Bo Pang (庞博)

Ph.D., Lecturer School of Public Health, Jilin University, P.R. China

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Research Interests:

- Advanced methods for monitoring pollutants in air, water or soil;
- Point-of-care diagnostic for zoonotic pathogens and emerging infectious agents;
- > Food safety and on-site detection of foodborne pathogens.

Work experience:

2022.3-present Lecturer in School of Public Health, Jilin University.

Education:

2016.9-2021.12	Ph.D. in Occupational and Environmental Health, School of Public
	Health, Jilin University.
	Development of on-site methods for the detection of pathogens.
	(Supervisor: Prof. Juan Li)
2019.9-2021.8	Visiting Ph.D. student in Division of Analytical and Environmental
	Toxicology, Faculty of Medicine and Dentistry, University of
	Alberta.
	Development of rapid methods for the detection of SARS-CoV-2.
	(Supervisor: Prof. X. Chris Le, Fellow of the Royal Society of
	Canada)
2011.9-2016.7	Bachelor of Medicine in Preventive Medicine, School of Public
	Health, Jilin University.
	Extraction methods of Immunoglobulin Yolk (IgY) against
	foodborne pathogens. (Supervisor: Prof. Juan Li)
2012.9-2016.7	Bachelor of Administration in Administrative Management,
	School of Public Administration, Jilin University.
	• Study on the construction of primary health care system.
	(Supervisor: Prof. Dechao (Michael) Sun)

English level:

Dec., 2018	Completed Advanced English Training Program (300-hour
	minimum) at the Ministry of Education (MOE) Training Center
	for Overseas Study, China, and passed the required tests with
	following scores:
	■ Listening: 30 (Full Score 40);
	■ Reading: 37 (Full Score 40);
	■ Writing: 37 (Full Score 40);
	■ Speaking: 26 (Full Score 30);
	■ Total Score: 130 (Full Score 150)

■ *Most Outstanding Student* offered by MOE Training Center.

Publications:

As the first-author or corresponding author:

- Jia Wei, Wanjun Wang, Qiong Yu, Mingrui Zhang, Fengyu Xue, Beibei Fan, Tong Zhang, Yanpeng Gao, Juan Li*, Xianying Meng*, <u>Bo Pang*</u>. MASTR Pouch: Palm-size lab for point-of-care detection of Mpox using recombinase polymerase amplification and CRISPR technology. *Sensors and Actuators B: Chemical*, 2023, 390:133950. (*Ranking Q1*)
- Zhenyue Su, Shengnan Wei, Xuening Shi, Xiaomu Wang, Liang Zhang, Xiangong Bu, Hui Xu, Yi Liu, Minghua Jin^{*}, <u>Bo Pang</u>^{*}, Chao Zhao^{*}. Smartphone-assisted colorimetric detection of Salmonella typhimurium based on the catalytic reduction of 4-nitrophenol by β-cyclodextrin-capped gold nanoparticles. *Analytica Chimica Acta*, 2023, 1239:340672. (*Ranking Q1*)
- Jia Wei, Xianying Meng, Juan Li*, Bo Pang*. Pocket Lab for the Rapid Detection of Monkeypox Virus. *Travel Medicine and Infectious Disease*, 2022, 50:102478. (Impact Factor 20.441)
- Yanli Fu[#], Jia Wei[#], Shuo Yao, Liang Zhang, Mingrui Zhang, Xiangyang Zhuang, Chao Zhao^{*}, Juan Li^{*}, <u>Bo Pang^{*}</u>. Rapid Qualitative and Quantitative Detection of Salmonella Typhimurium Using a Single-step Dual Photometric/Fluorometric Assay. *Microchimica Acta*, 2022, 189:218. (*Ranking Q2*)
- Shuo Yao[#], <u>Bo Pang</u>[#], Yanli Fu, Xiuling Song, Kun Xu, Juan Li^{*}, Juan Wang^{*}, Chao Zhao^{*}. Multiplex Detection of Foodborne Pathogens using Inductively Coupled Plasma Mass Spectrometry, Magnetic Separation and Metal Nanoclusters-Mediated Signal Amplification. *Sensors and Actuators B: Chemical*, 2022, 359:131581. ([#]Contribute equally) (*Ranking Q1*)
- Hang Li[#], Xuechen Wang[#], Shengnan Wei[#], Chao Zhao, Xiuling Song, Kun Xu, Juan Li^{*}, <u>Bo Pang^{*}</u>, Juan Wang^{*}. Applications of Hybridization Chain Reaction

