

## CURRICULUM VITAE

### A. Personal Information

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| <b>NAME</b><br><b>Jianping Cao</b> | <b>POSITION TITLE</b><br><b>Professor of Immunology and Parasitology</b><br><b>Deputy Director</b> |
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### EDUCATION/TRAINING

| <b>INSTITUTION AND LOCATION</b>                        | <b>DEGREE</b> | <b>MM/YY</b>    | <b>FIELD OF STUDY</b> |
|--|---------------|-----------------|-----------------------|
| Nanjing Medical University, Jiangsu Province, China    | Bachelor      | 09/1982-07/1987 | Clinical Medicine     |
| Nanjing Medical University, Jiangsu Province, China    | Master        | 09/1989-07/1992 | Basic Medicine        |
| Chinese Academy of Preventive Medicine, Beijing, China | Doctor/PhD    | 09/1995-07/1998 | Immunology            |

### B. Positions and Honors

#### Positions and Employment

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|-----------------|---|
| 08/1987-12/1999 | Assistant Professor of Parasitology, Director of Department of Parasitology, Zhenjiang Medical College (Jiangsu University, China),   |
| 01/2000-2001    | Assistant Professor of Parasitology and Immunology, Deputy Director of Department of Immunology, National Institute of Parasitic Diseases, Chinese Academy of Preventive Medicine   |
| 2002-present    | Professor of Parasitology and Immunology; Deputy Director of National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention (Former: Chinese Academy of Preventive Medicine); Deputy Director of Key Laboratory of Parasite and Vector Biology, MOH, China |

**Dr. Jianping Cao** is Professor of Immunology and Parasitology at National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention. He has extensive experience in leading Chinese national-funded research projects from 2000, and has been the Principal Investigator for more than 20 projects, including 3 projects from National High Technology Research and Development Programme of China (863 Programme) on development of vaccine against *Schistosoma japonicum*, 3 projects from National Natural Science Foundation of China on immune response and its regulation mechanism in mice infected with *S. japonicum*, *Echinococcus Granulosus* and other parasites, 1 project from the Ministry of Science and Technology

of China on Rapid detection of *Cryptosporidium*, 3 projects from the National S & T Major Program about parasitic pathogen spectrum within patients with diarrhea syndrome and parasites variation, 2 projects from the Chinese Special Program for Scientific Research of Public Health about key techniques of meat-borne, fish-borne and water-borne parasitic disease surveillance and risk assessment, and Co-Principal Investigator of 5 projects from Chinese national projects and WHO. Professor Cao has more than two decades of expertise in studying on control and prevention of parasitic diseases, and on immunology, vaccines, diagnosis and pathogen detection methods of important parasitic diseases and emerging infectious disease. Professor Cao is a tutor or senior supervisor for graduate students, doctoral students and postdoctors.

### **Memberships**

President, Shanghai Association for Parasitology

Member, Chinese Medical Science and Technology Award Committee

Executive member, Branch of Tropical Diseases and Parasitology, Chinese Medical Association

Member, Branch of Medical Parasitology, Chinese Preventive Medical Association

Member, Shanghai Immunology Association

Expert, Technology Foresight in Key areas of Science and Technology Development, Shanghai

Deputy editor, Int J Med Parasitol Dis

Deputy editor, Dis Surveillance

### **C. Selected Peer-reviewed Publications** (Selected from peer-reviewed publications since 2010)

1. Wei Pan, Yujuan Shen, Xiuming Han, Ying Wang, Hua Liu, Yanyan Jiang, Yumei Zhang, Yanjuan Wang, Yuxin Xu, **Jianping Cao\*(Corresponding author)**. Transcriptome Profiles of the Protoscoleces of *Echinococcus granulosus* Reveal that Excretory-Secretory Products are Essential to Metabolic Adaptation. PLoS Negl Trop Dis, 2014,8(12): e3392. doi:10.1371/journal.pntd.0003392
2. Xiao Hong Li, Meg Stark, Gillian M Vance, **Jian Ping Cao\*(Corresponding author)**, R Alan Wilson\*. The anterior esophageal region of *Schistosoma japonicum* is a secretory organ. Parasites & Vectors 2014, 7:565 doi:10.1186/s13071-014-0565-8
3. Yuan Hu, Yuxin Xu, Weiyuan Lu, Zhongying Yuan, Hong Quan, Yujuan Shen, **Jianping Cao\*(Corresponding author)**. De novo assembly and transcriptome characterization: novel insights into the natural resistance mechanisms of *Microtus fortis* against *Schistosoma japonicum*. BMC Genomics. 2014, doi: 10.1186/1471-2164-15-417
4. Aiqin Liu, Fengkun Yang, Yujuan Shen, Weizhe Zhang, Rongjun Wang, Wei Zhao, Longxian Zhang, Hong Ling, **Jianping Cao\*(Corresponding author)**. Genetic Analysis of the *Gdh* and *Bg* Genes of

