

C U R R I C U L U M V I T A E

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FACULTY APPOINTMENTS:

Primary: Department of Biotechnology, College of Life Sciences, Sichuan University
Associate: Department of Food Science and Technology, Sichuan University

EDUCATION BACKGROUND:

2002-2007 Ph.D. in Modern Genetics and Biotechnology, College of Life Sciences, Sichuan University, Chengdu, Sichuan, P.R. China.
2000-2001 Certification in Computer Programming/Information Systems, Forsyth Technical Community College, Winston-Salem, NC. USA
1996-1999 M.S. in Animal Science with minor in Meat Science, University of Connecticut, Storrs, CT. USA
1985-1989 B.S. in Biotechnology with minor in Microbiology, Sichuan University, Chengdu, Sichuan, P.R.China.

EMPLOYMENT RECORD:

2001- Professor (2009-), Associate Professor (2002 - 2009), Secretary of International Affairs (2002-2017), Director of the Information Center, (2002-2008), College of Life Sciences, Sichuan University. Sichuan, China.
Director (2011-), Sichuan Key Laboratory for Resource Microbiology and Biotechnology.
Director (2011-), Sichuan Key Laboratory for Resource Microbiology and Biotechnology.
Head (2015-2020), Department of Biotechnology
1996-1999 Research assistant, Animal Science, University of Connecticut, Storrs, CT.
1996-1999 Teaching assistant, Laboratory Animal Management (ANSC 269) and Animal Nutrition (ANSC 216), University of Connecticut, Storrs, CT.

- 1995 Technical manager, Tiancheng Food Co. (the agency of Nutrasweet® in Southwestern China and the producer of Youli® protein sweetener), Chengdu, Sichuan, China.
- 1993-1994 Product manager, Jinboyou Healthy Food Inc., Chengdu, Sichuan, China.
- 1989-1993 Assistant Engineer, Division of Food Science, Sichuan Institute of Light Industry, Sichuan, China.

TEACHING RESPONSIBILITIES:

Undergraduate:

- 20403730-1 Microbiology, 3 credits
20404920-0 English for Biology Majors, 2 credits,
20402420-0 Introduction to Life Sciences, 2 credits

Graduate:

- English for Biology Majors, 2 credits
Food Quality and Control, 2 credits
Biosafety Advancement, 4 credits

HONORS & AWARDS:

- 2022 Advisor, The First Class of National Competition of Life Science of Undergraduate Students, Guard ancient Shu civilization - Control of key deteriorative microorganism of ancient ivory from Sanxing Site.;
- 2021 Key lecturer, Food Analysis, awarded as the First Class of Sichuan Undergraduate Course.
- 2017 High Level Talents of Sichuan Province
- 2017 The First Prize of Sichuan Science and Technology Progress Award
- 2017 The First Prize of Teaching Reform Award of Sichuan University
- 2015 The Distinguished Teaching Award of Sichuan University
- 2014 Tanglixin Renowned Teacher Award
- 2012 The Most Welcome Instructor of Sichuan University
- 2009 Reserve Talent of Sci and Tech Leader of Sichuan Province
- 2008 Sichuan University Top Ten Faculty of Merit
- 2007 Key Raise Object of Sichuan University Master Teacher
- 2007 Third Prize of National Award in Agricultural Sci. & Tech. Ministry of Agriculture
- 2005 Sichuan University Excellent Teaching Award
- 2003 The First Prize of Outstanding Ph.D. Students, Sichuan University
- 2002-07 Award for Excellent Young Faculty, Sichuan University
- 2002 Zhanhong Faculty Research Scholarship, Sichuan University
- 2001 President's Honors List, Forsyth Technical Community College, Winston-

- Salem, NC. USA
- 1999 Graduate Student Scholarship Award, Chinese American Food Society, Chicago, IL. USA
- 1999 Vice president, Board of Chinese Student and Scholar Association, University of Connecticut, Storrs, CT. USA.
- 1998 3rd place in Graduate Student Research Poster Competition, Annual Reciprocal Meat Conference by American Meat Science Association, Storrs, CT. USA.
- 1996-1999 Full Graduate Student Scholarship, University of Connecticut, Storrs, CT. USA.
- 1991 Award for Outstanding Researcher, Sichuan Institute of Light Industry, Chengdu, Sichuan, P.R.China.
- 1988 Award for the Excellence of Undergraduate Scientific Essay, Sichuan University, Chengdu, Sichuan, P.R.China.
- 1986-88 Outstanding Undergraduate Scholarship, Sichuan University, Chengdu, Sichuan, P.R.China.