Optical Detection Incorporating Nanomaterials: A Review. *Analytica Chimica Acta*, 2022, 1190:338930. (*Ranking Q1*) (Front cover feature)

- Bo Pang, Jingyang Xu, Yanming Liu, Hanyong Peng, Wei Feng, Yiren Cao, Jinjun Wu, Huyan Xiao, Kanti Pabbaraju, Graham Tipples, Michael A. Joyce, Holly A. Saffran, D. Lorne Tyrrell, Hongquan Zhang^{*}, X. Chris Le^{*}. Isothermal Amplification and Ambient Visualization in A Single Tube for the Detection of SARS-CoV-2 Using Loop-Mediated Amplification and CRISPR Technology. *Analytical Chemistry*, 2020, 92(24):16204-16212. (*Ranking Q1*) (ESI Highly Cited Paper)
- Wei Feng[#], Ashley M. Newbigging[#], Connie Le[#], <u>Bo Pang</u>[#], Hanyong Peng[#], Yiren Cao, Jinjun Wu, Ghulam Abbas, Jin Song, Dian-Bing Wang, Mengmeng Cui, Jeffrey Tao, D. Lorne Tyrrell, Xian-En Zhang^{*}, Hongquan Zhang^{*}, X. Chris Le^{*}. Molecular Diagnosis of COVID-19: Challenges and Research Needs. *Analytical Chemistry*, 2020, 92(15):10196-10209. ([#]Contribute equally) (*Ranking Q1*) (Front cover feature; ESI Highly Cited Paper ; ACS Editors' Choice article)
- <u>Bo Pang</u>[#], Yan Zheng[#], Juan Wang, Yushen Liu, Xiuling Song, Jinhua Li, Shuo Yao, Kaiyue Fu, Kun Xu^{*}, Chao Zhao^{*}, Juan Li^{*}. Colorimetric Detection of Staphylococcus aureus Using Gold Nanorods Labeled with Yolk Immunoglobulin and Urease, Magnetic Beads, and A Phenolphthalein Impregnated Test Paper. *Microchimica Acta*, 2019, 186(9):611. ([#]Contribute equally) (*Ranking Q2*)
- <u>Bo Pang</u>, Shuo Yao, Kun Xu, Juan Wang, Xiuling Song, Ying Mu^{*}, Chao Zhao^{*}, Juan Li^{*}. A Novel Visual-mixed-dye for LAMP and Its Application in the Detection of Foodborne Pathogens. *Analytical biochemistry*, 2019, 574:1-6.
- Bo Pang, Kaiyue Fu, Yushen Liu, Xiong Ding, Jiumei Hu, Wenshuai Wu, Kun Xu, Xiuling Song, Juan Wang, Ying Mu^{*}, Chao Zhao^{*}, Juan Li^{*}. Development of A Self-priming PDMS/paper Hybrid Microfluidic Chip Using Mixed-dye-loaded Loop-mediated Isothermal Amplification Assay for Multiplex Foodborne Pathogens Detection. *Analytica Chimica Acta*, 2018, 1040:81-89. (*Ranking Q1*)
- <u>Bo Pang</u>[#], Chao Zhao[#], Li Li, Xiuling Song^{*}, Kun Xu, Juan Wang, Yushen Liu, Kaiyue Fu, Hao Bao, Dandan Song, Xiangjun Meng, Xiaofeng Qu, Zhuping Zhang, Juan Li^{*}. Development of A Low-cost Paper-based ELISA Method for Rapid *Escherichia coli* O157:H7 Detection. *Analytical Biochemistry*, 2018, 542:58-62. ([#]Contribute equally)
- Lili Zhang[#], <u>Bo Pang</u>[#], Wenbin Zhang, Wei Bai, Weiying Yu, Yuanyuan Li, Wanqing Hua, Wenjun Li^{*}, Changgui Kou^{*}. Association between Schizophrenia and DNA Demethylase Activity in Human Peripheral Blood Mononuclear Cells. *Clinical Laboratory*, 2018, 64:1301-1035. ([#]Contribute equally)
- 14. Bo Pang[#], Xiong Ding[#], Guoping Wang, Chao Zhao, Yanan Xu, Kaiyue Fu,

