmed/32064244) Front Public Health. 2020;7:412.
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74. [Mapping the epitopes of *Schistosoma japonicum* esophageal gland proteins for incorporation into vaccine constructs.](https://www.ncbi.nlm.nih.gov/pubmed/32107503) PLoS One. 2020;15(2):e0229542.
75. [Prevalence and genetic characterization of *Cryptosporidium*, *Giardia* and *Enterocytozoon* in chickens from Ezhou, Hubei, China.](https://www.ncbi.nlm.nih.gov/pubmed/32083107) Front Vet Sci. 2020;7:30.

**著作**1.《临床微生物学手册》（第12版）共同主译，中华医学电子音像出版社，北京，20202.《临床微生物学手册》（第11版）共同主译，中华医学电子音像出版社，北京，20173.《曼氏热带病》（第23版），副主译，上海科学技术出版社，上海，20204.《腹泻症候群病原学监测与检测技术》，副主编，中山大学出版社，广州，20165.《现代寄生虫病学》（第2版），副主编，人民军医出版社，北京，2015 **专利**获授权国家发明专利10件，1件已转化。部分专利有：1. **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. 国家发明专利，授权专利号：ZL202210392910.3，2024年05月07日
2. **曹建平**, 胡媛, 吴晓莹. 一种抗原多肽及其应用. 国家发明专利，专利号：ZL202311664133.4, 2024年06月07日
3. 王莹，**曹建平**，张璟，沈玉娟，伍卫平. 一段来源于细粒棘球绦虫的游离DNA序列及其应用.国家发明专利，授权专利号：ZL202010559041.X，2024年07月05日
4. **曹建平**，梁乐，沈玉娟，胡媛. 一种血吸虫病治疗靶点和应用. 国家发明专利，申请专利号：202210101151.0，2022年1月27日
5. 沈玉娟，张小凡，**曹建平**，曹胜魁，张璟. 细粒棘球绦虫原头节源和囊液源外泌体非编码RNA表达谱分析方法及非编码RNA序列.申请号:202010591112.4
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7. 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 201510093500.9，2017.2
8. 沈玉娟，陈盛霞，金红，李峰，潘雨青，孙启艳，吴亮，**曹建平**. 基于图像的寄生虫虫卵形状识别方法，ZL 201110022426.3，2012.10   已转化
9. 尹建海，**曹建平**，刘丛珊，张皓冰，沈玉娟. 熊果酸在制备抗包虫药物中的应用，ZL 2016 1 0517861.6，2019.4
10. **曹建平**、Ugwu Chidiebere Emmanuel、沈玉娟、姜岩岩、段李平、袁忠英. 银杏酸在抗隐孢子虫中的应用，ZL 201310539693.7，2016.3
11. **曹建平**，蔡辉霞，沈玉娟，韩秀敏，胡媛，王虎，卢潍媛，徐馀信，官亚宜. 诊断细粒棘球蚴病的重组抗原蛋白、其制备方法和用途，ZL 201010284913.2，2012.8
 |
| **荣誉及奖项** |
| 1. 国家抗震救灾医药卫生先进个人（2008）
2. 国家卫生计生有突出贡献中青年专家（2017）
3. 全国血防卫士（2018）
4. 上海市总工会职工创新工作室（2021）（负责人）
5. 中华医学科技奖二等奖（2019，第一完成人）
6. 上海市自然科学奖二等奖（2022，第一完成人）
7. 上海市科技进步奖二等奖（2019，第一完成人）
8. 华夏医学科技奖三等奖（2019，第一完成人）
9. 中华预防医学科技奖三等奖（2015，第一完成人）
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| **Profile** | 中国疾控中心寄生虫病所-曹建平.jpg |
| **Name：Cao Jianping****Gender：male****Date of birth：Oct 14, 1964****Degree：  Doctor****Title： Professor, Doctoral Supervisor****Email： caojpcdc@163.com****Address：207 Rui Jin Er Road,  Shanghai, China** |
| **Education** |
| 1982.9-1987.7   Nanjing Medical University, bachelor, clinical medicine1989.9-1992.7   Nanjing Medical University, master, basic medicine1995.9-1998.7  Chinese Academy of Preventive Medicine, Ph.D.,Pathogen Biology |
| **Appointments** |
| Aug 1987 to Dec, 1999 Jiangsu UniversityJan 2000 to present, National Institute of Parasitic Diseases at Chinese Center for Disease Control and Prevention (Chinese Center for Tropical Diseases Research) |
| **Academic Participation and Activities** |
| 1. Member of the 11th Committee of the Shanghai Association for Science and Technology
2. Member, Chinese Medical Science and Technology Award Committee
3. President, Shanghai Association for Parasitology
4. Deputy President, Branch of Tropical Diseases and Parasitology, Chinese Medical Association
5. Deputy President, Committee on Aetiology of Zoonoses, Chinese Society for Microbiology
6. Member, Shanghai Immunology Association
7. Expert, Technology Foresight in Key areas of Science and Technology Development, Shanghai
 |
| **Research Interest** |
| 1. Mechanisms involved in the interaction between parasite and the host2. Infection and immunity, Development of vaccine3. Molecular epidemiology, pathogenic mechanism, cross-species transmission, key techniques for surveillance and risk assessment of emerging infectious parasitic diseases |
| **Projects** |
