

# Haoxuan LIU

## EDUCATION

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| 2008 - 2012<br>B.S., Biology  | Nanjing University | Nanjing, China |
| 2012 – 2017<br>Ph.D., Biology | Nanjing University | Nanjing, China |

## RESEARCH INTEREST

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Broadly interested in topics related to evolutionary genomics and experimental evolution.

## PUBLICATIONS

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1. **Haoxuan Liu**, Yanxiao Jia, Xiaoguang Sun, Dacheng Tian, Laurence Hurst, Sihai Yang. Direct Determination of the Mutation Rate in the Bumblebee Reveals Evidence for Weak Recombination-Associated Mutation and an Approximate Rate Constancy in Insects.  
*Molecular Biology and Evolution*: msw226 (2017)
2. **Haoxuan Liu**, Xiaohui Zhang, Ju Huang, Jianqun Chen, Dacheng Tian, Laurence Hurst, Sihai Yang. Causes and Consequences of Crossing-over Evidenced via a High-Resolution Recombinational Landscape of the Honey Bee.  
*Genome Biology* 16(1) (2015)
3. **Haoxuan Liu**, Zhengqing Xie, Shengjun Tan, Xiaohui Zhang, and Sihai Yang. Relationship between Amino Acid Usage and Amino Acid Evolution in Primates.  
*Gene* 557(2): 182–187 (2015)
4. Lina Zhao, Qijun Zhang, Rongchao Gao, Sihai Yang, **Haoxuan Liu\*** and Xiaohui Zhang\*. High Genetic Abundance of Rpi-blb2/Mi-1.2/Cami Gene Family in Solanaceae.  
*BMC Evolutionary Biology* 15: 215. (2015) (\*co-corresponding author)
5. Sihai Yang, Yang Yuan, Long Wang L, ... **Haoxuan Liu**, ... Laurence Hurst, Dacheng Tian. Great majority of recombination events in Arabidopsis are gene conversion events. *PNAS* 109 :20992-20997(2012)
6. **Haoxuan Liu**, Yuhang Xing, Sihai Yang, and Dacheng Tian. Remarkable Difference of Somatic Mutation Patterns between Oncogenes and Tumor Suppressor Genes.  
*Oncology Reports* 26(6): 1539–1546 (2011)
7. **Haoxuan Liu**, Ju Huang, Xiaoguang Sun, Jing Li, Yingwen Hu, Luyao Yu, Gianni Liti, Dacheng Tian, Laurence D. Hurst, Sihai Yang. Pan-phylum tetrad analysis finds large differences in gene conversion rates but no GC bias. (2017, under review)
8. Xiao Chen, Quanqi Yue, Ziwei Liu, Sihai Yang\* and **Haoxuan Liu\***. Recombination plays importance role in driving the evolution of caste differentiation in bumblebees. (2017, under review) (\*corresponding author)