Jingjing Sun, Xiuling Song, Wenshuai Wu, Yushen Liu, Qi Song, Jiumei Hu, Juan Li^{*}, Ying Mu^{*}. Rapid and Quantitative Detection of *Vibrio parahemolyticus* by the Mixed-dye-based Loop-mediated Isothermal Amplification Assay on A Self-priming Compartmentalization Microfluidic Chip. *Journal of Agricultural and Food Chemistry*, 2017, 65(51):11312-11319. ([#]Contribute equally) (*Ranking Q1*)

- <u>Bo Pang</u>, Jingyi Wang, Wenbin Zhang, Yuan Gao, Jinrong Zhang, Yingying Su and Changgui Kou^{*}. Increased Histone Deacetylase Activity in Peripheral Blood Mononuclear Cells of Patients with Schizophrenia. *Psychiatry Research*, 2016, 245:105-107. (Impact Factor 11.225)
- <u>Bo Pang</u>, Guofan Su and Tianqi Zhang. The existence of mental health service problems and improvement measures. *China Continuing Medicine Education*, 2015, 7(5):262-263.

As the co-author:

- Chonghui Zhu, Yu Bing, Qidai Chen, <u>Bo Pang</u>, Juan Li, Tong Zhang^{*}. Nonenzymatic Flexible Wearable Biosensors for Vitamin C Monitoring in Sweat. *ACS Applied Materials & Interfaces*. 2023, 15(15):19384-19392.
- Caihong Yin, <u>Bo Pang</u>, Yanzhi Huang, Jinhua Li, Tingyu Meng, Mengfan Zhang, Liang Zhang, Yanli Gao^{*}, Xiuling Song^{*}. Multiplex polymerase spiral reaction for simultaneous detection of Salmonella typhimurium and Staphylococcus aureus. *Analytical biochemistry*, 2023, 667:115086.
- Shiwei Cui, <u>Bo Pang</u>, Huifang Yan, Bo Wu, Ming Li, Caihong Xing^{*}, Juan Li^{*}. Using Urinary Biomarkers to Estimate the Benzene Exposure Levels in Individuals Exposed to Benzene. *Toxics*. 2022, 10:636.
- Shengnan Wei, Zhenyue Su, Xiangong Bu, Xuening Shi, <u>Bo Pang</u>, Liang Zhang, Juan Li^{*}, Chao Zhao^{*}. On-site colorimetric detection of Salmonella typhimurium. *NPJ Science of Food*. 2022, 6(1):48.
- Yanming Liu, Teresa Kumblathan, Wei Feng, <u>Bo Pang</u>, Jeffrey Tao, Jingyang Xu, Huyan Xiao, Michael A. Joyce, D. Lorne Tyrrell, Hongquan Zhang, Xing-Fang Li^{*}, X. Chris Le^{*}. On-Site Viral Inactivation and RNA Preservation of Gargle and Saliva Samples Combined with Direct Analysis of SARS-CoV-2 RNA on Magnetic Beads. *ACS Measurement Science Au*, 2022, 2(3):224-232. (Front cover feature)
- Xiaoxiao Guo[#], Shuo Yao[#], Hang Li, Xuening Shi, <u>Bo Pang</u>, Jin Jin, Zhenyue Su, Huiwen Zhang, Chao Zhao^{*}, Juan Wang^{*}. Multi-functional Magnetic Molecular Imprinting Probe for Visual Detection of IgY Antibodies. *Mikrochimica Acta*, 2021, 188(11):378.
- Shiyu He[#], Yanzhi Huang[#], Yingwei Ma, Haoyan Yu, <u>Bo Pang</u>, Xingxing Liu, Caihong Yin, Xiaomu Wang, Yuan Wei, Yuling Tian, Chao Zhao, Kun Xu, Juan