- Animal-Derived *Giardia duodenalis* Isolates in Northeastern China and Evaluation of Zoonotic Transmission Potential. PLoS ONE, 2014,9(4): e95291.doi:10.1371/journal.pone0095291
5. Hu Y, Xu Y, Lu W, Quan H, Shen Y, Yuan Z, Zhang J, Zang W, He Y, **Cao J\*(Corresponding author)**. Effects of *Microtus fortis* lymphocytes on *Schistosoma japonicum* in a bone marrow transplantation model. *Exp Parasitol*, 2014, 142:27-37
  6. Wei Diao, Hejun Zhou, Wei Pan, Haipeng Liu, Yujuan Shen, Yuxin Xu, Xiaohong Li, **Jianping Cao\*(Corresponding author)**. Expression and immune characterization of a novel enzyme, protein arginine methyltransferase 1, from *Schistosoma japonicum*. *Parasitology Research*, 2014, 113(3):919-924; DOI 10.1007/s00436-013-3723-6
  7. Hua Liu, Yujuan Shen\*, Jianhai Yin, Zhongying Yuan, Yanyan Jiang, Yuxin Xu, Wei Pan, Yuan Hu, **Jianping Cao\*(Corresponding author)**. Prevalence and genetic characterization of *Cryptosporidium*, *Enterocytozoon*, *Giardia* and *Cyclospora* in diarrheal outpatients in china. *BMC Infect Dis*, 2014, 13 Jan doi:10.1186/1471-2334-14-25
  8. Wei Pan, Hejun Zhou, Yujuan Shen, Ying Wang, Yuxin Xu, Yuan Hu, Yanyan Jiang, Chidiebere E. Ugwu, Zhongying Yuan, **Jianping Cao\*(Corresponding author)**. Surveillance on the Status of Immune Cells after *Echinococcus granulosus* Protoscoleces Infection in Balb/c Mice. PLoS ONE, 2013,8(3): e59746. doi:10.1371/journal.pone.0059746
  9. Jing Zhang, Yujuan Shen, Zhongying Yuan, Jianhai Yin, Wei Zang, Yuxin Xu, Weiyuan Lu, Yanjuan Wang, Ying Wang, **Jianping Cao\*(Corresponding author)**. Primary Analysis of the Expressed Sequence Tags in a *Pentastomid* Nymph cDNA Library. PLoS ONE , 2013,8(2): e56511, doi:10.1371/journal.pone.0056511
  10. Yin JH, Yuan ZY, Cai HX, Shen YJ, Jiang YY, Zhang J, Wang YJ, **Cao JP\*(Corresponding author)**. Age-related infection with *Cryptosporidium* species and genotype in pigs in China. *Biomed Environ Sci*, 2013,26(6):492-495
  11. Jianhai Yin, Zhongying Yuan, Yujuan Shen, Jing Zhang, Yanyan Jiang, **Jianping Cao\*(Corresponding author)**. Molecular identification of *Cryptosporidium* spp. from animal sources in China. *J Infect Dev Ctries*, 2013;7(12):1020-1022
  12. Yuan Hu, Weiyuan Lu, Yujuan Shen, Yuxin Xu, Zhongying Yuan, Chaowei Zhang, Jiantong Wu, Yichang Ni, Shuxian Liu, **Jianping Cao\*(Corresponding author)**. Immune changes of *Schistosoma japonicum* infections in various rodent disease models. *Exp Parasitol*,2012,131(2):180-189
  13. Hejun Zhou, Xi Sun, Zhiyue Lv, Yujuan Shen, Hui Peng, Lingling Yang, Huanquin Zheng, Ming Chiu Fung, **Jianping Cao\*(Corresponding author)**, Zhongdao Wu. The secretions products from invading cercariae of *S. japonicum* (0-3hRP) restrain mouse dendritic cells to mature. *Parasitol Res*, 2012,110:119-126
  14. Jianhai Yin., Yujuan Shen, Zhongying Yuan, Weiyuan Lu, Yuxin Xu, **Jianping Cao\*(Corresponding**

