



华南农业大学
South China Agricultural University

研究生院

更新日期：2020年6月15日

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个人主页			

个人简介

U.S. Department of Agriculture与西北农林科技大学联合培养博士，硕士研究生导师。

工作经历

2013年-2015年，美国农业部农业研究局，访问学者

2015年-至今，华南农业大学动物科学学院

▣ 研究领域

(1) 环境应激与乳品质调控； (2) 肉品质调控机制及营养干预； (3) 饲料生物技术

▣ 科研项目

1. 国家自然科学基金青年项目，CircRNA作为ceRNA参与miR-423-5p调控猪骨骼肌纤维发育的机制研究，主持
2. 广东省自然科学基金博士科研启动项目，猪高瘦肉率相关miRNAs鉴定及其调控肌细胞增殖与分化研究，主持
3. 广东省普通高校省级特色创新类项目（自然科学类），奶水牛泌乳相关miRNAs鉴定及其靶基因验证研究，主持
4. 亚热带农业生物资源保护与利用国家重点实验室开放课题基金项目，主持
5. 国家重点研发计划，环境因素对家畜泌乳健康的影响机制，项目骨干
6. 国家重点研发计划，优质肉牛高效安全养殖技术应用与示范，项目骨干

▣ 发表论文

1. Zhu, Y. L., Chen, T., Xiong, J. L., Wu, D., Xi, Q. Y., Luo, J. Y., Jiajie Sun & Zhang, Y. L. (2018). miR-146b Inhibits Glucose Consumption by Targeting IRS1 Gene in Porcine Primary Adipocytes. *International journal of molecular sciences*, 19(3), 783.
2. Zhang, H., Qi, Q., Chen, T., Luo, J., Xi, Q., Jiang, Q., Jiajie Sun & Zhang, Y. (2018). Age-Related Changes in MicroRNA in the Rat Pituitary and Potential Role in GH Regulation. *International journal of molecular sciences*, 19(7).
3. Jiajie Sun, Meiyong Xie, Zhipeng Huang, Hongyi Li, Ting chen, Qianyun Xi, Tongshan Wu, Yongliang Zhang. Integrated analysis of non-coding RNA and mRNA expression profiles of 2 pig breeds differing in muscle traits. *Journal of animal science*, 2017, 95(3), 1092-1103.
4. Jiajie Sun, Bin Zeng, Zujing Chen, Shijuan Yan, Wenjie Huang, Baoli Sun, Qian He, Xiaoyan Chen, Ting Chen, Qingyan Jiang, Qianyun Xi, Yongliang Zhang. Characterization of faecal microbial communities of dairy cows fed diets containing ensiled *Moringa oleifera* fodder. *Scientific reports*, 2017, 7, 41403.
5. Jiajie Sun, Kshama Aswath, Steven G. Schroeder, John D. Lippolis, Timothy A. Reinhardt, Tad S. Sonstegard. MicroRNA expression profiles of bovine milk exosomes in response to *Staphylococcus aureus* infection. *BMC genomics*, 2015, 16(1),

