个人简介

姓名: 陈木新

性别: 男

出生年月: 1982年11月

学位/学历: 博士/博士研究生

职称:研究员

电子邮件: chenmx@nipd.chinacdc.cn

办公地址:上海市黄浦区瑞金二路 207 号

办公电话: 021-64377008-1215



教育经历

2013/09-2017/01, 复旦大学, 生命科学学院微生物学和微生物工程系, 博士

2006/09-2009/06, 华南农业大学, 兽医学院预防兽医系, 硕士

2002/09-2006/06, 韶关学院, 英东生命科学学院生物技术系, 学士

工作经历

2020/07-至 今,中国疾病预防控制中心寄生虫病预防控制所,健康教育咨询检测中心,研究员

2019/11-2021/08,南京医科大学/深圳市疾病预防控制中心,博士后、副研究员、研究员

2016/07-2020/06,中国疾病预防控制中心寄生虫病预防控制所,健康教育咨询检测中心,副研究员

2012/07-2016/06,中国疾病预防控制中心寄生虫病预防控制所,健康教育咨询检测中心,助理研究员

2009/07-2012/06,中国疾病预防控制中心寄生虫病预防控制所,健康教育咨询检测中心,研究实习员

社会/学术任职和活动

2021/07-至今,中国地方病协会第一届病媒生物控制专业委员会委员

2009/07-至今,中华预防医学会寄生虫学分会成员

2009/07-至今,上海市寄生虫学会成员

研究方向/主要研究内容

研究方向为病原生物学,主要从事重大媒传与食源性寄生虫病检测关键技术研究。获血液原虫基因芯片检测试剂盒、食源性寄生虫病蛋白芯片检测试剂盒等一批具有现场应用价值的寄生虫检测试剂。近年来,主持或参与上海市自然科学基金项目、国家重点研发项目、国家科技重大专项等 10 余项科研项目。发表论文三十余篇,其中,SCI 论文二十余篇,第一(含并列)或通讯作者 SCI 论文 21篇,总影响因子约 48,共被引用 198次;申请专利 19项,其中第一发明人 2

项,已授权2项。参编专著1部,起草《巴贝虫病诊断》等卫生行业标准3项,获省部级科技二等奖1项(第六,2018年)、深圳市科技进步二等奖1项(第二,2013年),并获中共湖北省委员会和湖北省人民政府联合颁发的新时代"最美逆行者"称号(2020年)。

科研/教学研究项目

- 1) 项目名称:单抗12D5抑制IL-5表达在小鼠广州管圆线虫感染所致脑炎的分子机制;上海市自然科学基金项目;编号:18ZR1443500;研究起止年月:2018.6-2021.5;经费:20万元;作用:主持,在研。
- 2) 项目名称:血液原虫基因芯片试剂盒的监测应用研究;中国疾控中心青年科研基金;编号:2018A105;研究起止年月:2018.1-2019.12;经费:9万元;作用:主持,在研。
- 3) 项目名称:血液原虫病基因芯片试剂盒的现场应用研究;上海市卫生和计划 生育委员会面上项目;编号:201640278;研究起止年月:2017.1-2019.12; 经费:5万元;作用:主持,已结题。
- 4) 项目名称: 重要寄生虫病检测和监测技术研究; 项目类别: 国家科技重大专项项目; 编号: 2008ZX10004-011; 研究起止年月: 2008.10-2010.12; 经费: 2459万元; 作用: 主要骨干,已结题。
- 5) 项目名称: 重要寄生虫病监测技术研究; 项目类别: 国家科技重大专项项目; 编号: 2012ZX10004-220; 研究起止年月: 2012.1- 2015.12; 经费: 2561.13 万元; 作用: 主要骨干,已结题。

主要学术成果

期刊论文

- 1) **Chen MX**, Huang DN, Chen JX, Huang YL, Zheng HW, Tang YJ, Zhang Q, Chen SH, Ai L, Zhou XN*, Zhang RL*. Genetic Characterization and Detection of *Angiostrongylus cantonensis* by Molecular Approaches. Vector-Borne And Zoonotic Diseases 2021 (on line).
- 2) Chen MX, Ai L, Huang DN, Chen JX, Feng TJ, Mei SJ, Huang YL, Peng B, Zhang SX, Zhang RL*, Zhou XN*. Soaring Asymptomatic Infected Individuals Bring About Barriers and Difficulties for Interruption of COVID-19 Prevalence in China. Vector-Borne And Zoonotic Diseases 2021 (on line).
- 3) Chen MX, Gao ST, Ai L, Chen JX, Feng TJ, Chen ZG, Zhang XM, Deng SY, Lin ZD, Tang YJ, Zhang Q, He GC, Xiong HW, Zhou XN, Zhang RL, Huang DN. The First Reported Case of COVID-19 and *Plasmodium ovale* Malaria