| 1. Study on the function and mechanism of cGAS in promoting Schistosoma-induced liver fibrosis by targeting GSK3β to inhibit E-cadherin expression. National Natural Science Foundation of China, No. 82272369，2023-2026；
2. Study on the role and its mechanism of microRNA-1 of exosome from Schistosoma japonicum egg in promoting liver fibrosis. National Natural Science Foundation of China, No.81971969, 2020-2023;
3. Study on the mechanism of Vγ2γδT cells derived from mice infected with Schistosoma japonicum facilicate the liver fibrosis. National Natural Science Foundation of China, No.81772225, 2018-2021;
4. Study on the mechanism of re-generated spleen lymphoid follicles in mice during advanced schistosomiasis japonica. National Natural Science Foundation of China, No.81371841, 2014-2017;
5. Study on the destruction of the spleen’s lymphoid follicles in mice infected with Schistosoma japonicum by the schistosome-derived molecules. National Natural Science Foundation of China, No.30872212, 2009-2011;
6. Study on the molecular mechanism of immune evasion in mice   infected with Schistosoma japonicum. National Natural Science Foundation of China, No.30371262, 2004-2006;
7. Study and application of the key technologies for monitoring and risk assessment of meat-borne and water-borne parasitic diseases. Chinese Special Program for Scientific Research of Public Health, 201502021,2016-2018;
8. Study on genetic engineering polyvalent vaccine against schistosomiasis japonica. National High Technology Research and Development  Programme of China (863 Programme), 2006AA02Z444, 2006-2010;
9. Development of genetic engineering vaccine against Schistosoma japonicum. National High Technology Research and Development Programme of China (863 Programme), 2001AA215151, 2001-2003; 2004AA215240, 2004-2005;
10. Development of geneticengineering polyvalent vaccine and DNA vaccine against schistosomiasis japonica, National Science and Technology Major Program of China, 2004AA2Z3520, 2004-2005;
11. Study on rapid detection and identification techniques of Cryptosporidium. National Programs for Science and Technology Development, 2003BA712A03-06, 2003-2005;
12. Study on prevalence and variation of the pathogen spectrum of parasitic diseases. National Science and Technology Major Program of China, 2012ZX10004-201-004, 2012-2015;
13. Development of reference materials for special infectious disease diagnostic reagent enterprise R & D/product evaluation. National Science and Technology Major Program of China, 2013ZX10004-805, 2012-2015;
14. Study on prevalence and variation of the pathogen spectrum of parasitic diseases. National Science and Technology Major Program of China, 2009ZX10004-201-004, 2009-2011;
15. Control of parasitic diseases and vectors. Key Discipline Project of the Three-year Action Plan (2020-2022) for the Construction of Shanghai Public Health System, No.GWV-10.1-XK13, 2020-2022;
16. Tropical Medicine. Key Discipline Project of the Three-year Action Plan for the Construction of Shanghai Public Health System, 15GWZK0101，2016-2019;
17. Preclinical study of genetic engineering vaccine against schistosomiasis japonica. Key Biomedical Project Shanghai, 064319026, 2007-2009;
18. Development of genetic engineering vaccine against pairing of female and male of Schistosoma japonicum. Shanghai Science and Technology Major Program, 03DZ19231, 2004-2006;
19. “Parasites on the tip of the Tongue”series science popularization activities, Shanghai Municipal Science and Technology Commission, No. 22DZ2300500, 2022-2023;