Wang, Chunping Lv, Xiuling Song^{*}, Minghua Jin^{*}. Detection of Four Foodborne Pathogens based on Magnetic Separation Multiplex PCR and Capillary Electrophoresis. *Biotechnology Journal*, 2022, 17(1): e2100335.

- Yiren Cao, Jinjun Wu, <u>Bo Pang</u>, Hongquan Zhang^{*}, X. Chris Le^{*}. CRISPR/Cas12a-mediated Gold Nanoparticle Aggregation for Colorimetric Detection of SARS-CoV-2. *Chemical Communications*, 2021, 57:6871-684. (Back cover feature)
- 25. Wei Feng[#], Ashley M. Newbigging[#], Jeffrey Tao[#], Yiren Cao[#], Hanyong Peng[#], Connie Le[#], Jinjun Wu, <u>Bo Pang</u>, Juan Li, D. Lorne Tyrrell, Hongquan Zhang^{*}, X. Chris Le^{*}. CRISPR Technology Incorporating Amplification Strategies: Molecular Assays for Nucleic Acids, Proteins, and Small Molecules. *Chemical Science*, 2021, 12(13):4683-4698. (Back cover feature; ESI Highly Cited Paper)
- 26. Shengnan Wei[#], Xuechen Wang[#], <u>Bo Pang</u>, Hang Li, Xuening Shi, Chao Zhao, Juan Li^{*}, Juan Wang^{*}. Analyte-triggered Autoacceleration of 4-mercaptophenylboronic acid-mediated Aggregation of Silver Nanoparticles for Facile and One-step Ratiometric Colorimetric Method for Detection of Ascorbic Acid. *Microchemical Journal*, 2020, 158:105122.
- 27. Shuo Yao, Juan Li, <u>Bo Pang</u>, Xuechen Wang, Yujie Shi, Xiuling Song, Kun Xu, Juan Wang^{*}, Chao Zhao^{*}. Colorimetric Immunoassay for Rapid Detection of Staphylococcus aureus Based on Etching-enhanced Peroxidase-like Catalytic Activity of Gold Nanoparticles. *Microchimica Acta*, 2020, 187(9):504.
- 28. Shiyu He, Yanzhi Huang, Yanling Zhao, <u>Bo Pang</u>, Lixue Wang, Liwei Sun, Haoyan Yu, Juan Wang, Juan Li^{*}, Xiuling Song^{*}, Hui Li. A Reverse Transcription-Polymerase Spiral Reaction (RT-PSR)-Based Rapid Coxsackievirus A16 Detection Method and Its Application in the Clinical Diagnosis of Hand, Foot, and Mouth Disease. *Frontiers in Microbiology*, 2020, 11:734.
- Shuo Yao[#], Chao Zhao[#], Yushen Liu, Heran Nie, Gaolei Xi, Xiaolian Cao, Zhuolin Li, <u>Bo Pang</u>, Juan Li^{*}, Juan Wang^{*}. Colorimetric Immunoassay for the Detection of Staphylococcus aureus by Using Magnetic Carbon Dots and Sliver Nanoclusters as o-Phenylenediamine-Oxidase Mimetics. *Food Analytical Methods*, 2020, 13:833-838.
- 30. Shiyu He, Hongbo Jiang, Chao Zhao, Kun Xu, Juan Wang, <u>Bo Pang</u>, Xiaoxue Si, Minghua Jin, Xiuling Song^{*}, Juan Li^{*}. Rapid Visualized Isothermal Nucleic Acid Testing of Vibrio parahaemolyticus by Polymerase Spiral Reaction. *Analytical and Bioanalytical Chemistry*, 2020, 412(1):93-101.
- 31. Kaiyue Fu[#], Yan Zheng[#], Juan Li, Yushen Liu, <u>Bo Pang</u>, Xiuling Song, Kun Xu, Juan Wang^{*}, Chao Zhao^{*}. Colorimetric Immunoassay for Rapid Detection of *Vibrio parahemolyticus* Based on Mn²⁺ Mediates the Assembly of Gold Nanoparticles.

