Programs of *Plant Genomics in China XX*

August 19-22, 2019, Nanchang, Jiangxi

**August 19, 2019**

10:00-22:00 Arrival and Registration

18:00-20:00 Dinner (Buffet)

Scientific Programs

**August 20, 2019**

08:30-09:00 Opening Ceremony

09:00-10:00 Session I: Genome Sequencing and New Technology

09:00-09:30 **Plenary 1 Jim Giovannoni** (US Department of Agriculture) The tomato genome and its role in elucidating fruit biology

09:30-10:00 **Plenary 2 Sanwen Huang** (Agricultural Genome Institute at Shenzhen, CAAS) The Upotato Plan 2019: Genome design of diploid inbred lines

10:00-10:20 Tea Break

10:20-11:40 Major Talk

10:20-10:40 **Xuehui Huan** (Shanghai Normal University) Genome-wide mapping of complex traits in rice

10:40-11:00 **Jisen Zhang** (Fujian Agriculture and Forestry University) Allele-defined genome of the autopolyploid sugarcane *Saccharum spontaneum* L.

11:00-11:20 **Jinsheng Lai** (China Agricultural University) Maize genomics and epigenomics using third generation sequencing technologies

11:20-11:40 **Xingwang Li** (Huazhong Agricultural University) Promoter and heterochromatin associated chromatin architecture orchestrates transcriptional regulation in rice
Student Talk  11:40-11:55
11:40-11:55  Changsheng Wang (Institute of Plant Physiology and Ecology, CAS)
Dissecting a heterotic gene through GradedPool-Seq mapping informs a new rice-improvement strategy

12:00  Lunch Break

14:00-15:50  Session II: Functional Genomics (I)
14:00-14:30  Plenary 3 Lars Østergaard (John Innes Centre, UK) A direct transcription factor-auxin interaction provides a chromatin switch to control gene expression

14:30-15:50  Major Talk
14:30-14:50  Yongrui Wu (Institute of Plant Physiology and Ecology, CAS) Large genomic structural variation at $o_2$ modifier loci underlies successful breeding of Quality Protein Maize
14:50-15:10  Zhukuan Cheng (Institute of Genetics and Developmental Biology, CAS) Transition from mitosis into meiosis
15:10-15:30  Qingmei Guan (Northwest A&F University) Crosstalk of drought resistance and hormone response mediated by apple MYB88/MYB124
15:30-15:50  Zhaosheng Kong (Institute of Microbiology, CAS) Live-cell imaging illuminates cotton fibre growth and the improvement of cotton fibre quality

Student Talk  15:50-16:05
15:50-16:05  Yanlin Shao (Zhejiang University) OsSPL3, an SBP-domain protein, regulates crown root development in rice

16:05-16:25  Tea Break

16:25-17:55  Session III: Genome Diversity
16:25-16:55  Plenary 4 Feng Tian (China Agricultural University) Teosinte ligule allele narrows plant architecture and enhances high-density maize yields
16:55-17:30  Major Talk
16:55-17:15  Wenfeng Qian (Institute of Genetics and Developmental Biology, CAS) The mutation hotspots in Arabidopsis shift as latitude increases
17:15-17:35  Suhua Shi (Sun Yat-Sen University) Convergent adaptation of woody plants at the land-sea interface revealed by genomic sequencing of multiple mangrove species

Student Talk  17:35-17:50
17:35-17:50  Ning Yang (Huazhong Agricultural University) Genome assembly of a tropical maize inbred line provides insights into structural variation and crop improvement

18:00  Dinner (Buffet)

20:00-21:00  PGC Committee Meeting

August 21, 2019
08:30-12:05  Session IV: Proteomics, Metabolomics and Bioinformatics
08:30-09:00  Plenary 5 Ian Small (The University of Western Australia, Australia) RNA processing by pentatricopeptide repeat (PPR) proteins

09:00-10:20  Major Talk
09:00-09:20  Jiming Gong (Institute of Plant Physiology and Ecology, CAS) Ionomic profiling of a rice core collection for cultivating heavy metal- remediation rice
09:20-09:40  Yi Shang (Yunnan Normal University) A data-driven and structure-guided approach to engineer a plant cytochrome P450 enzyme
09:40-10:00  Guodong Wang (Institute of Genetics and Developmental Biology, CAS) CYP72A enzymes catalyzing 13-hydrolyzation of gibberellin are indispensable for primary seed dormancy in Brassicaceae plants
10:00-10:20  Fang Xie (Institute of Plant Physiology and Ecology, CAS) The molecular mechanism of nitrate inhibition of nodulation in Medicago truncatula
10:20-10:40  Tea Break

