# Jinliang Yang

Department of Plant Sciences University of California One Shields Ave. Davis, CA 95616

Phone: (515) 509-4552
Email: jolyang@ucdavis.edu
Homepage: http://yangjl.com

GitHub: https://github.com/yangil

# Professional Experience

2014-present Postdoctoral Researcher with Jeffrey Ross-Ibarra, UC Davis

2008-2014 Research Assistant with Patrick Schnable, Iowa State University

2006-2008 Research Assistant with Jinsheng Lai, China Agricultural University

# **Teaching Experience**

2015 Guest lecture, Ecological Genomics (ECS243, graduate class), UC Davis

### Education

2008-2014 PhD, Interdepartmental Genetics, Iowa State University

2005-2008 MS, Biochemistry and Molecular Biology, China Agricultural University

2001-2005 BS, Bio-engineering, China Agricultural University

#### Selected Awards

- 1. Sui Tong Chan Fung Fund for the Promotion of Study and Research in Genetics (Nov. 2013)
- 2. W. Young and W.E. Loomis travel award (Oct. 2012)
- 3. PhD Scholarship from Chinese Scholarship Council (2008-2012)

#### **Invited Presentations**

- 1. Oct. 2014, Using next-generation sequencing for genome-wide association and prediction in plants, Plant Sciences Departmental Seminar, UC Daivs.
- 2. Mar. 2014, **Big data meets genomics: GWAS and genomic selection of yield related traits in maize**, Huazhong Agricultural University, Wuhan, China.
- 3. Mar. 2014, Insights into heterosis, 56th Annual Maize Genetics Conference, Beijing, China.
- 4. Feb. 2013, **GBS-enabled GWAS: identification and validation of KRN-associated SNPs in maize**, Gordon Research Conference on Quantitative Genetics and Genomics, Galveston, TX.
- 5. 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.

### **Publications**

- 1. 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. (SUBMITTED)
- 2. Yang, Jinliang, Sofiane Mezmouk, Andy Baumgarten, Edward S. Buckler, Katherine E. Guill, Michael D. McMullen, Rita H. Mumm, Jeffrey Ross-Ibarra. Incorporation of evolutionary constraint improves genomic prediction of hybrid phenotypes (IN PREPARATION)
- 3. Yang, Jinliang, Li L, Jiang H, Yeh CT, Fernando RL, Dekkers JCM, Garrick DJ, Nettleton D, and Schnable PS. Dominant gene action accounts for much of the missing heritability in a GWAS and provides insight into heterosis. (IN PREPARATION)
- 4. Leiboff, Samuel, Xianran Li, Heng-Cheng Hu, Natalie Todt, Jinliang Yang, Xiao Li, Xiaoqing Yu et al. Genetic control of morphometric diversity in the maize shoot apical meristem. Nature Communications 6 (2015).
- 5. Yang, Jinliang, Haiying Jiang, Cheng-Ting Yeh, Jianming Yu, Jeffrey A. Jeddeloh, 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.
- 6. Sosso, Davide, Dangping Luo, Qin-Bao Li, Joelle Sasse, Jinliang Yang, Ghislaine Gendrot, Masaharu Suzuki et al. Seed filling in domesticated maize and rice depends on SWEET-mediated hexose transport. Nature genetics (2015).
- 7. Liu, Sanzhen, Kai Ying, Cheng-Ting Yeh, Jinliang Yang, Ruth Swanson-Wagner, Wei Wu, Todd Richmond et al. Changes in genome content generated via segregation of non-allelic homologs. The Plant Journal 72, no. 3 (2012): 390-399.
- 8. Koesterke, Lars, Dan Stanzione, Matt Vaughn, Stephen M. Welch, Waclaw Kusnierczyk, Jinliang Yang, Cheng-Ting Yeh, Dan Nettleton, and Patrick S. Schnable. An efficient and scalable implementation of SNP-pair interaction testing for genetic association studies. In Parallel and Distributed Processing Workshops and Phd Forum (IPDPSW), 2011 IEEE International Symposium on, pp. 523-530. IEEE, 2011.

# Patent Applications

- 1. 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.
- 2. Schnable PS, Yang J. Identification of QTLs and trait-associated SNPs controlling six yield component traits in maize. 2013. (PENDING)
- 3. Schnable PS, OTT A, Yang J. Intercrossed ex-PVP lines. 2014. (PENDING)