AFFILIATION OF ACADEMIC SOCIETY

- Chair, Sichuan Society of Microbiology, 2016-
- Members of the Standing Council, Chinese Association of Animal Product Processing Research, 2002-
- Members of the Standing Council, Sichuan Association of Food Science and Technology, 2004-
- Board of Directors, Sichuan Science & Technology Youth Association, 2005 – 2015.
- Board of Directors, Division of Food Standards, Sichuan Standards Institution, 2002-2007.
- American Meat Science Association, 1998-2010.
- Chinese American Food Association, 1997-2000.
- Institute of Food Technologists, USA. 1996-2000.

PUBLICATIONS AUTHORED & CO-AUTHORED

International Journal Articles Only – Full Paper Refereed

1. Xu, X., Jia, Y., Li, R., Wen, Y., Liang, Y., Lao, G., Liu, X., Zhou, W., Liu, H., Xie, J., Wang, X., Xu, W., Sun, Q. Rapid and simultaneous detection of multiple pathogens in the lower reproductive tract during pregnancy based on loop-mediated isothermal amplification-microfluidic chip. BMC Microbiology. Accepted
2. Zhang, Z., Yang, Y. Sun, Q., Zeng, W., Li, Y. Inhibition of biofilm formation and virulence factors of cariogenic oral pathogen Streptococcus mutans by shikimic acid. Microbiology Spectrum. 2022. Accepted

3. Tan C., Xu, Q., Chen, N., He, Q., Sun, Q., Zeng, W. Cross-linking effects of EGCG on myofibrillar protein from common carp (*Cyprinus carpio*) and the action mechanism. Food Research International. 2022. Journal of Food Biochemistry. Accepted
4. Fu, Y., Tan, H., Wang, B., Peng, W., Sun, Q., Yu, Y. Metabolomics reveals dopa melanin involved in the enzymatic browning of the yellow cultivars of East Asian golden needle mushroom (*Flammulina filiformis*). Postharvest Biology and Technology. 2022. Accepted (Co-corresponding author)
5. Wei, Z., Shu, D., Chen, D., Li, Z., Luo, D., Sun, Q. Yang, J., Tan, H. The BcLAE1 is involved in the regulation of ABA biosynthesis in *Botrytis cinerea* TB-31. Frontier in Microbiology. 2022. doi: 10.3389/fmicb.2022.77248
6. Ma, Q., Pan, Y., Chen, Y., Yu, S., Huang, J., Liu, Y., Gong, T., Zhang, Q., Sun, Q., Zou, J., Li, Y. Acetylation of lactate dehydrogenase negatively regulates the acidogenicity of *Streptococcus mutans*. 2022. mBio. DOI: 10.1128/mbio.02013-22
7. Tian, L., Zhao, R., Xu, X., Zhou, Z. Xu, X., Luo, D., Zhou, Z., Liu, Y., Kushmaro, A., Marks, R., Sun, Q. Modulatory effects of *Lactiplantibacillus plantarum* on chronic metabolic diseases. 2022. Food Science and Human Wellness. 11: 1475-1481
8. Zhang, S., Sun, H., Lao, G., Zhou, Z., Liu, Z., Cai, J., Sun, Q. Identification of mobile colistin resistance gene mcr-10 in disinfectant and antibiotic resistant *Escherichia coli* from disinfected tableware. 2022. Antibiotics. 11: 883. <https://doi.org/10.3390/antibiotics11070883>
9. Zhou, Z., Wang, D., Liu, W., Lang, H, Liang, P., Hao, J., Sun, Q. The immunity-promoting activity of porcine placenta in mice as an immunomodulator in functional foods. 2022. Food Science and Human Wellness. 11: 1475-1481
10. Zhang, H., Guo, X., Tian, L., Wang, N., Li, Y., Kushmaro, A., Marks, R., Sun, Q. Antibiofilm activity of 3,3'-diindolylmethane on *Staphylococcus aureus* and its disinfection on common food-contact surfaces. 2022. Food Science and Human Wellness. 11: 1222-1232.
11. Tian, L, Liu, Y., Xu, X., Jiao, P., Hu, G., Cui, Y., Chen, J., Ma, Y., Jin, X., Wang, K., Sun, Q. *Lactiplantibacillus plantarum* J-15 reduced calcium oxalate kidney stones by regulating intestinal microbiota, metabolism and inflammation in rats. 2022. FASEB Journal. DOI: 10.1096/fj.202101972RR.
12. Lin, Y., Gong, T., Ma, Q., Jing, M., Zheng, T., Yan, J., Chen, J., Pan Y., Sun, Q., Zhou, X., Li, Y. Nicotinamide could reduce growth and cariogenic virulence of *Streptococcus mutans*. 2022. Journal of Oral Microbiology. <https://doi.org/10.1080/20002297.2022.2056291>
13. Jiang, M, Yang, C., Kwan, P.S., Zhang, L., Fan, H., Jin, Y., Sun, L., Chen, H., Li, B., Chen, Q., Wu, Y., Guo, Y., Shi, Y., Liao, M., Shi, X., Cai, R., Deng, Y., Sun, Q., Yang, R., Zhang, Q., Cui, Y., Hu, Q. Rapid multilateral and integrated public health response to a cross-city outbreak of *Salmonella enteritidis* infections combining analytical, molecular and genomic epidemiological analysis. Frontier in Microbiology. 2022. doi: 10.3389/fmicb.2022.77248
14. Xu, Q., Zhou, Z., Y., He, Q., Sun, Q., Zeng, W. Effect of tea polyphenols on