- Coinfection Guangdong Province, China, January 2021. China CDC Weekly. 2021, 4:1-2.
- 4) Xu QM, Fang F, Wu S H, Shi ZQ, Liu Z, Zhao YJ, Zheng HW, Lu GX, Kong HR, Wang GJ, Ai L*, **Chen MX***, Chen JX*.Dendritic cell TLR4 induces Th1-type immune response against Cryptosporidium parvum infection. Tropical Biomedicine. 2021,38(1): 172-179.
- 5) Chen MX, Liu Q, Xue JB, Chen SH, Huang DN, Yu YF, Cai YC, Lu Y, Song P, Zhang RL, Ai L, Chen JX*.Spreading of Human Babesiosis in China: Current Epidemiological Status and Future Challenges.China CDC Weekly. 2020, 2(33):634-637.
- 6) **Chen MX**, Zhang RL, Xu XN, Yu Q, Huang DN, Liu W, Chen SH, Song P, Lu Y, Cai YC, Ai L, Chen JX*. Parasitological and molecular detection of human fascioliasis in a young man from Guizhou, China. Tropical Biomedicine. 2020,37(1): 50–57.
- 7) Chen MX, Ai L, Chen JH, Feng XY, Chen SH, Cai YC, Lu Y, Zhou XN, Chen JX, Hu W*. DNA Microarray Detection of 18 Important Human Blood Protozoan Species. PLoS Negl Trop Dis. 2016, 10(12):e0005160.
- 8) Ma J, Sun MM, He JJ, Liu GH, Ai L, **Chen MX***, Zhu XQ. *Fasciolopsis buski* (Digenea: Fasciolidae) from China and India may represent distinct taxa based on mitochondrial and nuclear ribosomal DNA sequences, Parasit Vectors. 2017, 10(1): 101.
- 9) Chen MX, Chen JX, Chen SH, Huang NA, Ai L, Zhang RL*. Development of lateral flow immunoassay for antigen detection from human *Angiostrongylus cantonensis* infections. Korean J Parasitol. 2016, 54(3):375-380.
- 10) **Chen MX**, Hu W, Li J, He JJ, Ai L, Chen JX*. Identification and characterization of microRNAs in the zoonotic fluke *Fasciolopsis buski*. Parasitol Res. 2016, 115(6):2433-2438.
- 11) Chen JX, Chen MX, Ai L, Xu XN, Jiao JM, Zhu TJ, Su HY, Zang W, Luo JJ, Guo YH, Lv S, Zhou XN*. An Outbreak of Human *Fascioliasis gigantica* in Southwest China. PLoS One, 2013, 8(8):e71520. (Contributed equally)
- 12) Chen JX, Chen MX, Ai L, Chen JH, Chen SH, Zhang YN, Cai YC, Zhu XQ, Zhou XN*. A protein microarray for the rapid screening of patients suspected of infection with various food-borne helminthiases. PLoS Negl Trop Dis., 2012, 6(11):e1899. (Contributed equally)

- 13) **Chen MX**, Ai L, Xu MJ, Zhang RL, Chen SH, Zhang YN, Guo J, Cai YC, Tian LG, Zhang LL, Zhu XQ, Chen JX*. *Angiostrongylus cantonensis*: identification and characterization of microRNAs in male and female adults. Exp Parasitol., 2011, 128(2):116-120.
- 14) **Chen MX**, Ai L, Xu MJ, Chen SH, Zhang YN, Guo J, Cai YC, Tian LG, Zhang LL, Zhu XQ, Chen JX*. Identification and characterization of microRNAs in *Trichinella spiralis* by comparison with *Brugia malayi* and *Caenorhabditis elegans*. Parasitol Res., 2011, 109(3):553-558.
- 15) **Chen MX**, Ai L, Zhang RL, Xia JJ, Wang K, Chen SH, Zhang YN, Xu MJ, Li X, Zhu XQ, Chen JX*. Sensitive and rapid detection of *Paragonimus westermani* infection in humans and animals by loop-mediated isothermal amplification (LAMP). Parasitol Res., 2011, 108(5):1193-1198.
- 16) Chen MX, Wang K, Ai L, Yan WH, Peng L, Zhang RL. Development of a double antibody sandwich ELISA assay for the diagnosis of angiostrongyliasis. J Parasitol. 2011, 97(4):721-724.
- 17) **Chen MX**, Zhang RL, Ai L, Chen JX, Chen SH, Huang DN, Gao ST, Geng YJ, Li XH, Zhu XQ. Seroprevalence of *Angiostrongylus cantonensis* infection in humans in China. J Parasitol. 2011, 97(1):144-145.
- 18) **Chen MX**, Zhang RL, Chen JX, Chen SH, Li XH, Gao ST, Geng YJ, Huang DN, Ai L, Xu MJ, Zhu XQ. Monoclonal antibodies against excretory/secretory antigens of *Angiostrongylus cantonensis*. Hybridoma (Larchmt). 2010, 29(5):447-452.