- author**). Prevalence of the *Cryptosporidium* Pig Genotype II in Pigs from the Yangtze River delta, China. PLoS ONE, 2011,6(6):e20738. doi:10.1371/ journal.pone. 0020738
15. Shen Yujuan , Yin Jianhai, Yuan Zhongying , Lu Weiyuan, Xu Yuxin, Xiao Lihua, **Cao Jianping\*(Corresponding author)**. The identification of the *Cryptosporidium ubiquitum* in pre-weaned ovines from Aba Tibetan and Qiang autonomous prefecture in China. Biomed Environ Sci, 2011,24(3):315-320
  16. Liang Wu, Xugan Jiang, Yujuan Shen, Zhaoxi Lu, Guohua Tu, Xingli Fu, Sheng xia Chen, **Jianping Cao\*(Corresponding author)**. Efficacy of ginkgolic acids against *Cryptosporidium andersoni* in cell culture. Parasitol Res, 2011, DOI 10.1007/s00436- 011-2433-1
  17. Yanyan Jiang, Jinhua Ren, Zhongying Yuan, Aiqin Liu, Hong Zhao, Hua Liu, Lei Chu, Wei Pan, **Jianping Cao**, Yijin Lin, Yujuan Shen. *Cryptosporidium andersoni* as a novel predominant Cryptosporidium species in outpatients with diarrhea in Jiangsu Province, China. BMC Infect Dis, 2014, 14(1): 555. 2014. doi:10.1186/s12879-014-0555-7
  18. Zhao W, Zhang W, Yang F, **Cao J**, Liu H, Yang D, Shen Y, Liu A. High Prevalence of *Enterocytozoon bieneusi* in Asymptomatic Pigs and Assessment of Zoonotic Risk at a Genotype Level. Appl Environ Microbiol, 2014,80(12):3699-3707
  19. Zhang T, Yang D, Zeng Z, Zhao W, Liu A, Piao D, Jiang T, **Cao J**, Shen Y, Liu H, Zhang W. Genetic characterization of human-derived hydatid cysts of *Echinococcus granulosus* Sensu Lato in Heilongjiang Province and the first report of G7 genotype of *E. Canadensis* in humans in China. PLoS ONE, 2014,16,9(10):e109059. doi: 10.1371/journal.pone.0109059. eCollection 2014.
  20. Zhao W, Wang R, Zhang W, Liu A, **Cao J**, Shen Y, Yang F, Zhang L. MLST subtypes and population genetic structure of *Cryptosporidium andersoni* from dairy cattle and beef cattle in northeastern China's Heilongjiang Province. PLoS ONE, 2014,9(7):e102006. doi: 10.1371/journal.pone.0102006. eCollection 2014.
  21. Weizhe Zhang, Rongjun Wang, Fengkun Yang, Longxian Zhang, **Jianping Cao**, Xiaoli Zhang, Hong Ling, Aiqiu Liu, Yujuan Shen. Distribution and Genetic Characterizations of *Cryptosporidium* spp. in Pre-Weaned Dairy Calves in Northeastern China's Heilongjiang Province. PLoS ONE, 2013, 8(1): e54857. doi:10.1371/journal.pone.0054857
  22. Zhang W, Yang F, Liu A, Wang R, Zhang L, Shen Y, **Cao J**, Ling H. Prevalence and genetic characterizations of *Cryptosporidium* spp. In pre-weaned and post-weaned piglets in Heilongjiang province, China. PLoS ONE, 2013,8(7):e67564.doi:10.1371/journal.pone.0067564
  23. Weizhe Zhang, Yujuan Shen, Rongjun Wang, Aiqin Liu, Hong Ling, Yihong Li, **Jianping Cao**, Xiaoyun Zhang, Jing Shu, Longxian Zhang. *Cryptosporidium cuniculus* and *Giardia duodenalis* in Rabbits: Genetic

Diversity and Possible Zoonotic Transmission. PLoS ONE, 2012,7(2): e31262. doi:10.1371/ journal.pone.0031262

24. Weizhe Zhang, Xiaoli Zhang, Rongjun Wang, Aiqin Liu, Yujuan Shen, Hong Ling, **Jianping Cao**. Genetic Characterizations of *Giardia duodenalis* in Sheep and Goats in Heilongjiang Province, China and Possibility of Zoonotic Transmission. PLoS Negl Trop Dis, 2012, 6(9): e1826. doi:10.1371/journal.pntd.0001826
25. Liang Wu, Shengxia Chen, Xugan Jiang, Xingli Fu, Yujuan Shen, **Jianping Cao**. Separation and purification of *Toxoplasma gondii* tachyzoites from *in vitro* and *in vivo* culture systems. Exp Parasitol, 2012, 130(1): 91-94
26. Rongjun Wang, Shuxing Qiu, Fuchun Jian, Sumei Zhang, Yujuan Shen, Longxian Zhang, Changshen Ning, **Jianping Cao**, Li Huaxiao. Prevalence and molecular identification of *Cryptosporidium* spp. in pigs in Henman, China. Parasitol Res, 2010, 107:1489-1494
27. Sijie He, Linlin Yang, Zhiyue Lv, Wei Hu, **Jianping Cao**, Jie Wei, Xi Sun, Jie Yang, Huanqin Zheng and Zhongdao Wu. Molecular and functional characterization of a mortalin-like protein from *Schistosoma japonicum* (SjMLP/hsp70) as a member of the HSP70 family. Parasitol Res, 2010,107:955–966.DOI 10.1007/s00436-010-1960-5