- the quality of Chinese steamed bun and the *Cedrus deodara* extract on the physiochemical and sensory properties of salted meat and its action mechanism. *Journal of Food Science*. 2021. DOI: 10.1111/jfpp.15396.
15. Jiang, Z., Lu, Y., Liu, Z., Wu, W., Xu, X., Yu, Z., Chen, L., Dinnyes, A., Sun, Q. Drug resistance prediction and resistance genes identification in *Mycobacterium tuberculosis* based on a hierarchical attentive neural network utilizing genome-wide variants. 2022. *Briefings In Bioinformatics*. <https://doi.org/10.1093/bib/bbac041>
 16. Tian, L., Liu, R., Zhou, Z., Xu, X., Feng, S., Kushmaro, A., Marks, R.S., Wang, D., Sun, Q. Probiotic characteristics of *Lactiplantibacillus plantarum* N-1 and its cholesterol-lowering effect in hypercholesterolemic rats. 2022. *Probiotics and Antimicrobial Proteins*. 2022, <https://doi.org/10.1007/s12602-021-09886-1>
 17. Zhou, Z., Xu, Q., Chen, L., Chen, N., Gao, H., Sun, Q., Zeng, W. Interaction and action mechanism of quercetin and myofibrillar protein and its effects on the quality of cured meat. 2021. *Journal of Food Processing and Preservation*. DOI: 10.1111/jfpp.16020.
 18. Fu, Y., Yu, W., Lin, W., Yu, Y., Duan, C., Cai, H., Sun, Q. A novel non-destructive detection of moldy/wormy dried longan fruits based on low field nuclear magnetic resonance using machine learning algorithms. *Food Measurement and Characterization*. 2021. <https://doi.org/10.1007/s11694-021-01190-4>
 19. Fu, Y., Yu, Y., Tan, H., Wang, B., Peng, W., Sun, Q. Metabolomics reveals dopa melanin involved in the enzymatic browning of the yellow cultivars of East Asian golden needle mushroom (*Flammulina filiformis*). *Food Chemistry*. 2022. 370(2022) 131295. <https://doi.org/10.1016/j.foodchem.2021.131295>
 20. Wei, Z., Cui, Y., Tian, L., Liu, Y., Yu, Y., Jin, X., Li, H.m, Wang, K., Sun, Q. Probiotics *Lactobacillus plantarum* N-1 prevents ethylene glycol-induced kidney stones by regulating gut microbiota and enhancing intestinal barrier function. 2021. *FASEB Journal*. DOI: 10.1096/fj.202100887RR. (Q1, IF 5.19)
 21. Liu, Y., Jin, X., Tian, L., Jian, Z, Ma, Y., Cheng, L., Cui, Y., Li, H., Sun, Q., Wang, K. *Lactiplantibacillus plantarum* reduced renal calcium oxalate stones by regulating arginine metabolism in gut microbiota. *Frontiers in Microbiology*. doi: 10.3389/fmicb.2021.743097 (Q1, IF 5.64)
 22. Guo., X., Qiao, M., Yang, Y., Luo, K., Liu, Z., Liu, J., Kuznetsova N., Liu, Z., Sun, Q. *Bacillus amyloliquefaciens* M73 reduces postharvest decay and promotes anthocyanin accumulation in Tarocco blood orange (*Citrus sinensis* (L.) Osbeck) during cold storage. 2021. *Postharvest Biology and Technology*, <https://doi.org/10.1016/j.postharvbio.2021.111698> (Q1, IF 5.54)
 23. Chen, L., Yi, Z., Fang, Y., Jin, Y., He, K., Xiao, Y., Zhao, D., Luo, H., He, H., Sun, Q., Zhao, H. Biochemical and synergistic properties of a novel alpha-amylase from Chinese Nong-flavor Daqu. 2021. *Microbial Cell Factories*, 20:80. <https://doi.org/10.1016/j.enzmctec.2020.109672>
 24. Liu, Y., Li, Z., Wang, S., Zhang, C., Han, L., Sun, Q., Han, X. *Aspergillus fumigatus* induces the release of IL- 8 and MCP- 1 by activating nuclear transcription through Dectin- 1 and CR3 receptors in alveolar epithelial cells.