10:40-12:00  Session V: Epigenetics and Epigenomics

10:40-12:00  Major Talk
10:40-11:00  Yuehui He (Shanghai Center for Plant Stress Biology, CAS) A molecular pathway for embryonic resetting of a parental memory of winter cold in plants
11:00-11:20  Xiaofeng Gu (Biotechnology Research Institute, CAAS) Insights into new N6-methyladenine DNA methylation from Arabidopsis to rice
11:20-11:40  Yong Ding (University of Science & Technology of China) PRC2 recruitment and H3K27me3 deposition at FLC require FCA binding of COOLAIR
11:40-12:00  Jiamu Du (南方科技大学) Molecular basis for the epigenetic regulation of plant flowering

12:00  Lunch Break

14:00-16:15  Session VI: Prof. Shiping Wang Memorial Session of Plant Immune Responses

14:00-14:30  Plenary 6 Meng Yuan (Huazhong Agricultural University): In loving memory of Professor Shiping Wang
14:30-15:00  Plenary 7 Jian-Min Zhou (Institute of Genetics and Developmental Biology, CAS) The finale begins: Activation of an immune receptor in plants

15:00-15:50  Major Talk
15:00-15:20  Zuhua He (Institute of Plant Physiology and Ecology, CAS) Genomic variation and immune signaling of broad-spectrum blast resistance in rice
15:20-15:40  Zhengqiang Ma (Nanjing Agricultural University) Cloning and utilisation of Fhb1 conferring resistance to wheat Fusarium head blight
15:40-16:00  Zhaohui Chu (Shandong Agricultural University) A natural variation in an F-box protein confers banded leaf and sheath blight resistance in maize and rice

16:00-16:15  Student Talk
16:00-16:15  Yinggeng Ke (Huazhong Agricultural University) The versatile functions of GDT1 provide a genic basis for growth-defense tradeoffs in rice
16:15-18:00  Tea Break and Poster Session

18:00  Dinner (Buffet)

August 22, 2019

08:15-10:05  Session VII: Transgenic Technology and Genomics-based Breeding

08:15-08:45  Plenary  Takeshi Izawa (The University of Tokyo, Japan) The circadian clocks and photoperiodic control of flowering in rice under natural environments

08:45-10:05  Major Talk

08:45-09:05  Haohua He (Jiangxi Agricultural University) Molecular rule of double-cropping super rice in Jiangxi & breeding and promotion of new varieties

09:05-09:25  Jixian Zhai (Southern University of Science and Technology) Multiplex CRISPR-Cas9 editing of DNA methyltransferases reveals hyper-robust non-CG methylation in rice

09:25-09:45  Huanbin Zhou (Institute of Plant Protection, CAAS) Cas9-NG greatly expands the targeting scope of genome-editing toolkit by recognizing NG and other atypical PAMs in rice

09:45-10:05  Fei Dai (Zhejiang University) Genomic approaches towards the evaluation and utilization of barley germplasm

10:05-10:25  Tea Break

10:25-11:55  Session VIII: Functional Genomics (II)

10:25-11:25  Major Talk

10:25-10:45  Lizhong Xiong (Huazhong Agricultural University) Fine regulation of abscisic acid signaling and drought resistance by OsbZIP46 in rice

10:45-11:05  Zuofeng Zhu (China Agricultural University) The genetic control of seed shattering in African rice domestication

11:05-11:25  Qingwen Zhou (Jiangxi Agricultural University) From genetics to protein biochemistry, approaching to the fundamental mechanism of recombinational
mediator machinery in low eukaryotes

11:25-11:55  **Student Talk**
11:25-11:40  **Zengxiang Ge** (Peking University) The roles of RALF/CrRLK1L-mediated signaling in plant reproduction
11:40-11:55  **Fu He** (Southwest University) The miR390/TAS3/ARF4 module mediates lateral root growth under salt stress in Populus via modulating auxin pathway

12:00  **Lunch Break**

14:00-15:40  **The 20th Anniversary Session of Plant Genomics in China**
14:00-14:30  **Plenary 9 Xiao-Ya Chen** (Institute of Plant Physiology and Ecology, CAS) Plant terpenoids for nutrition and defense
14:30-15:00  **Plenary 10 Kang Chong** (Institute of Botany, CAS) Chilling signal network and its application potential in rice

15:00-15:40  **Major Talk**
15:00-15:20  **Zhixi Tian** (Institute of Genetics and Developmental Biology, CAS) Investigation of the genetic diversity during soybean domestication
15:20-15:40  **Jianbing Yan** (Huazhong Agricultural University) The development and application of single cell sequencing technology in maize

15:40  **Closing Ceremony**

18:00  **Dinner (Buffet)**

Programs may be subjected to changes