

Xin Geng

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Work Address

7000 Fannin St
School of biomedical informatics
The University of Texas Health Science Center at Houston
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Education

Doctor of Philosophy 02/2016

School of Fisheries, Aquaculture and Aquatic Sciences
Auburn University, Auburn, AL, USA
Supervisor: Dr. Zhanjiang(John) Liu
Dissertation project: Genome-wide association studies for columnaris resistance and head size in hybrid catfish

Master of Probability and Statistics 11/2015

Department of Mathematics and Statistics
Auburn University, Auburn, AL, USA
Supervisor: Dr. Peng Zeng

Bachelor of Science in Biological Technology 05/2010

College of Marine Life
Ocean University of China, Qingdao, China
Supervisor: Dr. Shuanglin Dong and Dr. Xiangli Tian

Academic Experience

Postdoctoral fellow, School of biomedical informatics, the University of Texas Health Science Center at Houston 07/2016-present

Postdoctoral fellow, Department of Biostatistics, University of Alabama at Birmingham 03/2016-06/2016

Professional Field

Biostatistics; Bioinformatics; Molecular Biology; Quantitative Genetics; Genomics.

Honors and Awards

Swingle Award for outstanding Ph.D. student in School of Fisheries, Dec 2015

Aquaculture and Aquatic Sciences

Novus International Research Award for outstanding Ph.D. student in animal science in College of Agriculture	July 2015
Aquaculture Species Group Student and Postdoctoral Fellowship Bursaries for Plant and Animal Genome XXIII	Jan 2015
Scholarship from the China Scholarship Council (CSC) for studying abroad	2011-2015
Auburn University Graduate School International Graduate Assistantship Award	2011-2015
3rd Short Course on Statistical Genetics and Genomics travel award (UAB)	Aug 2013
3rd Short Course on Statistical Genetics and Genomics bursary award (UAB)	Aug 2013
Outstanding Student Scholarship	2007-2009

Publications

1. **Geng X**, Sha J, Liu S, et al.: GWAS in catfish reveals the presence of functional hubs of related genes within major QTLs for columnaris disease resistance. *BMC genomics* 2015,16(1):196.
2. **Geng X**, Feng J, Liu S, Wang Y, Arias C, Liu Z: Transcriptional regulation of hypoxia inducible factors alpha (HIF- α) and their inhibiting factor (FIH-1) of channel catfish (*Ictalurus punctatus*) under hypoxia. *Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology* 2014, 169:38-50.
3. Liu Z, Liu S, Yao J, ... **Geng X** (21th), et al.: The channel catfish genome sequence and insights into evolution of scale formation in teleosts, *Nature communications* 2016, 7.
4. Liu S, Li Y, Qin Z, **Geng X**, Bao L, Kaltenboeck L, Kucuktas H, Dunham R, Liu Z: High-density interspecific genetic linkage mapping provides insights into genomic incompatibility between channel catfish and blue catfish. *Animal genetics* 2016, 47(1): 81-90.
5. Li Z, Yao J, Xie Y, **Geng X**, Liu Z: role of PI3K gene family in bacteria disease resistance in catfish. *Fish and Shellfish Immunology* 2016, 49:364-373.
6. Jin Y, Zhou T, **Geng X**, et al.: A genome-wide association study (GWAS) of heat stress-associated SNPs in catfish. *Animal genetics* 2016, Accepted.
7. **Geng X**, Liu S, Yao J, et al.: Mapping of genes in the small GTPase pathway within QTLs for head size in catfish suggests conservation of control mechanisms for skull morphometric traits. *Submitted to G3: Genes | Genomes | Genetics*, in review.
8. **Geng X**, Zhi D, Liu Z: Genome-wide association studies of performance traits. (*Book chapter in Bioinformatics in Aquaculture*, in review).
9. **Geng X**, Liu S, Jiang Y, Liu Z.: A genome-wide association study for body conformation in hybrid catfish *Submitted to Aquaculture*.
10. Li Y, **Geng X**, Bao L, et al.: A deletion in the Hermansky-Pudlak syndrome 4 (Hps4) gene is responsible for albinism in channel catfish. *Submitted* (Co-first author).

Professional Presentations

1. **Xin Geng**, Jin Sha, Shikai Liu, et al. GWAS in catfish reveals the presence of functional hubs of related genes within major QTLs for columnaris disease resistance. Jan 10-14, 2015, Plant & Animal Genome XXIII, San Diego, CA, USA. W048/P0243.
2. **Xin Geng**, Shikai Liu, Jun Yao, et al. Mapping of genetic regions for head size in catfish: the involved GTPase pathway is evolutionarily conserved for skull morphometric traits. Jan 9-13, 2016, Plant & Animal Genome XXIV, San Diego, CA, USA. P0477.
3. Tao Zhou, Shikai Liu, **Xin Geng**, et al. Candidate genes for ESC Disease Resistance of Catfish as Revealed by a Genome Wide Association Study. Jan 9-13, 2016, Plant & Animal Genome XXIV, San Diego, CA, USA. P0478.
4. Xiaozhu Wang, Chen Jiang, Shikai Liu, **Xin Geng**, et al. A Genome-wide Association Study for Low-oxygen Tolerance in Catfish using the 250K SNP Array. Jan 9-13, 2016, Plant & Animal Genome XXIV, San Diego, CA, USA. P0479.

Service

Reviewer for PLOS ONE, and BMC genetics.

Selection Committee of the 2014 Kraska Award for Excellence in Teaching (Statistics).