20. Diagnosis of cryptosporidiosis, National Health Standard, No. 20131601, 2013-2015;
21. Diagnosis of Giardiasis, National Health Standard, No. JK2024-424, 2024-2025.
 |
| **Publications** |
| 1. More than 300 papers published. Some of the papers published in the past 5 years are as follows:
2. [Past, present and future epidemiology of echinococcosis in China based on nationwide surveillance data 2004-2022.](https://pubmed.ncbi.nlm.nih.gov/39956527/) J Infect. 2025;90(3):106445.
3. [Intestinal protozoan infections among schoolchildren in China.](https://pubmed.ncbi.nlm.nih.gov/39871046/) Infection. 2025;53(4):1531-1533.
4. Single-cell sequencing reveals the heterogeneity of hepatic natural killer cells and identifies the cytotoxic natural killer subset in schistosomiasis mice. Int J Mol Sci. 2025;26(7):3211.
5. STAT1-IFITM3 promotes autophagy in epithelial cells to control Cryptosporidium parvum infection. Life Sci Alliance. 2025;8(9):e202503200.
6. Eggs of Schistosoma japonicum deposited in the spleen induce apoptosis of splenic T cells in C57BL/6 mice. Parasitol Res. 2025;124(3):31.
7. [High genotype diversity and zoonotic potential of Enterocytozoon bieneusi in laboratory mice from two medical experimental animal centers.](https://pubmed.ncbi.nlm.nih.gov/40097037/) Acta Trop. 2025;264:107585.
8. Effects of latent infection of Toxoplasma gondii strains with different genotypes on mouse behavior and brain transcripts. Parasit Vectors. 2025 May 26;18(1):190.
9. Species-level taxonomy and diversity of freshwater and terrestrial snails, and first report of Pseudonapaeus pretiosus and Succinea putris in Azad Jammu and Kashmir, Pakistan, and evaluation of their role as hosts of trematode-borne infections. Pakistan J Zool. 2025;57(5):2107-2118.
10. Proteomic analysis of mouse liver lesions at all three stages of Echinococcus granulosus infection. PLoS Negl Trop Dis. 2024;18(12): e0012659.
11. Inhibiting liver autophagy and promoting hepatocyte apoptosis by Schistosoma japonicum infection. Trop Med Infect Dis. 2024;9:42.
12. Mosquito Gut Microbiota: A Review. Pathogens. 2024;13(8):691.
13. Brown rats (Rattus norvegicus) as potential reservoirs of Enterocytozoon bieneusi in Heilongjiang Province, China: high prevalence, genetic heterogeneity, and potential risk for zoonotic transmission. Front Vet Sci. 2024;11:1426384.
14. [Wastewater-based intestinal protozoa monitoring in Shanghai, China.](https://pubmed.ncbi.nlm.nih.gov/39315819/) Microbiol Spectr. 2024;12(11):e0403223.
15. [Molecular identification and subtyping of Cryptosporidium spp. in laboratory mice and rats.](https://pubmed.ncbi.nlm.nih.gov/39637311/) Parasite. 2024;31:75.
16. Induction of hepatic fibrosis in mice with schistosomiasis by extracellular microRNA-30 derived from Schistosoma japonicum eggs. Front Immunol. 2024;15:1425384.