- Current Microbiology. 2021. <https://doi.org/10.1007/s00284-021-02534-5>
25. Liu, J., Zhang, H., Cao, Y., Sun, Q. First Report of postharvest fruit rot disease of hardy kiwifruit caused by *Diaporthe eres* in China. Plant Disease. 2021. <https://doi.org/10.1094/pPDIS-08-20-1705-PDN> (Q1, IF 4.44)
 26. Xu, Q., Zhou, Z., Y., He, Q., Sun, Q., Zeng, W. Effect of *Cedrus deodara* extract on the physiochemical and sensory properties of salted meat and its action mechanism. Journal of Food Science. 2021. DOI: 10.1111/jfpp.15396.
 27. Xu, Q., Zhou, Z., Jing, Z., He, Q., Sun, Q., Zeng, W. Pine needle extract from *Cedrus deodara*: Potential applications on hazardous chemicals and quality of smoked bacon and its mechanism. Food Control. 2021. <https://doi.org/10.1016/j.foodcont.2021.108368>
 28. Chen, L., Li, Z, He, Q., Gao, M., Sun, Q., Zeng, W. Effect of lotus (*Nelumbo nucifera*) petals extract on the quality of yogurt and its action mechanism. Journal of Food Processing and Preservation. 2021. DOI: 10.1111/jfpp.15396.
 29. Chen, L., Chen, N., He, Q., Sun, Q., Zeng, W. Preparation of a functional yogurt with *Ligustrum robustum* (Rxob.) Blume and its action mechanism. Journal of Food Science 2021, 86(3): 1114-1123.
 30. Wang, X., Li, M., Zhang, X., Li, Y., He, G., Dinnyes, A., Sun, Q., Xu, W. CYP11A1 upregulation leads to trophoblast oxidative stress and fetal neurodevelopmental toxicity that can be rescued by vitamin D. Frontiers in Molecular Bioscience. 2021. doi: 10.3389/fmolb.2020.608447.
 31. Deng, Y., Jiang, M, Kwan, P.S.L, Yang, C., Chen, Q., Lin, Y. Qiu, Y, Li, Y., Shi, X., Li, L, Cui, Y., Sun, Q., Hu, Q. Integrated genomic surveillance infrastructure for outbreak detection of Salmonella enteric serotype Enteritidis. Foodborne Pathogen and Disease. 2021. DOI: 10.1089/fpd.2020.2856
 32. Wang, Y., Li, J, Zhou, Z., Zhou, R., Sun, Q., Wu, P. Halo-fluorescein for photodynamic bacteria inactivation in extremely acidic conditions. Nature Communication. 2021. <https://doi.org/10.1038/s41467-020-20869-8>
 33. Liang, P., Zheng, C., Xu, X., Zhao, Z-Z, Zhao, C., Li, C., Couvin, D., Reynaud, Y., Zozio, T., Li, S., Luo, D., Rastog, N., Sun, Q. Bayesian population structure and phylogenetic analyses reveal the local adaptive evolution of two distinct clades of *Mycobacterium tuberculosis* in Chongqing. Infectious Diseases of Poverty. 2020. <https://doi.org/10.1186/s40249-020-00674-7>
 34. Qu, R., Sun, Q., Wei, Y., Deng, P., Hou, X. Quantification of ¹³C, ¹⁵N labelled compounds with ¹³C, ¹⁵N edited ¹H Nuclear Magnetic Resonance spectroscopy. Talanta, 2020. <https://doi.org/10.1016/j.talanta.2020.121839>
 35. Liu, Y., Jin, X., Hong, H.G., Xiang, L., Jiang, Q., Ma, Y., Chen, Z., Cheng, L., Jian, Z., Wei, Z., Ai, J., Qi, S., Sun, Q., Li, H., Li, Y., and Wang, K. The relationship between gut microbiota and short chain fatty acids in the renal calcium oxalate stones disease. 2020. FASEB Journal. DOI: 10.2139/ssrn.3566113
 36. Chen, L., Yi, Z., Fang, Y., Jin, Y., Xiao, Y., Zhao, D., Luo, H., He, H., Sun, Q., Zhao, H. Uncovering key residues responsible for the thermostability of a thermophilic 1,3(4)-β-D-glucanase from Nong flavor Daqu by rational design. Enzyme and Microbial Technology. 2020,

