

<h2>个人简介</h2> <p>         姓名：秦志强          性别：男          出生年月：1972.10          学位/学历：博士/博士研究生          职称：研究员          电子邮件：qinzq@nipd.chinacdc.cn          办公地址：上海市黄浦区瑞金二路 207 号          办公电话：021-54650863       </p>	
<h2>教育经历</h2>	
<p>1998/09-2001/06 中南大学湘雅医学院，病原生物学， 硕士</p> <p>2002/09-2007/06 中南大学，生物化学与分子生物学， 博士</p>	
<h2>工作经历</h2>	
<p>2001/07-2002/08 浙江省宁波市疾病预防控制中心 主管医师</p> <p>2007/06-2012/01 美国得克萨斯大学西南医学中心， 博士后</p> <p>2012/02-迄今 中国疾病预防控制中心寄生虫病预防控制所，副研究员、研究员(期间 2018/10-2019/10 世界卫生组织非洲区域办公室， 技术官员)</p>	
<h2>社会/学术任职和活动</h2>	
<p>中国生物化学与分子生物学会员</p> <p>中国细胞生物学会员</p>	
<h2>研究方向/主要研究内容</h2>	
<p>专业：病原生物学</p> <p>研究方向: 1.基于核酸适体的血吸虫病诊疗新技术；2 蠕虫感染与自身免疫</p> <p>主要研究内容：（一）筛选与鉴定特异性结合血吸虫虫体/虫卵的核酸适配体靶标，探究核酸适配体识别虫体/虫卵的分子机理以及开展基于核酸适体的诊疗新方法研究。（二）针对日本血吸虫感染后导致机体发生自身免疫现象，我们将结合免疫学、细胞生物学以及生物化学等多种手段来研究和阐明其分子机制，为理解血吸虫感染和致病机理提供新的线索。</p>	
<h2>科研/教学研究项目</h2>	

1. 十三五”国家科技重大专项，“一带一路”重要传染病流行规律和预警应对技术研究》课题（编号：2018ZX10101002-005-003），2018/01-2021/06，在研，子任务主持。
2. 上海市自然科学基金，17ZR1433300，核酸适配体 Apt-LC15 体内靶向识别日本血吸虫卵的功能研究，2017/05-2020/04，主持。
3. 上海市卫生和计生委面上科研基金，基于 LAMP 方法的血吸虫病传播监测试剂研发，2014/01-2016/12，主持。
4. 化学生物与计量传感学国家重点实验室（湖南大学）开放基金，基于核酸适配体的血吸虫病诊断新靶标分子的研究 2014/01-2016/12，主持。
5. 国家自然科学基金青年项目，30400256，东方田鼠抗日本血吸虫抗性相关基因的功能研究，2005/01-2007/12，主持。

## 主要学术成果

### 期刊论文

1. Youxiang Zhang, De-Hui Xiong, Yangyang Li, Guina Xu, Baoxin Zhang, Yang Li u, Shan Zhang, QingHuang, Simin Chen, Fansheng Zeng, Jingyi Guo, Bin Li, **Zhiqiang Qin\***, and Zuping Zhang\*. Schistosoma japonicum Infection in Treg-Specific USP21 Knockout Mice. *Journal of Immunology Research*, 2021 Feb 9;2021:6613162. doi: 10.1155/2021/6613162. (共同通讯作者)
2. Wang X, Fu Q, Song R, Duan B, Bergquist R, Xu J, Li S, Zhou D, **Qin Z\***. Antinuclear antibodies and interleukin responses in patients with Schistosoma japonicum infection. *Parasite Immunol.* 2018;40(10):e12577. doi: 10.1111/pim.12577. Epub 2018 Aug 29.(通讯作者)
3. **Zhi-Qiang Qin**, Xu J, Feng T, Lv Shan, Yin-jun Qian, Li-Juan Zhang, Yin-Long Li, Chao Lv, Robert Bergqusit, Shi-Zhu Li, Xiao-Nong Zhou\*. Field Evaluation of a Loop-Mediated Isothermal Amplification (LAMP) Platform for the Detection of Schistosoma japonicum Infection in Oncomelania hupensis Snails. *Trop. Med. Infect. Dis.* 2018, 15;3(4). pii: E124. doi: 10.3390/tropicalmed3040124.
4. Yuqian Long, #, **Zhiqiang Qin**, #, Minlan Duan, Shizhu Li, Jianglin Li, Zilong Zhao, Xiaoqiu Wu, Wei Lin, Yi Huang, Mao Ye.\* and Weihong Tan.\* Screening and Identification of DNA aptamers toward Schistosoma japonicum egg via SELEX. *Sci Rep.* 2016 Apr 28; 6:24986. doi: 10.1038/srep24986 (共同第一作者)
5. Shen-Bo Chen, Lin Ai, Wei Hu, Jing Xu, **Zhi-Qiang Qin\***, Jun-Hu Chen\*. New anti-Schistosoma approaches in the People's Republic of China: Development of Diagnostics, Vaccines and Other New Techniques Belonging to the 'omics' group. *Adv Parasitol.* 2016;92:385-408 (共同通讯作者)
6. **Qin Z**, Zou Y, Lavingia B, Stastny P. Identification of endothelial cell surface antigens encoded by genes other than HLA. A combined immunoprecipitation and proteomic approach for the identification of antigens recognized by antibodies against endothelial cells in transplant recipients. *Hum Immunol.* 2013