17. Gut microbiota mediates anxiety-like behaviors induced by chronic infection of Toxoplasma gondii in mice. Gut Microbes. 2024;16(1):2391535.
18. [Molecular discrimination of G1 and G3 genotypes of Echinococcus granulosus sensu stricto obtained from human, cattle, and sheep using the mitochondrial NADH dehydrogenase subunit 5 marker.](https://pubmed.ncbi.nlm.nih.gov/38262573/) Acta Trop. 2024;252:107124.
19. Epidemiological characteristics and spatiotemporal patterns of visceral leishmaniasis in Xinjiang, China, during 2004–2021.Trop Med Infect Dis. 2024;9:153.
20. MicroRNAs in opisthorchiids and their definitive hosts: Current status and perspectives. Mol Biochem Parasitol. 2024;260:111636.
21. Mothers' knowledge, attitudes, and practices regarding the prevention and management of diarrhea among children in Pakistan: A cross-sectional study. Am J Trop Med Hyg. 2024;111(3):682-693.
22. Incidence of cutaneous leishmaniasis in humans during the COVID-19 pandemic in Baluchistan Province, Pakistan. J Infect Dev Ctries. 2024;18(6):862-869.
23. [Environmental factors associated with Cryptosporidium and Giardia.](https://pubmed.ncbi.nlm.nih.gov/36986342/) Pathogens. 2023;12(3):420.
24. [Inhibition of hepatic natural killer cell function via the TIGIT receptor in schistosomiasis-induced liver fibrosis.](https://pubmed.ncbi.nlm.nih.gov/36930687/) PLoS Pathog. 2023;19(3):e1011242.
25. [Cryptosporidiosis threat under climate change in China: prediction and validation of habitat suitability and outbreak risk for human-derived Cryptosporidium based on ecological niche models.](https://pubmed.ncbi.nlm.nih.gov/37041630/) Infect Dis Poverty. 2023;12(1):35.
26. Prevalence of different tick species on livestock and associated equines and canine from different agro-ecological zones of Pakistan. Front Vet Sci. 2023;9:1089999.
27. An inventory of anthelmintic plants across the globe. Pathogens. 2023;12:131.
28. [Knowledge, attitudes and practices related to neglected tropical diseases (schistosomiasis and fascioliasis) of public health importance: A cross-sectional study.](https://pubmed.ncbi.nlm.nih.gov/36925606/) Front Vet Sci. 2023;10:1088981.
29. [Pathological changes in hepatic sinusoidal endothelial cells in Schistosoma japonicum-infected mice.](https://pubmed.ncbi.nlm.nih.gov/36828540/) Trop Med Infect Dis. 2023;8(2):124.
30. [An epidemiological survey to investigate the prevalence of cystic echinococcosis in slaughtered bovine hosts in Punjab, Pakistan.](https://pubmed.ncbi.nlm.nih.gov/36669040/) Vet Sci. 2023;10(1):40.
31. [Comparative analysis of different ELISA methods for the serodiagnosis of Przhevalskiana silenus infestation in goats.](https://pubmed.ncbi.nlm.nih.gov/37368782/) Vet Sci. 2023;10(6):396.
32. [Knowledge, attitudes and practices regarding taeniasis in Pakistan.](https://pubmed.ncbi.nlm.nih.gov/37489447/) Diseases. 2023;11(3):95.
33. Bioinformatics-based prediction and screening of immunogenic epitopes of Toxoplasma gondii rhoptry proteins 7, 21 and 22 as candidate vaccine target. Heliyon. 2023; 9(7): e18176.
34. Molecular epidemiology and the control and prevention of cystic echinococcosis in China: what is known from current research. Zoonoses. 2023;3:24.
35. [cGAS exacerbates Schistosoma japonicum infection in a STING-type I IFN-dependent and independent manner.](https://pubmed.ncbi.nlm.nih.gov/35108342/) PLoS Pathog. 2022;18(2):e1010233.
36. A novel miRNA from egg-derived exosomes of Schistosoma japonicum promotes liver fibrosis in murine schistosomiasis. Front Immunol. 2022;13:860807.