- <https://doi.org/10.1016/j.enzmictec.2020.109672>
37. Yu, Y., Shi, J., Xie, B., He, Y., Wang, D., Shi, H., Ke, Y., Sun, Q. Detoxification of aflatoxin B1 in corn by chlorine dioxide gas. *Food Chemistry*. 2020. 328:127121
 38. Zhang, G., Lu, M., Liu, R., Tian, Y., Vu, V-H., Li, Y. Liu, B., Kuhmaro, A. , Li, Y., Sun, Q. Inhibition of *Streptococcus mutans* biofilm formation and virulence by *Lactobacillus plantarum* K41 isolated from traditional Sichuan pickles. *Frontiers in Microbiology*. 2020. 11(4); doi: 10.3389/fmicb.2020.00774.
 39. Wang, Y., Yu, Y., Huang, M., Gao, P., Chen, H., Liu, M., Chen, Q., Yang, Z., Sun, Q. Transcriptomic and proteomic profiles of II YOU 838 (*Oryza sativa*) provide insights into heat stress tolerance in hybrid rice. *PeerJ*. 2020, 8:e8306 DOI 10.7717/peerj.8306
 40. Shi, H., Yu, Y., Gu, R., Feng, C., Yu, X., Yuan, J., Sun, Q., Ke, Y. *Male sterile 305* mutation leads the misregulation of anther cuticle formation by disrupting lipid metabolism in maize. *International Journal of Molecular Sciences*. 2020. 21, 2500; doi:10.3390/ijms21072500
 41. Gao, H., He, Z., Sun, Q., He, Q., Zeng, W. A functional polysaccharide film forming by pectin, chitosan, and tea polyphenols. *Carbohydrate Polymers*, 2019, 215: 1-7.
 42. Bourguignon, A., Kobolak, J., Janstova, Z., Tun, Z, Feher, A., Sun, Q., Xu, W., Dinnyes, A. Pluripotent stem cell-based technology platform for improved understanding of developmental toxicology and DOHaD. *The Thai Journal of Veterinary Medicine*, 2019, 49 (S2): 96-98.
 43. Gao, M., Xu, Q., He, Q., Sun, Q., Zeng, W. A theoretical and experimental study: the influence of different standards on the determination of total phenol content in the Folin–Ciocalteu assay. *Journal of Food Measurement and Characterization*. 2019, 13:1349-1356.
 44. Zhao, C., Liu, J., Deng, Y., Tian, Y., Zhang, G., Liao, J., Yang, J., Yang, Y., Liu, N., Sun, Q. Microorganism-graphene oxide composites via an immobilization approach for uranium(VI) adsorption from aqueous solutions. *Journal of Cleaner Production*. 2019, 236: 117624. (IF 6.395)
 45. Zhang, G., Li, X., Xu, X., Tang, K., Vu, V-H., Gao, P., Chen, H., Sun, Q. Antimicrobial activity of irradiation-degraded chitosan fragments. *Food Bioscience*. 2019, 29: 94-101
 46. Wen, W., Liu, R., Guan, J., Zhou, Z., Luo, X., Summan, S.P., Sun, Q. Skeletal muscle proteome analysis provides insights on high altitude adaptation of yaks. *Molecular Biology Reports*. 2019, <https://doi.org/10.1007/s11033-019-04732-8>.
 47. Vu, V-H, Li, X., Wang, M., Liu, R., Zhang, G., Liu, W., Xia, B., Sun, Q. Effects of salt-sugar additives on silage quality of elephant grass (*Pennisetum purpureum*) produced in northern Vietnam. *Asian-Australasian Journal of Animal Sciences*. 2019, 32(7): 996-1006
 48. Zhou, G., Shi, H., Yu, X., Yuan, J., Guo, Q., Zhao, C., Sun, Q., Ke, Y. Genetic characterisation and cytological identification of a male sterile mutant in maize (*Zea mays* L.). *Cereal Research Communications*, 2018. 46(2): 344-354
 49. Zhao, C., Liu, J., Yuan, G., Liu, J., Zhang, H., Yang, J., Yang, Y., Liu, N., Sun,