荣誉及奖项

2018年12月,重大媒传与食源性寄生虫病检测关键技术研究与应用,中华医学会,中华医学科技奖二等奖(部级),主要完成人:周晓农、陈家旭、胡薇、王恒、汪俊云、陈木新、陈军虎、黄艳、秦志强、余传信。

2020年3月,中共湖北省委员会、湖北省人民政府(省级),新时代"最美逆行者"称号,主要完成人:**陈木新**。

2013年9月,深圳市主要食原性寄生虫快速诊断试剂盒研制及传播途径溯源,深圳市人民政府(副省级),深圳市科技进步二等奖,主要完成人:张仁利,**陈木新**,黄达娜,耿艺介,高世同,李晓恒,刘春艳,程锦泉。

Profile

Name: Mu-Xin Chen

Gender: male

Date of birth: 3 November, 1982

Degree: PHD
Title: Professor

Email: chenmx@nipd.chinacdc.cn

Address: 207 Ruijin Er Road, Shanghai, China

Office Tel: 86 21-64377008-1215



Education

2013/09-2017/01, Fudan University University, Shanghai, China, Biology and medicine, PHD

2006/09-2009/06, South China Agricultural University, Guangzhou, China, Parasitology, MSc

2002/09-2006/06, Shaoguan University, Shaoguan, China, biotechnology, BSc

Appointments

2020.7 – present: Professor, National Institute of Parasitic Diseases (IPD), Chinese Center for Diseases Control and Prevention (China CDC)

2019/11-2021/08: postdoctoral, associate Professor, Professor, Nanjing Medical University/Shenzhen Center for Disease Control and Prevention, China

2016.7 –2020.6: associate Professor, National Institute of Parasitic Diseases (IPD), Chinese Center for Diseases Control and Prevention (China CDC)

2012.7 –2016.6: Assistant Professor, National Institute of Parasitic Diseases (IPD), Chinese Center for Diseases Control and Prevention (China CDC)

2009.7 –2012.6: research assistant, National Institute of Parasitic Diseases (IPD), Chinese Center for Diseases Control and Prevention (China CDC)

Academic Participation and Activities

Member, The First Professional Committee of Vector Control of the Chinese Endemic Disease Association (2021-)

Member, The Society of Parasitology, China Preventive Medical Association (2009-) Member, Shanghai Society for Parasitology (2009-)

Research Interest

The research direction is pathogenic biology, mainly engaged in the research of key technologies for the detection of major vector-borne and food-borne parasitic diseases. Obtained a batch of parasite detection reagents with field application value, such as blood protozoan gene chip detection kit and food-borne parasitic disease protein chip detection kit.

In recent years, he has presided over or participated in more than 10 scientific research projects such as Shanghai Natural Science Foundation projects, national key research and development projects, and national science and technology major special projects. Published more than 30 papers, including more than 20 SCI papers, 21 of which were the first (including Co-first) or corresponding author SCI papers, with a total impact factor of about 48, and were cited 198 times; applied for 19 patents, of which the first. There are 2 patents are the first inventors and 2 patents have been authorized. Participated in the compilation of 1 book, drafted 3 health industry standards such as "Diagnosis of Babesiosis", won 1 provincial and ministerial second prize of science and technology (sixth, 2018), and 1 second prize of Shenzhen Science and Technology Progress Award (second, 2013), and was awarded the title of "Most Beautiful Retrograde" in the New Era jointly issued by the Hubei Provincial Committee of the Communist Party of China and the People's Government of Hubei Province (2020).