37. The single-cell landscape of cystic echinococcosis in different stages provided insights into endothelial and immune cell heterogeneity. Front. Immunol. 2022;13:1067338.
38. Analysis of gene expression profile of peripheral blood in alveolar and cystic echinococcosis. Front Cell Infect Microbiol. 2022;12:913393.
39. Proteomic profiling of serum extracellular vesicles identifies diagnostic markers for echinococcosis. PLoS Negl Trop Dis. 2022;16(10):e0010814.
40. Echinococcus granulosus protoscoleces-derived exosome-like vesicles and Egr-miR-277a-3p promote dendritic cell maturation and differentiation. Cells. 2022;11:3220.
41. In silico evaluation of the haplotype diversity, phylogenetic variation and population structure of human E. granulosus sensu stricto (G1 genotype) sequences. Pathogens 2022;11:1346.
42. [Detection of anti-Echinococcus granulosus antibodies in humans: An update from Pakistan.](https://pubmed.ncbi.nlm.nih.gov/35055977/) Pathogens. 2021;11(1):29.
43. [Evaluation of household preparedness and risk factors for cutaneous leishmaniasis (CL) using the community assessment for public health emergency response (CASPER) method in Pakistan.](https://pubmed.ncbi.nlm.nih.gov/35564462/) Int J Environ Res Public Health. 2022;19(9):5068.
44. [Genetic diversity and haplotype analysis of cattle hydatid cyst isolates using mitochondrial markers in Turkey.](https://pubmed.ncbi.nlm.nih.gov/35631040/) Pathogens. 2022 Apr 28;11(5):519.
45. [Epidemiology of toxoplasmosis among the Pakistani population: A systematic review and meta-analysis.](https://pubmed.ncbi.nlm.nih.gov/35745528/)  Pathogens. 2022;11(6):675.
46. Prevalence of fascioliasis in livestock and humans in Pakistan: A systematic review and meta-analysis. Trop Med Infect Dis. 2022;7: 126.
47. [First molecular evidence of Clostridium perfringens in adult Fasciola spp. isolates in cattle hosts.](https://pubmed.ncbi.nlm.nih.gov/36118337/)  Front Vet Sci. 2022;9:967045.
48. Prevalence of toxoplasmosis in sheep and goats in Pakistan: a systematic review and meta-analysis. Pathogens. 2022;11:1331.
49. [Genetic, haplotype and phylogenetic analysis of Ligula intestinalis by using mt-CO1 gene marker: ecological implications, climate change and eco-genetic diversity.](https://pubmed.ncbi.nlm.nih.gov/35703625/) Braz J Biol. 2022;84:e258626.
50. Comparative proteomics analysis for elucidating the interaction between host cells and Toxoplasma gondii. Front Cell Infect Microbiol. 2021;11:643001.
51. [High frequency mutations in pfdhfr and pfdhps of Plasmodium falciparum in response to sulfadoxine-pyrimethamine: a cross-sectional survey in returning Chinese migrants from Africa.](https://pubmed.ncbi.nlm.nih.gov/34568082/) Front Cell Infect Microbiol. 2021;11:673194.
52. [Comparative proteomics reveals Cryptosporidium parvum manipulation of the host cell molecular expression and immune response.](https://pubmed.ncbi.nlm.nih.gov/34818332/) PLoS Negl Trop Dis. 2021;15(11):e0009949.
53. [Alteration of the fecal microbiota in Chinese patients with Schistosoma japonicum infection.](https://pubmed.ncbi.nlm.nih.gov/33416489/) Parasite. 2021;28:1.
54. [Prevalence and genetic characteristics of Blastocystis hominis and Cystoisospora belli in HIV/AIDS patients in Guangxi Zhuang Autonomous Region, China.](https://pubmed.ncbi.nlm.nih.gov/34354101/) Sci Rep. 2021;11(1):15904.