74(11):1445-1452

7. Qin Z, Lavingia B, Zou Y, Stastny P. Antibody against nucleolin in recipients of organ transplants. *Transplantation*. 2011, 92:829-835

## 专利申请

- 1.人粪便中寄生虫卵检测试剂盒.李石柱,**秦志强**,冯婷,许静,吕山,周长海. 专利号 ZL 2015 2 1086760.5, 专利授权日, 2016.8.3(授权)
- 2.一种检测日本血吸虫卵的核酸适配体及其在制备检测制剂中的应用.谭蔚泓,**秦志强**,龙禹乾,叶茂.专利号 CN104962560B 专利授权日,2017.7.21(授权)
- 3.东方田鼠抗日本血吸虫抗性基因及其编码的多肽. 胡维新,**秦志强**,熊德慧.专利号: ZL200710035282.9; 授权公开日: 2010.5 (授权)

## 荣誉及奖项

2018年中华医学科学技术奖二等奖（排名第9）

2003 年度宁波市科学技术进步二等奖（NK03020015-2, 排名第 2）

2001 年度湖南省科学技术进步二等奖（2001013191-2-07,排名第 7）

<h2>Profile</h2>	
<p><b>Name:</b> Qin, Zhiqiang  <b>Gender:</b> Male  <b>Date of birth:</b> October, 08, 1972  <b>Degree:</b> Ph.D.  <b>Title:</b> Professor  <b>Email:</b> qinzq@nipp.chinacdc.cn  <b>Address:</b> 207 Ruijin Er Road, Shanghai, China  <b>Office Tel:</b> +86-21-54650863</p>	
<h2>Education</h2>	<p>1998/09~2001/06 M.S. in Pathogen biology, Xiang-Ya School of Medicine, Central South University, China</p> <p>2002/09~2007/06 Ph.D. in Biochemistry and Molecular Biology, Xiang-Ya School of Medicine, Central South University, China</p>
<h2>Appointments</h2>	<p>2017/08~present Professor, National Institute of Parasitic Diseases, China CDC, Shanghai, China</p> <p>2018/10~2019/10 Medical Officer, Schistosomiasis elimination, Expanded Special Project for Elimination of NTDs (ESPEN), World Health Organization Regional Office for Africa, Brazzaville, Congo</p> <p>2012/02~2017/07 Associate Professor, National Institute of Parasitic Diseases, China CDC, Shanghai, China</p> <p>2007/06 ~ 2012/01 Postdoctoral Researcher, University of Texas Southwestern Medical Center, Dallas, TX, USA</p> <p>2001/07~2002/08 Chief Intern, Ningbo Center for Disease Control and Prevention, Ningbo City, Zhejiang Province, China</p>
<h2>Academic Participation and Activities</h2>	<p>Full member of Chinese Society for Cell Biology</p> <p>Full member of Chinese society of Biochemistry and molecular biology</p>

## Research Interest

### Research interests:

- (1) New technology for diagnosis and treatment of schistosomiasis based on nucleic acid aptamer;
- (2) Helminth infection and Autoimmunity

**Main research contents:** 1, Screening and identification of aptamer targets specifically binding to *Schistosoma japonicum* worm/egg, and then to explore the molecular mechanism of aptamer recognition of *Schistosoma japonicum* worm/egg, and carry out research on new methods of diagnosis and treatment based on aptamer; 2, In view of the autoimmune phenomenon caused by *Schistosoma japonicum* infection, we will study and clarify its molecular mechanism by means of immunology, cell biology and biochemistry, so as to provide new clues for understanding the infection and pathogenesis of *Schistosoma japonicum*.