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6. Jiajie Sun, Tad S Sonstegard, Congjun Li, Yongzheng Huang, Zhuanjian Li, Xianyong Lan, Chunlei Zhang, Chuzhao Lei, Xin Zhao, Hong Chen. Altered microRNA expression in bovine skeletal muscle with age. *Animal genetics*, 2015, 46(3): 227-238.
7. Jiajie Sun, Yang Zhou, Hanfang Cai, Xianyong Lan, Chuzhao Lei, Xin Zhao, Chunlei Zhang, and Hong Chen. Discovery of novel and differentially expressed microRNAs between fetal and adult backfat in cattle. *PloS one*, 2014, 9(2): e90244.
8. Jiajie Sun, Bowen Zhang, Xianyong Lan, Chunlei Zhang, Chuzhao Lei, and Hong Chen. Comparative Transcriptome Analysis Reveals Significant Differences in MicroRNA Expression and Their Target Genes between Adipose and Muscular Tissues in Cattle. *PloS one*, 2014, 9(7): e102142.
9. Jiajie Sun, Liming Shan, Chunlei Zhang, and Hong Chen. Haplotype combination of the bovine PCSK1 gene sequence variants and association with growth traits in Jiaxian cattle. *Journal of genetics*, 2014, 93(3): e123-129.
10. Jiajie Sun, Mijie Li, Zhuanjian Li, Jing Xue, Xianyong Lan, Chunlei Zhang, Chuzhao Lei, and Hong Chen. Identification and profiling of conserved and novel microRNAs from Chinese Qinchuan bovine longissimus thoracis. *BMC genomics*, 2013, 14(1): 42.
11. Jiajie Sun, Jinlong Zhu, Jing Xue, Chunlei Zhang, Xianyong Lan, Chuzhao Lei, and Hong Chen. Haplotype combinations of AdPLA gene polymorphisms associate with growth traits in Chinese cattle. *Molecular biology reports*, 2012, 39(6): 7069-7076.
12. Jiajie Sun, Jing Xue, Chunlei Zhang, Xianyong Lan, Chuzhao Lei, and Hong Chen. Haplotype combination of the caprine PC1 gene sequence variants and association with growth traits in Chinese Haimen breed. *J Genet*, 2012, 91(1): E54-E59.
13. Jiajie Sun, Yuan Gao, Dong Liu, Wei Ma, Jing Xue, Chunlei Zhang, Xianyong Lan, Chuzhao Lei, and Hong Chen. Haplotype combination of the bovine INSIG1 gene sequence variants and association with growth traits in Nanyang cattle. *Genome*, 2012, 55(6): 429-436.
14. Jiajie Sun, Chunlei Zhang, Xianyong Lan, Chuzhao Lei, and Hong Chen. Exploring polymorphisms and associations of the bovine MOGAT3 gene with growth traits. *Genome*, 2011, 55(1): 56-62.
15. Jiajie Sun, Qijiang Jin, Chunlei Zhang, Xingtang Fang, Chuanwen Gu, Chuzhao Lei, Juqiang Wang, and Hong Chen.

- Polymorphisms in the bovine ghrelin precursor (GHRL) and Syndecan-1 (SDC1) genes that are associated with growth traits in cattle. *Molecular biology reports*, 2011, 38(5): 3153-3160.
16. Chen Zhongqi, Jiajie Sun, Zhuanjian Li, Xianyong Lan, Chunlei Zhang, Yujiao Qu, Yanli Liu, Xingtang Fang, Chuzhao Lei, and Hong Chen. Novel SNPs in the caprine stearoyl-CoA desaturase (SCD) and decorin (DCN) genes that are associated with growth traits in Chinese goat breeds. *Molecular biology reports*, 2011, 38(5): 3121-3127.
17. Jiajie Sun, Zhang ChunLei, Fang XingTang, Lei ChuZhao, Lan XianYong, and Chen Hong. The polymorphism of bovine FIT gene and its associations with cattle (*Bos taurus*) growth traits. *Animal Science Papers and Reports*, 2011, 29(2): 99-107.
18. Jiajie Sun, Chunlei Zhang, Hong Chen, Xingtang Fang, Qijiang Jin, Danxia Chen, Xiuying Shi, and Yu Du. Two novel SNPs in coding region of the caprine Fat-inducing transcript gene and their association with growth traits. *Molecular biology reports*, 2010, 37(1): 485-490.
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29. Robert W. Li, Weizhong Li, Jiajie Sun, Peng Yu, Ransom L. Baldwin, Joseph F. Urban. The effect of helminth infection on the microbial composition and structure of the caprine abomasal microbiome. *Scientific reports*, 2016, 6, 20606.
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▣ 教学活动

《动物生物化学》、《饲料生物技术》、《动物营养组学》

▣ 我的团队

张永亮教授，习欠云教授，陈婷博士，罗君谊实验师。