55. [Granulocytic myeloid-derived suppressor cells inhibit T follicular helper cells during experimental Schistosoma japonicum infection.](https://pubmed.ncbi.nlm.nih.gov/34565440/) Parasit Vectors. 2021;14(1):497.
56. Higher frequency of circulating Vδ1 γδ T cells in patients with advanced schistosomiasis. Parasite Immunol. 2021; 43(10-11):e12871.
57. [Epidemiological analysis of cystic echinococcosis and alveolar echinococcosis in an extremely high prevalence region: Population-based survey and host animal monitoring in Shiqu County, China.](https://pubmed.ncbi.nlm.nih.gov/34048788/) Acta Trop. 2021;221:105982.
58. Risk factors for Clonorchis sinensis infection in residents of Binyang, Guangxi: a cross-sectional and logistic analysis study. Front Public Health. 2021;9:588325.
59. Quantitative microbial risk assessment of Cryptosporidium and Giardia in public drinking water in China. Biomed Environ Sci. 2021;34(6):492-497.
60. Detection of anti-Echinococcus granulosus antibodies in humans: an update from Pakistan. Pathogens 2022;11, 29.
61. Epidemiology of ectoparasites (ticks, lice, and mites) in the livestock of Pakistan: a review. Front Vet Sci. 2021;8:780738.
62. A cross-sectional study on the association between risk factors of toxoplasmosis and One Health knowledge in Pakistan. Front Vet Sci. 2021;8:751130.
63. Demographic attributes of knowledge, attitude, practices, and One Health perspective regarding diarrhea in Pakistan. Front. Public Health. 2021;9:731272.
64. Haplotype comparisons of Echinococcus granulosus sensu lato via mitochondrial gene sequences (co1, cytb, nadh1) among Pakistan and its neighbouring countries. Parasitology. 2021;148(9):1019-1029.
65. Community based assessment of behavior and awareness of risk factors of cystic echinococcosis in major cities of Pakistan: a one health perspective. Front Public Health. 2021;9:648900.
66. 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.
67. [Comprehensive analysis of non-coding RNA profiles of exosome-like vesicles from the protoscoleces and hydatid cyst fluid of Echinococcus granulosus.](https://pubmed.ncbi.nlm.nih.gov/32793506/) Front Cell Infect Microbiol. 2020;10:316.
68. [Identification and genotyping of Enterocytozoon bieneusi in wild Himalayan marmots (Marmota himalayana) and Alashan ground squirrels (Spermophilus alashanicus) in the Qinghai-Tibetan Plateau area (QTPA) of Gansu Province, China.](https://pubmed.ncbi.nlm.nih.gov/32698833/) Parasit Vectors. 2020;13(1):367.
69. [IL-17A-producing γδ T cells promote liver pathology in acute murine schistosomiasis.](https://pubmed.ncbi.nlm.nih.gov/32611373/) Parasit Vectors. 2020;13(1):334.
70. Molecular characterization of human Echinococcus isolates and the first report of E. canadensis (G6/G7) and E. multilocularis from the Punjab Province of Pakistan using sequence analysis. BMC Infect Dis. 2020;20:262.
71. [Spread of cystic echinococcosis in Pakistan due to stray dogs and livestock slaughtering habits: research priorities and public health importance.](https://www.ncbi.nlm.nih.gov/pubmed/32064244) Front Public Health. 2020;7:412.
72. [A retrospective epidemiological analysis of human Cryptosporidium infection in China during the past three decades (1987-2018).](https://www.ncbi.nlm.nih.gov/pubmed/32226011) PLoS Negl Trop Dis. 2020;14(3):e0008146.
73. [First identification and genotyping of Enterocytozoon bieneusi in humans in Myanmar.](https://www.ncbi.nlm.nih.gov/pubmed/31931704) BMC Microbiol. 2020;20(1):10.
74. [First report of Cryptosporidium viatorum and Cryptosporidium occultus in humans in China, and of the unique novel C. viatorum subtype XVaA3h.](https://www.ncbi.nlm.nih.gov/pubmed/31910816) BMC Infect Dis. 2020;20(1):16.