Projects

- The Program for the Shanghai Natural Science Foundation of China (Grant No. 18ZR1443500) 6/18-05/21 The molecular mechanism of monoclonal antibody 12D5 inhibits IL-5 expression in eosinophil meningitis infected with Angiostrongylus cantonensis in mice Role: PI
- 2) The Youth Science Foundation of Chinese Center for Disease Control and Prevention (Grant No. 2018A105) 01/18-12/19 Study on the application of blood protozoa gene chip kit Role: PI
- 3) The General Program Shanghai Municipal Commission of Health and Family Planning of China (Grant No. 201640278) 01/16-12/18 Field application of blood protozosis gene chip kit Role: PI
- 4) National Key Project of S&T (grant no. 2008ZX10004-011) 10/08-12/10

 Surveillance and detection of major human parasitic infections Role: Assistant PI
- 5) National Key Project of S&T (grant no. 2012ZX10004-220) 01/12-12/15

 Surveillance of major human parasitic infections Role: Assistant PI

Publications

- 1) **Chen MX**, Huang DN, Chen JX, Huang YL, Zheng HW, Tang YJ, Zhang Q, Chen SH, Ai L, Zhou XN*, Zhang RL*. Genetic Characterization and Detection of *Angiostrongylus cantonensis* by Molecular Approaches. Vector-Borne And Zoonotic Diseases 2021 (on line).
- 2) Chen MX, Ai L, Huang DN, Chen JX, Feng TJ, Mei SJ, Huang YL, Peng B, Zhang SX, Zhang RL*, Zhou XN*. Soaring Asymptomatic Infected Individuals Bring About Barriers and Difficulties for Interruption of COVID-19 Prevalence in China. Vector-Borne And Zoonotic Diseases 2021 (on line).
- 3) Chen MX, Gao ST, Ai L, Chen JX, Feng TJ, Chen ZG, Zhang XM, Deng SY, Lin ZD, Tang YJ, Zhang Q, He GC, Xiong HW, Zhou XN, Zhang RL, Huang DN. The First Reported Case of COVID-19 and *Plasmodium ovale* Malaria Coinfection Guangdong Province, China, January 2021. China CDC Weekly. 2021, 4:1-2.
- 4) Xu QM, Fang F, Wu S H, Shi ZQ, Liu Z, Zhao YJ, Zheng HW, Lu GX, Kong HR, Wang GJ, Ai L*, **Chen MX***, Chen JX*.Dendritic cell TLR4 induces Th1-type immune response against Cryptosporidium parvum infection. Tropical Biomedicine. 2021,38(1): 172-179.
- 5) Chen MX, Liu Q, Xue JB, Chen SH, Huang DN, Yu YF, Cai YC, Lu Y, Song P, Zhang RL, Ai L, Chen JX*.Spreading of Human Babesiosis in China: Current Epidemiological Status and Future Challenges.China CDC Weekly. 2020, 2(33):634-637.
- 6) **Chen MX**, Zhang RL, Xu XN, Yu Q, Huang DN, Liu W, Chen SH, Song P, Lu Y, Cai YC, Ai L, Chen JX*. Parasitological and molecular detection of human fascioliasis in a young man from Guizhou, China. Tropical Biomedicine. 2020,37(1): 50–57.
- 7) **Chen MX**, Ai L, Chen JH, Feng XY, Chen SH, Cai YC, Lu Y, Zhou XN, Chen JX, Hu W*. DNA Microarray Detection of 18 Important Human Blood Protozoan Species. PLoS Negl Trop Dis. 2016, 10(12):e0005160.
- 8) Ma J, Sun MM, He JJ, Liu GH, Ai L, **Chen MX***, Zhu XQ. *Fasciolopsis buski* (Digenea: Fasciolidae) from China and India may represent distinct taxa based on mitochondrial and nuclear ribosomal DNA sequences, Parasit Vectors. 2017, 10(1): 101.

