

Jinliang Yang

POSTDOCTORAL SCHOLAR · UNL

Department of Agronomy and Horticulture, University of Nebraska-Lincoln, NE 68588

☎ (+1) 515-509-4552 | ✉ jyang21@unl.edu | 🌐 yangjl.com | 📱 yangjl | 🐦 JinliangYang

Education

Iowa State University

PH.D. IN INTERDEPARTMENTAL GENETICS

Ames, IA, USA

Sep. 2008 - Sep. 2014

China Agricultural University

M.S. IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

Beijing, China

Sep. 2005 - Aug. 2008

China Agricultural University

B.S. IN BIO-ENGINEERING

Beijing, China

Sep. 2001 - Aug. 2005

Professional Experience

Schnable Lab, University of Nebraska, Lincoln

POSTDOCTORAL RESEARCHER

Lincoln, NE, USA

Jan. 2017 - Present

Ross-Ibarra Lab, University of California, Davis

POSTDOCTORAL RESEARCHER

Davis, CA, USA

Oct. 2014 - Dec. 2016

Schnable Lab, Iowa State University

RESEARCH ASSISTANT

Ames, IA, USA

Sep. 2008 - Sep. 2014

Lai Lab, China Agricultural University

RESEARCH ASSISTANT

Beijing, China

Sep. 2005 - Aug. 2008

Teaching

2015 **Guest lecture on RNA-seq analysis** Ecological Genomics (graduate level)

UC Davis

Honors & Awards

2013 **Sui Tong Chan Fung Fund for the Promotion of Study and Research in Genetics** Iowa State University

2012 **W. Young and W.E. Loomis travel award** Iowa State University

2011 **W. Young and W.E. Loomis travel award** Iowa State University

Invited Presentations

Mar. 2017 **ZeaBigData: a community curated data sharing platform** The 59th Annual Maize Genetics Conference St. Louis, MO, US

Feb. 2016 **Evolutionary constraint improves genomic-enabled prediction for heterosis** Bay Area Population Genomics (BAPG) meeting XIII UC Berkeley, CA, US

Oct. 2014 **Using next-generation sequencing for genome-wide association and prediction in plants** Plant Sciences Departmental Seminar UC Davis, CA, US

Mar. 2014 **Big data meets genomics: GWAS and genomic selection of yield related traits in maize** Plant Sciences Departmental Seminar Wuhan, China

Mar. 2014 **Insights into heterosis** The 56th Annual Maize Genetics Conference Beijing, China

- Feb. 2013 **GBS-enabled GWAS: identification and validation of KRN-associated SNPs in maize** Gordon Research Conference on Quantitative Genetics and Genomics Galveston, TX, US
- Feb. 2012 **Identification and validation of maize loci controlling a yield component trait via 2nd generation Bayesian-based GWAS** AB&G Seminar Series Ames, IA, US

Current Funding

- 2017-2018 **Recount RNA-seq reads on AGPv4 genome to facilitate genetic studies for maize community** XSEDE-allocated computational resources, \$1,400 XSEDE by the NSF

Publications

Google Scholar Citation Metrics

MANUSCRIPTS IN PREPARATION

- Yang, Jinliang, Qing Li, John Doebley, Nathan Springer, and Jeffrey Ross-Ibarra. **Population Genetic Modeling of methylation variation in a natural teosinte population.**
- Bilinski, Paul, Patrice Albert, James A Birchler, Jeremy J Berg, Mark Grote, Anne Lorant, Juvenal Quezada, Jinliang Yang, Jeffrey Ross-Ibarra. **Adaptive and parallel clinal reductions in genome size within *Zea mays* taxa.**
- Yang, Jinliang, Yeh CT, Fernando RL, Dekkers JCM, Garrick DJ, Nettleton D, Schnable PS. **Identification and genetic validation of nucleotide variants associated with the kernel row number trait of maize: an empirical comparison of GWAS approaches.**
- Yang, Jinliang, Li Li, Haiying Jiang, Cheng-Ting Yeh, Dan Nettleton, and Patrick Schnable. **Dominant gene action accounts for much of the genetic variance and provides insight into heterosis in maize.**
- Kent, V. Tyler, Arun Durvasula, Siddharth Bhadra-Lobo, Jinliang Yang, Eric J. Fuchs, Griselda Arrieta-Espinoza, Jeffrey Ross-Ibarra **Population genomic assessment of crop-wild gene flow in the endangered wild rice *Oryza glumaepatula*.**

2017

- Hao, Jingjie, Jinliang Yang, Jiangli Dong, Shui-zhang Fei. **Characterization of *BdCBF* genes and Genome-wide Transcriptome Profiling of *BdCBF3*-dependent and -independent Cold Stress Responses in *Brachypodium distachyon*.** Plant Science, accepted.

2016

- Yang, Jinliang, Sofiane Mezouk, Andy Baumgarten, Edward S. Buckler, Katherine E. Guill, Michael D. McMullen, Rita H. Mumm, and Jeffrey Ross-Ibarra. **Incomplete dominance of deleterious alleles contributes substantially to trait variation and heterosis in maize.** bioRxiv (2016): 086132. Submitted to PLOS Genetics, in revision.

2015

- Yang, Jinliang, Haiying Jiang, Cheng-Ting Yeh, Jianming Yu, Jeffrey A. Jeddloh, Dan Nettleton, and Patrick S. Schnable. **Extreme-phenotype genome-wide association study (XP-GWAS): a method for identifying trait-associated variants by sequencing pools of individuals selected from a diversity panel.** The Plant Journal 84, no. 3 (2015): 587-596.
- Sosso, Davide, Dangping Luo, Qin-Bao Li, Joelle Sasse, Jinliang Yang, Ghislaine Gendrot et al. **Seed filling in domesticated maize and rice depends on SWEET-mediated hexose transport.** Nature genetics (2015).
- Leiboff, Samuel, Xianran Li, Heng-Cheng Hu, Natalie Todt, Jinliang Yang, Xiao Li et al. **Genetic control of morphometric diversity in the maize shoot apical meristem.** Nature Communications 6 (2015).

2014 AND BEFORE

- Yang, Jinliang. **Genome-wide association studies to dissect the genetic architecture of yield-related traits in maize and the genetic basis of heterosis.** (2014).
- Liu, Sanzhen, Kai Ying, Cheng-Ting Yeh, Jinliang Yang, Ruth Swanson-Wagner, Wei Wu et al. **Changes in genome content generated via segregation of non-allelic homologs.** The Plant Journal 72, no. 3 (2012): 390-399.
- Koesterke, Lars, Dan Stanzione, Matt Vaughn, Stephen M. Welch, Wacław Kusnierczyk, Jinliang Yang, et al. **An efficient and scalable implementation of SNP-pair interaction testing for genetic association studies.** IEEE International Symposium on Parallel and Distributed Processing Workshops and Phd Forum, pp. 523-530. IEEE, 2011.

Patent Applications

- Schnable PS, OTT A, **Yang J. Intercrossed ex-PVP lines**. 2014. (PENDING)
- Schnable PS, **Yang J. Identification of QTLs and trait-associated SNPs controlling six yield component traits in maize**. 2013. (PENDING)
- Schnable PS, **Yang J**, Swanson-Wagner RA, Nettleton D. **QTL regulating ear productivity traits in maize**. U.S. Patent No. 8779233. Filed July 12, 2011.