75. [Mapping the epitopes of Schistosoma japonicum esophageal gland proteins for incorporation into vaccine constructs.](https://www.ncbi.nlm.nih.gov/pubmed/32107503) PLoS One. 2020;15(2): e0229542.
76. [Prevalence and genetic characterization of Cryptosporidium, Giardia and Enterocytozoon in chickens from Ezhou, Hubei, China.](https://www.ncbi.nlm.nih.gov/pubmed/32083107) Front Vet Sci. 2020;7:30.
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| **Books** |
| 1.《Manual of Clinical Microbiology (12th Edition), Co-Chief-Translator, Chinese Medical Multimedia Press, Beijing, 20202.《Manson’s Tropical Diseases》(23rd Edition), Deputy Chief-translator, Shanghai Science & Technology Publishers, Shanghai, 20203.《Pathogen Surveillance and Detection Techniques: Diarrhea Syndrome》, Associate Editor, Sun Yat-sen University Press, Guangzhou, 20164.《Modern Parasitology》(2nd Edition), Associate Editor，People's Military Medical Press, Beijing, 2015 |
| **Patents** |
| 1. **Cao Jianping**, Wang Yiluo, Gong Wenci, Hu Yuan, Shen Yujuan, Zhou Hao. miRNA molecules promoting hepatic fibrosis in Schistosoma japonicum, miRNA Antagonists and Applications. No. ZL202210392910.3, 2024.
2. **Cao Jianping**, Hu Yuan, Wu Xiaoying. An antigenic polypeptide and its application. No. ZL202311664133.4, 2024.
3. Wang Ying, **Cao Jianping**, Zhang Jing, Shen Yujuan, Wu Weiping. A cell-free DNA sequence derived from Echinococcus granulosus and its application. No. ZL202010559041.X, 2024.
4. **Cao Jianping**, Liang Le, Shen Yujuan, Hu Yuan. A therapeutic target for schistosomiasis and its application. No. 202210101151.0, 2022.
5. Shen Yujuan，**Cao Jianping**，Liu Hua，Yuan Zhongyin，Jiang Yanyan，Yin Jianhai，Wang Yanjuan. Multiplex PCR kit and detection method for detecting emerging intestinal protozoan. ZL 201510093500.9, 2017
6. Shen Yujuan，Chen Shengxia，Jin Hong，Li Feng，Pan Yuqin，Sun Qiyan，Wu Liang，**Cao Jianping**. Recognition Method for Parasite Egg Based Shape Image. ZL 201110022426.3, 2012
7. Yin Jianhai，**Cao Jianping**，Liu Congshan，Zhang Haobing，Shen Yujuan. Application of ursolic acid in preparation of anti-hydatid drugs. ZL 2016 1 0517861.6, 2019.
8. **Cao Jianping**, Ugwu Chidiebere Emmanuel, Shen Yujuan， Jiang Yanyan，Duan Liping, Yuan Zhongying. Application of ginkgo acid against Cryptosporidium. ZL 201310539693.7, 2016
9. **Cao Jianping**, Cai Huixia, Shen Yujuan，Han Xiumin，Hu Yuan，Wang Hu，Lu Weiyuan，Xu Yuxin，Guan Yayi.  Recombinant antigen protein for diagnosis of Echinococcus granulosus, its preparation method and application. ZL 201010284913.2, 2012
 |
| **Honors and Awards** |
| 1. Key molecular mechanisms of Schistosoma japonicum parasitism and its pathogenicity. Shanghai Municipal Natural Science Award (second Prize, 2022).2. Study on the pathogens and key techniques of molecular detection for important emerging intestinal protozoan and their application in China. China Medical Science and Technology Award (second Prize, 2019), of Shanghai Science and Technology Progress Award (second Prize, 2019), and the Huaxia Medical Technology Awards (third Prize, 2019).3. Establishment and application of nucleic acid assays and genotyping techniques for Cryptosporidium in China. China Preventive Medicine Science and Technology Award (Third prize, 2015). |