- 9) **Chen MX**, Chen JX, Chen SH, Huang NA, Ai L, Zhang RL*. Development of lateral flow immunoassay for antigen detection from human *Angiostrongylus cantonensis* infections. Korean J Parasitol. 2016, 54(3):375-380.
- 10) **Chen MX**, Hu W, Li J, He JJ, Ai L, Chen JX*. Identification and characterization of microRNAs in the zoonotic fluke *Fasciolopsis buski*. Parasitol Res. 2016, 115(6):2433-2438.
- 11) Chen JX, Chen MX, Ai L, Xu XN, Jiao JM, Zhu TJ, Su HY, Zang W, Luo JJ, Guo YH, Lv S, Zhou XN*. An Outbreak of Human *Fascioliasis gigantica* in Southwest China. PLoS One, 2013, 8(8):e71520. (Contributed equally)
- 12) Chen JX, Chen MX, Ai L, Chen JH, Chen SH, Zhang YN, Cai YC, Zhu XQ, Zhou XN*. A protein microarray for the rapid screening of patients suspected of infection with various food-borne helminthiases. PLoS Negl Trop Dis., 2012, 6(11):e1899. (Contributed equally)
- 13) **Chen MX**, Ai L, Xu MJ, Zhang RL, Chen SH, Zhang YN, Guo J, Cai YC, Tian LG, Zhang LL, Zhu XQ, Chen JX*. *Angiostrongylus cantonensis*: identification and characterization of microRNAs in male and female adults. Exp Parasitol., 2011, 128(2):116-120.
- 14) **Chen MX**, Ai L, Xu MJ, Chen SH, Zhang YN, Guo J, Cai YC, Tian LG, Zhang LL, Zhu XQ, Chen JX*. Identification and characterization of microRNAs in *Trichinella spiralis* by comparison with *Brugia malayi* and *Caenorhabditis elegans*. Parasitol Res., 2011, 109(3):553-558.
- 15) **Chen MX**, Ai L, Zhang RL, Xia JJ, Wang K, Chen SH, Zhang YN, Xu MJ, Li X, Zhu XQ, Chen JX*. Sensitive and rapid detection of *Paragonimus westermani* infection in humans and animals by loop-mediated isothermal amplification (LAMP). Parasitol Res., 2011, 108(5):1193-1198.
- 16) **Chen MX**, Wang K, Ai L, Yan WH, Peng L, Zhang RL. Development of a double antibody sandwich ELISA assay for the diagnosis of angiostrongyliasis. J Parasitol. 2011, 97(4):721-724.
- 17) **Chen MX**, Zhang RL, Ai L, Chen JX, Chen SH, Huang DN, Gao ST, Geng YJ, Li XH, Zhu XQ. Seroprevalence of *Angiostrongylus cantonensis* infection in humans in China. J Parasitol. 2011, 97(1):144-145.
- 18) **Chen MX**, Zhang RL, Chen JX, Chen SH, Li XH, Gao ST, Geng YJ, Huang DN, Ai L, Xu MJ, Zhu XQ. Monoclonal antibodies against excretory/secretory antigens of *Angiostrongylus cantonensis*. Hybridoma (Larchmt). 2010,

29(5):447-452.

Books

Participated in the compilation of "Progress in Health Science and Technology" (Editors: Xiaonong Zhou, Xiaokui Guo, Qing Xie), published by Shanghai Jiao Tong University Press in June 2021, 294,400 words.

Patents

Lin Ai, **Muxin Chen**, Ruiqing Lin, Chun Li, Huiqun Song, Ziguo Yuan, Juan Li, Hailong Li, Xingquan Zhu. A LAMP detection method and kit for rapid identification and detection of Fasciola hepatica and Fasciola hepatica, 2012.11, ZL201010570231.8 (authorized)

Muxin Chen, Renli Zhang, Yan Zhang, Dana Huang, Jiaxu Chen, Yanjing Chen, Lin Ai, Suying, Bian Yijun Tang, Huiwen Zheng, Qian Zhang, Chuan Su, Xiaonong Zhou. Reagents, kits and their kits for isothermal amplification detection of 4 species of Babesia Application, 2020.7, ZL202010745565.8 (authorized)

Honors and Awards

In December 2018, the research and application of key technologies for the detection of major vector-borne and food-borne parasitic diseases, the Chinese Medical Association, the second prize of the Chinese Medical Science and Technology Award (ministerial level), mainly completed by: Xiaonong Zhou, Jiaxu Chen, Wei Hu, Heng Wang, Junyun Wang, **Muxin Chen**, Junhu Chen, Yan Huang, Zhiqiang Qin, Chuanxin Yu.

In March 2020, the Hubei Provincial Committee of the Communist Party of China and the People's Government of Hubei Province (provincial level), the title of "Most Beautiful Retrograde" in the new era, mainly completed by: **Muxin Chen**.

In September 2013, the development of rapid diagnostic kits for major food-borne parasites in Shenzhen and traceability of transmission routes, Shenzhen Municipal People's Government (sub-provincial level), second prize of Shenzhen Science and Technology Progress, mainly completed by: Renli Zhang, **Muxin Chen**, Dana Huang, Yijie Geng, Shitong Gao, Xiaoheng Li, Chunyan Liu, Jinquan Cheng.