Journal of Agricultural and Food Chemistry, 2018, 66:9516-9521.

- 32. Qiong Yu^{*}, <u>Bo Pang</u>, Rui Liu, Wenwang Rao, Shangchao Zhang, Yaqin Yu. Appropriate Body Mass Index and Waist-hip Ratio Cutoff Points for Overweight and Obesity in Adults of Northeast China. *Iranian Journal of Public Health*, 2017, 46(8):1038-1045.
- 33. Dehui Yin[#], Li Li[#], Dandan Song, Yushen Liu, Wen Ju, Xiuling Song, Juan Wang, <u>Bo Pang</u>, Kun Xu^{*}, Juan Li^{*}. A Novel Recombinant Multi-epitope Protein against *Brucella melitensis* Infection. *Immunology Letters*, 2016, 175:1-7.
- 34. Yue Zhai, Xiaofeng Qu, <u>Bo Pang</u>, Li Li, Kun Xu, Menghan Wang, Zibo Gao, Jiayin Song, Xiuling Song^{*}, Minghua Jin^{*}. Preparation of high immunity yolk antibody against *Vibrio parahemolyticus* and comparison of effectiveness between different extraction methods. *Journal of Jilin University (Medicine Edition)*, 2017, 43(2):441-445.

Patents:

- Juan Li, <u>Bo Pang</u>, Chao Zhao, Kun Xu, Juan Wang, Xiuling Song, Jinhua Li, "A assay for the detection of bacteria", P.R. China Patent (#ZL201910337253.0). Issued on August, 2021.
- Juan Li, <u>Bo Pang</u>, Chao Zhao, Ying Mu, Kun Xu, Xiuling Song, Juan Wang, "A self-priming microfluidic chip for multi-pathogens detection based on LAMP", P.R. China Patent (#ZL201810064006.3). Issued on February, 2021.
- Bo Pang, Hongquan Zhang, David Lorne Tyrrell, Xiaochun Chris Le, "Isothermal amplification and ambient visualization in a single tube for the detection of SARS-CoV-2 using loop-mediated amplification and CRISPR technology", U.S. Patent (#17/519,670). Filed on November, 2021.
- Juan Li, Yanli Fu, <u>Bo Pang</u>, Chao Zhao, Mingrui Zhang, Shuo Yao, Liang Zhang, Xiangyang Zhuang, "A assay and method for on-site quantitative and qualitative detection of Salmonella typhimurium", P.R. China Patent (#CN202210093712.7). Filed on January, 2022.

Projects:

As the Project Director:

- 2023, Project Director of *National Natural Science Foundation for Young Scholars, China* (Grant No. 82204101). Entitled "Research on Salmonella on-site detection technology based on a novel EXPAR-CRISPR system".
- 2023, Project Director of *Open Project of Guangdong-Hong Kong-Macao Joint Laboratory for Contaminants Exposure and Health* (Grant No. GHMJLCEH-13). Entitled "CRISPR-mediated portable biosensor for the on-site ultra-sensitive

detection of Vibrio Parahemolyticus".