- Q., Liao, J. A novel activated sludge-graphene oxide composites for the removal of uranium(VI) from aqueous solutions. *Journal of Molecular Liquids*, 2018, 271:786-794 (Co-corresponding author)
50. Yu, Y., Shi, J., Li, X., Liu, J. Geng, Q., Shi, H., Ke, Y., Sun, Q. Transcriptome analysis reveals the molecular mechanisms of the defense response to gray leaf spot disease in maize. *BMC Genomics*. 2018, 19: 742-759
 51. Su, M., Nie, Y., Shao, R., Duan, S., Jiang, Y., Wang, M., Xing, Z., Sun, Q., Liu, X., Xu, W. Diversified gut microbiota in newborns of mothers with gestational diabetes mellitus. *PLoS ONE*. 2018. doi.org/10.1371/journal.pone.0205695
 52. Li, S., Zeng, W., Li, R., Hoffman, L.C., He, Z., Sun, Q., Li, H. Rabbit meat production and processing in China. *Meat Science*. 2018. doi:10.1016/j.meatsci.2018.06.037. (Co-corresponding author)
 53. Yu, H., Du, H. Wu, L., Li, R., Sun, Q., Hou, X. Trace arsenic speciation analysis of bones by high performance liquid chromatography-inductively coupled plasma mass spectrometry. *Microchemical Journal*. 2018. 141:176-180
 54. Sun, H., Zeng, J., Li, S., Liang, P., Zheng, C., Liu, Y., Luo, T., Rastogi, N., Sun, Q. Interaction between *rpsL* and *gyrA* mutations affects the fitness and dual-resistance of *Mycobacterium tuberculosis* clinical isolates against streptomycin and fluoroquinolone. *Infection and Drug Resistance*. 2018, 11:431-440.
 55. Li, X., Zhao, C., Zheng, C., Vu, V-H., Liu, J., Wang, X., Sun, Q. Characteristics of microbial community and aroma compounds in traditional fermentation of Pixian broad bean in comparison of industrial fermentation. *International Journal of Food Properties*. 2017. 20(S3): S2520-S2531
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 57. Sun, H., Zeng, J., Li, S., Liang, P., Zheng, C., Liu, Y., Luo, T., Rastogi, N., Sun, Q. Interaction between *rpsL* and *gyrA* mutations affects the fitness and dual-resistance of *Mycobacterium tuberculosis* clinical isolates against streptomycin and fluoroquinolone. *Infection and Drug Resistance*. 2018, 11: 431-440
 58. Luo, M., Liu, Y., Wu, P., Luo, D., Sun, Q., Zheng, H., Hu, R, Pandol, S.J., Li, F., Han, Y., Zeng, Y. Alternation of gut microbiota in patients with pulmonary tuberculosis. *Frontiers in Physiology*. 2017. DOI: 10.3389/fphys.2017.00822
 59. Li, W. Li, Y., Liu, Y., Shi, X., Jiang, M., Lin, Y., Qiu, Y., Zhang, Q., Chen, Q., Sun, Q. Hu, Q., Clonal expansion of biofilm-forming and multidrug resistant *Salmonella Typhimurium* ST34 in the southern coastal region of China. *Frontiers in Microbiology*. 2017, 10.3389/fmicb.2017.02090. (Co-corresponding author)
 60. Han, Y., Zhu, A., Chen, J., Wu, P., Luo, M., Zheng, H., Sun, Q., Xiao, Z., Zeng, Y., Duan, Z., Zheng, S., Bei, L., Zhang, X., Ju, Z., Hu, R., Pandol, S.J. Cationic polystyrene resolves nonalcoholic steatohepatitis (nash), obesity, and metabolic disorders in an animal model by promoting eubiosis of gut microbiota and decreasing endotoxemia. *Gastroenterology*. 2017, Accepted.
 61. Ma, Q., Fu, Y., Sun, H., Huang, Y., Li, L., Yu, Q., Dinnyes, A., Sun, Q. Antimicrobial resistances of *Lactobacillus* spp. from fermented foods and

- human gut. *LWT - Food Science and Technology*. 2017, 10.1016/j.lwt.2017.07.059
62. Nie, Y., Zhou, Z., Guan, J., Xia, B., Luo, X., Yang, Y., Fu, Y., Sun, Q. Dynamic changes of yak (*Bos grunniens*) gut microbiota during growth revealed by PCR-DGGE and metagenomics. *Asian-Australasian Journal of Animal Sciences*. 2017, 2017, 30: 957-966.
 63. Zeng, W., Sun, Q., Zhang, W., Liao, X., Shi, B. Antioxidant activity *in vivo* and biological safety evaluation of a novel antioxidant peptide from bovine hair hydrolysates. *Process Biochemistry*, 2017, 56: 193-198.
 64. Zhou, R., Li, Y., Tian, Y., Sun, Q., Deng, P., Wu, L., Hou, X. 2017. Simple fluorescence sensing of extreme acidity based on inner filter effect of ascorbic acid to fluorescent Au Nanoclusters. *Nanoscale*, 2017, 9(29):10167-10172
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 66. Zhu, A., Chen, J., Wu, P., Luo, M., Zeng, Y., Zheng, H., Zhang, L., Cheng, Z., Sun, Q., Li, W., Duan Y., Su, D. Xiao, Z., Duan, Z., Zheng, S., Bei, L, Zhang, X., Ju, Z., Hu, R., Pandol, S.J., Han, Y. Cationic polystyrene resolves nonalcoholic steatohepatitis, obesity, and metabolic disorders by promoting eubiosis of gut microbiota and decreasing endotoxemia. *Diabetes*. 2017, 66:
 67. Yang, Y., Deng, Y., Jin, Y., Lu, Y., Xia, B., Sun, Q. Dynamics of microbial community during the extremely long-term fermentation process of a traditional soy sauce. *Journal of The Science of Food and Agriculture*. 2017, DOI 10.1002/jsfa.8169
 68. Reynaud, Y., Zheng, C., Wu, G., Sun, Q., Rastog, N. Bayesian population structure analysis reveals presence of phylogeographically specific sublineages within previously ill-defined T group of *Mycobacterium tuberculosis*. *PLOS One*. 2017, DOI:10.1371/journal.pone.0171584
 69. Liu, P., Chen, Y., Wang, D., Tang, Y., Tang, H., Song, H., Sun, Q., Zhang, Y., Liu, Z. Genetic selection of peptide aptamers that interact and inhibit both Small protein B and alternative ribosome-rescue factor A of *Aeromonas veronii* C4. *Frontiers in Microbiology*. 2016,7:1228 doi: 10.3389/fmicb.2016.01228.
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 71. Fu, Y., Li, X., Li, Q., Wu, H., Xiong, C., Geng, Q., Sun, H., Sun, Q. Soil microbial communities of three major Chinese truffles in southwest China. *Canadian Journal of Microbiology*. 2016, 62: 1-10
 72. Su, D., Nie, Y., Zhu, A, Chen, Z., Wu, P., Li, W., Zhang, L, Luo, M., Sun, Q., Cai, L., Lai, Y., Xiao, Z., Duan, Z., Zheng, S., Wu, G., Hu, R., Tsukamoto, H., Lugea, A., Liu, Z., Pandol, S., Han, Y. Vitamin D signaling through induction

