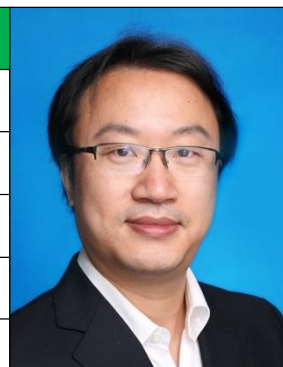


CURRICULUM VITAE

Personal Information			
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Research Interest			
<p>I devoted over 10 years in study of pig breeding and production since the very beginning of my career. From marker-assisted selection (MAS) to whole genome selection, I am a witness participating in this revolutionary change by using new technologies at this area in China. My research area includes inventing new methods for pig breeding and production, discovering SNPs associated with economic traits via GWAS in swine and also developing user interface for pig farms. My interest now is using 3D genome technologies to make better pig breeding and production in my research area and I 100% believe and agree “better lives through livestock” (ILRI slogan).</p>			
Professional Memberships			
<p>Researcher in the Key Lab of Agricultural Animal Genetics, Breeding and Reproduction of Ministry of Education & Key Laboratory of Swine Genetics and Breeding of Ministry of Agriculture, Huazhong Agricultural University (HZAU).</p>			
Other Roles			
<p>Teacher of biostatistics for undergraduate students and epigenetics for graduate students in the College of Animal Science & Technology.</p>			
Education & Working Experience			
<p>✧ 2014.4 - 2015.6, As a visiting scholar at Jackson Laboratory in the United States, research 3D genome technology (ChIA-PET) in pig breeding and production area, hope to find sites related with pig economic traits.</p> <p>✧ 2010.9 – Now Employed as associated professor by HZAU, research pig breeding and production focusing on introducing new technologies into in this area to improve efficiency of pig production.</p> <p>✧ 2008.12 - 2010.9 Employed as formal staff (lecturer) working in HZAU, teaching</p>			



biostatistics course for undergraduates.

- ✧ 2007.10 - 2008.2 As a visiting scientist involved in the international cooperative project of small ruminant diversity, responsible for the southern Chinese goats genotyping, working in International Livestock Research Institute (ILRI), Nairobi, Kenya.
- ✧ 2003.9 - 2008.6 Doctoral trained in the lab of Sino-France Joint Centre of Drug Research and Screening, College of Life Science and Technology, Huazhong University of Science & Technology (HUST). In this period, I finished my thesis named “Evolutionary analysis for the VFTM of class C GPCRs and research on the probe targeting GB1-VFTM”, and got Ph.D. degree (molecular biology and biochemistry) by HUST in July, 2008.
- ✧ 2000.9 - 2003.6 Studied on “Foundation and primary applications of molecular biology databases of swine” in the lab of animal genetics and breeding, college of animal science and technology, Huazhong Agricultural University (HZAU), and awarded M.S. degree (animal breeding and reproduction) by HZAU in July, 2003.
- ✧ 1996.9 - 2000.6 as an undergraduate trained in the college of animal science and technology, HZAU, and awarded B.S. degree (husbandry) by HZAU in July, 2000.

Publications

1. Liu, R., Li, X., Zhang, X., Ren, R., Sun, Y., Tian, X., Zhang, Q., Zhao, S., Yu, M., Cao, J. (*) (2022). Long-range interaction within the chromatin domain determines regulatory patterns in porcine skeletal muscle. *Genomics* 2022, 114, 110482.
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4. Sun, Y., Wang, S., Liu, H., Ren, R., Dong, Q., Xie, J., and Cao, J. (2019). Profiling and characterization of miRNAs associated with intramuscular fat content in Yorkshire pigs. *Anim Biotechnol*, 1-8.
5. Cao, J.H., Li, X.Y., Du, X.Y., and Zhao, S.H. (2017). Microsatellite based genetic diversity and population structure of nine indigenous Chinese domestic goats. *Small Ruminant Research* 148, 80-86.
6. Cao, J., Zhao, S., Wei, W., Li, X., Liu, H., and Dong, Q. (2014). A genome-wide association study of five meat quality traits in Yorkshire pigs. *Frontiers of Agricultural Science and Engineering* 1, 137-143.

7. Ren, R.M., Liu, H., Zhao, S.H. & Cao, J.H. Targeting of miR-432 to myozenin1 to regulate myoblast proliferation and differentiation. *Genet Mol Res* 15(2016).
8. Cao, J., Li, X., Du, X. & Zhao, S. Microsatellite based genetic diversity and population structure of nine indigenous Chinese domestic goats. *Small Ruminant Research* (2016).
9. Alim, M., Fu, Y., Wu, Z., Zhao, S.-h. & Cao, J. Single Nucleotide Polymorphisms of Toll-Like Receptors and Association with *Haemonchus contortus* Infection in Goats. *Pakistan Veterinary Journal* 36, 286-291 (2016).
10. Dong, Q. et al. A genome-wide association study of five meat quality traits in Yorkshire pigs. *Front. Agr. Sci. Eng.* 1, 137-143 (2014).
11. Cao, J., Huang, T., Li, X. & Zhao, S. Interactome mapping reveals important pathways in skeletal muscle development of pigs. *Int J Mol Sci* 15, 21788-802 (2014).
12. Liu G, Liu R, Li Q, Tang X, Yu M, Li X, Cao J*, Zhao S*. Identification of microRNAs in wool follicles during anagen, catagen, and telogen phases in Tibetan sheep. *PLoS One*. 2013; 8(10): e77801.
13. Xie, S.S., Li, X.Y., Liu, T., Cao, J.H., Zhong, Q., Zhao, S.H., 2011. Discovery of porcine microRNAs in multiple tissues by a Solexa deep sequencing approach. *PLoS One* 6, e16235.
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15. Feng, Y., Cao, J.H., Li, X.Y., Zhao, S.H., 2011. Inhibition of miR-214 expression represses proliferation and differentiation of C2C12 myoblasts. *Cell Biochem Funct*, DOI: 10.1002/cbf.1760.
16. Liu, Y., Zhou, K., Li, X.-Y., Zhao, S.-H., Cao, J.-H., 2011. Expression profiling of MYOZ1 gene in porcine tissue and C2C12 cells. *Journal of Animal and Veterinary Advances* 10, 1917-1921.
17. Shen, H., Zhao, S.H., Cao, J.H., Li, X.Y., Fan, B., 2010. Porcine MuRF2 and MuRF3: molecular cloning, expression and association analysis with muscle production traits. *Mol Biol Rep* DOI 10.1007/s11033-010-0659-0.
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19. CAO, J.-H., LIU, J.-F., 2009. Functional Divergence Analysis Reveals the Determinant Sites of the VFTM of Metabotropic Glutamate Receptor Subfamily. *LETTERS IN BIOTECHNOLOGY* 20, 155-160.

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