- 3. 2022, Project Director of JLU Lixin Distinguished Young Teacher Training Program.
- 2018, Project Director of *JLU Graduate Innovative Research Program* (Grant No. 101832018C061). Entitled "Study on on-site detection method for foodborne pathogens based on the novel visual mixed dye".
- 2014, Project Director of *JLU College Students' Innovative Entrepreneurial Training Plan* (Grant No. 2014A72315). Entitled "Study on the association of histone deacetylase activity and schizophrenia".

As the Major Participant:

- 2022, Major Participant in *Program of "Medicine+X" Interdisciplinary Innovation Team of Bethune Medical Department of Jilin University* (Grant No. 2022JBGS09). Entitled "Interdisciplinary Innovation Team for Zoonotic Pathogenic Microorganism Detection Technology".
- 2021, Major Participant in *National Natural Science Foundation of China* (Grant No. 82073603). Entitled "Point-of-care test for simultaneous detection of foodborne pathogens using microfluidic chip and nanozyme".
- 8. 2021, Major Participant in *National Natural Science Foundation of China* (Grant No. 82073602). Entitled "Study on multimodal method for the sensitive detection of pathogenic bacteria incorporating with nanomaterials enrichment".
- 2019, Major Participant in *National Natural Science Foundation of China* (Grant No. 81872668). Entitled "A novel high-throughput assay for rapid and accurate detection of three foodborne pathogens based on immunomagnetic separation and ICP-MS".
- 2018, Major Participant in *Open Project of State Key Laboratory of Industrial Control Technology, Zhejiang University* (Grant No. ICT1800418). Entitled "Development of a visual mixed-dye-based method for foodborne pathogens onsite detection".
- 11. 2017, Major Participant in the *Key Development Project of Science and Technology in Jilin Province of China* (Grant No. 20170204003SF). Entitled "Study on the rapid foodborne pathogens detection techniques".
- 12. 2017, Major Participant in *Open Project of State Key Laboratory of Industrial Control Technology, Zhejiang University* (Grant No. ICT170293). Entitled "A microfluidic chip for on-site duplex detection of *Listeria monocytogenes* and *Staphylococcus aureus* based on isothermal nucleic acid amplification".
- 13. 2016, Major Participant in *Open Project of State Key Laboratory of Industrial Control Technology, Zhejiang University* (Grant No. ICT1600203). Entitled "An

integrated microfluidic system based on digital rapid isothermal detection and amplification for *Vibrio parahaemolyticus* on-site detection".

Major Honors & Awards:

- 1. 2022, *Outstanding Fighter against COVID-19 Pandemic Award* offered by Jilin Province Government, China;
- 2. 2022, the *Most Excellent Ph.D. Thesis* offered by Jilin University.
- 3. 2019, *National Scholarship* (for Ph.D. Candidate) offered by Ministry of Education, China;
- 4. 2018, *National Scholarship* (for Ph.D. Candidate) offered by Ministry of Education, China;
- 5. 2018, the *First Place* in *Jilin Province University Student Innovation Technology and Product Design Patent Challenge* offered by Science and Technology Department, Jilin Provincial;
- 6. 2018, the *Second Place* in *"Elite Cup" Academic Achievement Competition* offered by Jilin University;
- 7. 2017, the *Third Place* in *"Elite Cup" Academic Achievement Competition* offered by Jilin University;
- 8. 2016-2019, *First-Class Graduate Fellowship* (two years) offered by Jilin University.
- 9. 2016-2019, Most Outstanding Graduate (two years) offered by Jilin University;
- 2016-2019, JLU Academic Achievement Scholarship (four times) offered by Jilin University;
- 11. 2016, the Most Excellent Graduation Thesis (Design) offered by Jilin University.
- 12. 2016, Most Outstanding Graduated Bachelor offered by Jilin University;
- 13. 2016, The *Most Outstanding Student of School of Public Health* offered by Jilin University;
- 14. 2016, Second-Class Undergraduate Fellowship offered by Jilin University;
- 15. 2014, Bethune Medicine Scholarship offered by Jilin University;
- 16. 2014, the *Third Place* in *Biological Experimental Skills Competition* offered by Jilin University;
- 17. 2014, the *Second Place* in *Biological Experimental Skills Competition* offered by School of Public Health, Jilin University;
- 2013-2015, *First-Class Undergraduate Fellowship* (three years) offered by Jilin University;
- 19. 2013, *Dongrong Scholarship* offered by Jilin University;
- 20. 2013, *The Most Outstanding Student-Cadres of School of Public Health* offered by Jilin University;