- of paneth cell defensins maintains gut microbiota and improves metabolic disorders and hepatic steatosis in animal models. *Frontiers in Physiology*, 2016, doi: 10.3389/fphys.2016.00498.
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Proceeding and Abstract

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51. Chan, W.K.M., Joo, S-T., Faustman, C., Sun, Q., and Vieth, R. Effect of *Pseudomonas fluorescens* on beef discoloration and oxymyoglobin oxidation *in vitro*. IFT Annual Meeting & IFT Food Expo®. Orlando, FL., June, 1997.
52. Sun, Q., and Faustman, C. Measurement of deteriorative changes in intermediate moisture meat during storage. The 4th Conference for Worldwide Chinese Young Chemists. Chengdu, China. 2004.

Theses and Dissertations:

- Sun, Q. 2007. Yak myoglobin cDNA sequence analysis and its oxidation in skeletal and cardiac muscles. Ph.D. Thesis. Sichuan University. Chengdu, Sichuan, P.R.China.
- Sun, Q. 1999. Characteristics of TBA-Reactive Substances and the Effect of Water Activity on Lipid Oxidation and Protein Solubility in Freeze-dried Beef During Storage. M.S. Thesis. University of Connecticut, Storrs, Connecticut,

the U.S.A.

- Sun, Q. 1989. Screening and cultivation of actidione-producing strains: a rat repellent used on prairie. B.S. Thesis. Sichuan University. Chengdu, Sichuan, P.R.China.

GRANTS RECEIVED

1. "Study on microbial corrosion control of ivory excavated from Sanxingdui Site", Sichuan Key Technologies R&D Program. ¥100,000. 2021-2023.
2. "Digital technologies as an enabler for a continuous transformation of food safety system", 2020-2023, Joint coordinator for SCU. Horizon 2020, National Key Technologies R&D Programme. 2020-2023. Co-PI for SCU.
3. "Genetic modification of *Methylotrichomyces Aeromonas* and the optimization of its fermentation", Key Technology R&D Program of Sichuan Province. ¥800,000. 2017-2019.
4. "Development of novel stem-cell based mycotoxin assays", Hungarian – Chinese Intergovernmental S&T Cooperation Programme. 2017-2018.
5. "Microbial fungicidal against major fungal disease in crops", International Program of China. ¥2200,000. 2015-2017.
6. "Control of aflatoxin in major crops", Key Technology R&D Program of Sichuan Province. ¥300,000. 2015-2017.
7. "Key technology and demonstration for biodiversity conservation in Ruergai wetland", Key Technology R&D Program of Sichuan Province. ¥500,000. 2011-2015.
8. "Development of Microbial fungicides in crops", International Program of China. ¥2500,000. 2011-2014.
9. "Food monitoring parameter in nuclear transfer cloned and transgenic animals", Hungarian – Chinese Intergovernmental S&T Cooperation Programme. 2009-2010.
10. "Comprehensive preservation technology for processed chicken products", National Key Technology R&D Program. ¥200,000. 2007-2010. Co-PI with Dr. Xin Luo (PI).
11. "Key technology and demonstration for biodiversity conservation in Ruergai wetland", National Key Technology R&D Program. ¥1,860,000. 2007-2010. Co-PI with Dr. Shiting Zhang (PI).
12. "Molecular genetic mapping of quantitative trait loci for heat-resistance in rice (*Oryza sativa*)", National Special Foundation for State Major Basic Research Program of China. ¥300,000. 2005-2007.
13. "Study of resource microbiology and the application of microorganisms with pesticide activity", National Key Technologies R&D Programme. ¥1,000,000. 2003-2005. Co-PI with Prof. Zhirong Yang (PI).