## Projects

Natural Science Foundation of Shanghai, Grant/Award Number: 17ZR1433300

05/01/2017-30/04/2020

Role: Principle Investigator

National Natural Foundation of China (NSFC 30400256) 1/1/2005-12/30/2007

Cloning and functional study on resistance-associated gene to *Schistosoma japonicum* infection from *Microtus fortis*.

Role: Principle Investigator

## Publications

1. Youxiang Zhang, De-Hui Xiong, Yangyang Li, Guina Xu, Baoxin Zhang, Yang Liu, Shan Zhang, QingHuang, Simin Chen, Fansheng Zeng, Jingyi Guo, Bin Li, **Zhiqiang Qin\***, and Zuping Zhang\*. Schistosoma japonicum Infection in Treg-Specific USP21 Knockout Mice. Journal of Immunology Research, 2021 Feb 9; 2021:6613162. doi: 10.1155/2021/6613162. (**Co-corresponding author**)
2. Wang X, Fu Q, Song R, Duan B, Bergquist R, Xu J, Li S, Zhou D, **Qin Z\***. Antinuclear antibodies and interleukin responses in patients with Schistosoma japonicum infection. Parasite Immunol. 2018;40(10):e12577. doi:

10.1111/pim.12577. Epub 2018 Aug 29.( **Corresponding author**)

3. **Zhi-Qiang Qin**, Xu J, Feng T, Lv Shan, Yin-jun Qian, Li-Juan Zhang, Yin-Long Li, Chao Lv, Robert Bergquist, Shi-Zhu Li, Xiao-Nong Zhou\*. Field Evaluation of a Loop-Mediated Isothermal Amplification (LAMP) Platform for the Detection of *Schistosoma japonicum* Infection in *Oncomelania hupensis* Snails. *Trop. Med. Infect. Dis.* 2018, 15;3(4). pii: E124. doi: 10.3390/tropicalmed3040124.
4. Yuqian Long, #, **Zhiqiang Qin**, #, Minlan Duan, Shizhu Li, Jianglin Li, Zilong Zhao, Xiaoqiu Wu, Wei Lin, Yi Huang, Mao Ye.\* and Weihong Tan.\* Screening and Identification of DNA aptamers toward *Schistosoma japonicum* egg via SELEX. *Sci Rep.* 2016 Apr 28; 6:24986. doi: 10.1038/srep24986 (**Co-first author**)
5. Shen-Bo Chen, Lin Ai, Wei Hu, Jing Xu, **Zhi-Qiang Qin**\*, Jun-Hu Chen\*. New anti-*Schistosoma* approaches in the People's Republic of China: Development of Diagnostics, Vaccines and Other New Techniques Belonging to the 'omics' group. *Adv Parasitol.* 2016;92:385-408 (**Co-corresponding author**)
6. **Qin Z**, Zou Y, Lavingia B, Stastny P. Identification of endothelial cell surface antigens encoded by genes other than HLA. A combined immunoprecipitation and proteomic approach for the identification of antigens recognized by antibodies against endothelial cells in transplant recipients. *Hum Immunol.* 2013 74(11):1445-1452
7. **Qin Z**, Lavingia B, Zou Y, Stastny P. Antibody against nucleolin in recipients of organ transplants. *Transplantation.* 2011, 92:829-835

## Books

## Patents

- 1, Kit for detecting parasite egg in Human stool. Patent No: ZL 2015 2 1086760.5, authorization date:2016.8.3
- 2, The utility model relates to aptamer for detection of *Schistosoma japonicum* eggs and its application in preparation of detection preparations. Patent No. CN104962560B; authorization date 2017.7.21

3. Resistance genes and peptides encoded by *Schistosoma japonicum* in *Microtus fortis*.

Patent No. ZL200710035282.9, authorization date, 2010.5

### **Honors and Awards**

1, Second Prize of China Medical Science and Technology Award 2018 (ranked 9<sup>th</sup>);

2, Awarded the second prize of Ningbo Science and technology progress in 2003(NK03020015-2, ranked 2<sup>th</sup>)

3, Second Prize of Science and Technology Progress of Hunan Province in 2001  
(2001013191-2-07, Ranked 7th)