- 21. 2012-2015, *The Most Outstanding Student-Cadres of Jilin University* (three years) offered by Jilin University;
- 22. 2012-2014, *The Most Outstanding Student of Jilin University* (two years) offered by Jilin University;
- 23. 2012, *National Scholarship* (for Bachelor) offered by Ministry of Education, China.

Professional & Academic Activities:

- 2023. 06, Invited Oral Presentation in the Canadian Chemistry Conference and Exhibition (CCCE) 2023, Canada. Entitled "Point-of-care detection of emerging infectious diseases using CRISPR technology: Examples of detecting SARS-CoV-2 and Mpox virus"
- 2. 2023. 02, **Invited Oral Presentation** in the IND 2023 Infectious Diseases Novel Molecular Diagnostics conference, China. Entitled "On-site detection technologies for pathogens of zoonotic infectious diseases"
- 2022. 06, Invited Oral Presentation in the Canadian Chemistry Conference and Exhibition (CCCE) 2022, Canada. Entitled "Point-of-care Detection of SARS-CoV-2 Using Loop-Mediated Isothermal Amplification and CRISPR Technology"
- 4. 2022. 05, **Invited Oral Presentation** in the 6th iCPCR2022, China. Entitled "Onsite detection of SARS-CoV-2 using isothermal amplification and CRISPR technology"
- 5. 2021. 05, **Invited Oral Presentation** in the 10th iConference on Spectroscopy, China. Entitled "Research progress in the molecular diagnosis of COVID-19"
- 6. 2018. 06, **Poster Presentation** in the 13th CCS National Conference on Analytical Chemistry, Xi'an, China. Entitled "Development and application of a novel visual mixed dye for loop-mediated isothermal amplification detection".
- 7. 2018. 05, **Poster Presentation** in the 31th Chinese Chemical Society Congress, Hangzhou, China. Entitled "A self-priming compartmentalization microfluidic chip for rapid and quantitative detection of *Vibrio parahemolyticus*".
- 2017. 05, Poster Presentation in 2017 International Congress on Analytical Sciences, Hainan, China. Entitled "Paper-based ELISA for rapid *Escherichia coli* O157:H7 detection".

Service & Others:

Invited peer reviewer for TOP academic journals, including ACS Nano, Analytical Chemistry, Analytica Chimica Acta and Food Control etc.

1. 2017-2018, vice-chairman in Graduate Students' Union of School of Public Health,

organized activities such as academic forum;

- 2. 2015. 08, the *Most Outstanding Student* in Institute of Neuroscience Summer School, Chinese Academy of Sciences, P.R. China;
- 3. 2015. 07, the *Most Outstanding Student* in State Key Laboratory of Biotherapy Summer School, Sichuan University, P.R. China;
- 4. 2014-2015, *vice-chairman* in *Undergraduate Students' Union of School of Public Health*, organized activities such as "Top Ten Singer" Singing Competition and "School of Public Health Cup" basketball match etc.;
- 5. 2014, certificated as *Chinese Three-Star-Level Volunteer*;
- 6. 2013, completed the *WHO-CIDI China Training and Resource Center Certification training* conducted by the Institute of Mental Health, Peking University in compliance with those guidelines for WHO-CIDI administration as set forth by the World Health Organization.