14. "Fast early diagnosis of tuberculosis in Sichuan and the development of chip system for drug-resistance detection", Sichuan Provincial Public Welfare Project. ¥100,000. 2007-2009.
15. "Development of bioalgaeicide of high efficiency", Sichuan Key Technologies R&D Program. ¥150,000. 2005-2006.
16. "Key technology and equipments in the industrial processing of novel microbiological pesticide", Sichuan Key Technologies R&D Program. ¥200,000. 2004-2005.
17. "Controllable synthesis of nanomaterial and its application as gene vector", Sichuan Key Technologies R&D Program. ¥100,000. 2004-2005.
18. "Database of food nutrients and its application in food labeling", Sichuan Key Technologies R&D Program. ¥60,000. 2004-2005.
19. "Oxidation of *Prinsepia utilis Royle* oil and its pharmacody on lipid metabolism in rats", Applied Basic Research Programs of Science and Technology Bureau of Sichuan Province. ¥30,000. 2003-2004.
20. "Lipid oxidation in Chinese traditional meats", Startup Foundation for Talents of Sichuan University. ¥70,000. 2001-2004.
21. "Modern production technology of traditional soy bean paste", Chengdu Liwei International Trade Co., Ltd. ¥100,000. 2008-2009.
22. "Bilingual teaching reform on Microbiology", Higher Education Talents Training and Teaching Reform Program of Education Bureau of Sichuan Province, ¥3,000, 2005-2007.
23. "Microbiology", Quality Course Construction Program of Education Bureau of Sichuan Province, ¥70,000, 2007-2009.
24. "Translation of Tufts OpenCourseWare *MBI200 Microbiology*", CORE Lead University Program, ¥6,000, 2006.
25. "Translation of MIT OpenCourseWare *7.13 Experimental Microbial Genetics*", CORE Lead University Program, ¥6,000, 2005.

SERVICE ACTIVITIES

University Service Activities

- Chair, Sichuan Society of Microbiology, 2016-
- Head, Department of Biotechnology, College of Life Sciences, Sichuan University, 2012 –2020
- Director, Sichuan Key Laboratory of Microbiology and Biotechnology, 2011-
- Secretary, International Affairs of the College of Life Sciences, 2001 – present.
- Director, Information Center of College of Life Science, 2001 – 2009.
- Judge, Sichuan University Talent Search Competition. 2005 – 2008

- Judge, Sichuan University Bilingual Teaching Competition. 2006
- Member, Teaching Steering Committee of College of Life Sciences, 2006 – present.

Editorial Responsibilities

- Member of Editorial Board, Food Science and Human Wellness. 2012 - .
- Member of Editorial Board, Meat Sci & Tech. 2012 - .
- Reviewer, For multiple international and domestic journals, including Frontiers in Microbiology, Food Chemistry, Food Control, Food Property, Biology Section, Journal of Sichuan University (Natural Science Edition), Environment and Applied Microbiology. 2007 – present.

Professional Activities and Organizations

- Executive Chair, 2021-2022 Asia-Pacific Congress of Meat Science and Technology and the 19th Conference of Animal Products Processing of China. Chengdu, China. 2022.
- Executive Chair, Annual Conference of Microbiology of China, Chengdu, China. 2020.
- Co-Chair, Bio-X Conference and 2nd China-Israel Biotechnology Forum, Beer Shava, Israel. 2019.
- Executive Chair, China-Israel International Forum on Biotechnology, Chengdu, China. 2018.
- Chair, Annual Conference of Microbiology of Sichuan, Chengdu, China. 2016-2022.
- Executive Chair, Session Chairman of Posters, 53rd International Congress of Meat Science and Technology (ICoMST), Beijing, China. 2007.
- Executive Chair, Session Chairman of Posters, 53rd International Congress of Meat Science and Technology (ICoMST), Beijing, China. 2007.
- Executive Chair, Session Chairman of Posters, 53rd International Congress of Meat Science and Technology (ICoMST), Beijing, China. 2007.
- Scientific Secretary, Session Chairman of Posters, 53rd International Congress of Meat Science and Technology (ICoMST), Beijing, China. 2007.
- Session Chairman of Food Quality, 2nd Food Science International Symposium. Beijing, China. 2002.

COMPUTER SKILLS

- Proficient in C++, Java, Visual Basic, Visual Foxpro, QBasic, Access, SQL
- Well acquainted with MS Word, Excel (Microsoft Office User Specialist (MOUS) certification), PowerPoint, and SigmaPlot.
- Ability of web page design using MS FrontPage and Dreamwaver.
- Working knowledge on SAS.

LANGUAGE SKILLS

- Chinese – Excellent written and oral ability
- English – Proficiency in speaking, reading and writing