

**11<sup>th</sup> International Conference of the Peanut  
Research Community on *Advances in Arachis  
through Genomics and Biotechnology* (AAGB-2019)**

October 21-25, 2019

Jinan, China



**Schedule of Program**

<b>Monday, October 21, 2019</b>	
<b>One day</b>	<b>Registration</b>
<b>14:00 - 17:00</b>	<b>Poster Set-up</b>
<b>18:00 - 21:00</b>	<b>Dinner</b>

<b>Tuesday, October 22, 2019</b>	
<b>Session I: Inauguration</b>	
<b>8:30 - 9:20</b>	<p><b>Welcome and Inaugural Address</b> <b>Shubo Wan</b>, President, SAAS</p> <hr/> <p>Chairpersons: <b>Shubo Wan</b></p> <p><b>Official Opening Words</b></p> <p>National Leader: Shandong Provincial Leader: Ministry of Agricultural and Rural Affairs of the P.R.C. leader: Shandong Academy of Ag. Sci. Leader:</p> <p><b>Delegation Opening Words</b> <b>Bob Parker</b>, CEO and President, National Peanut Board</p>
<b>9:20 - 9:35</b>	<p>Chairpersons: <b>Steve Brown</b></p> <p><b>Path to Success: Celebration, Recognition, Winning</b> <b>Baozhu Guo</b>, USDA-ARS <b>Howard Valentine</b>, Director, Peanut Foundation</p>

9:35 - 10:00	Group Picture Tea/Coffee Break
<b>Session II: Plenary Lecture</b> <b>(Celebration, Recognition, Winning)</b> Chairpersons: <b>Boshou Liao &amp; David Bertoli</b>	
10:00 - 10:30	<b>Xinyou Zhang</b> Henan Academy of Ag. Sci., China
10:30 - 11:00	Genomics applications in post-genome sequence era in groundnut: a way forward <b>Rajeev Varshney</b> ICRISAT, India
11:00 - 11:30	The Future is now for accelerated peanut improvement <b>Josh Clevenger</b> Mars & Wrigley, USA
11:30 - 12:00	<b>Shubo Wan</b> Shandong Academy of Ag. Sci., China
12:00 - 13:30	<b>Lunch</b>
<b>Session III: Peanut Genomics</b> Chairpersons: <b>Xinyou Zhang &amp; Josh Clevenger</b>	
14:00 - 14:30	The <i>Arachis hypogaea</i> genome provides insight into the polyploid origin and differential A and B subgenome evolution <b>Weijian Zhuang</b> Fujian Agriculture and Forestry University
14:30 - 15:00	The neotetraploid peanut IpaDur1 provides a model for genetic and genomic studies and increases crop diversity <b>Soraya Leal-Bertioli</b> University of Georgia, USA
15:00 - 15:30	The genomes of cultivated peanut and its suspected wild progenitors <b>Xiaoping Chen</b> Guangdong Academy of Agricultural Sciences
15:30 - 16:00	Optimizing effective genomic selection strategy for achieving higher genetic gains in groundnut <b>Manish Pandey</b> ICRISAT, India

<b>16:00 - 16:20</b>	<b>Coffee and Tea Break</b>
<b>Session IV: Genetic Trait Mapping &amp; Gene Discovery I</b>	
Chairpersons: <b>Weijian Zhuang &amp; Daniel Fonceka</b>	
<b>16:20-16:40</b>	Solving the Leaf Spot Problem in Peanut <b>Thomas Stalker</b> North Carolina State University, USA
<b>16:40-17:00</b>	Understanding the molecular basis of disease resistance of <i>Arachis glabrata</i> through transcriptome and genome sequencing <b>Xingjun Wang</b> Shandong Academy of Agricultural Sciences
<b>17:00-17:20</b>	Segmental subgenome exchange is captured in the nascent synthetic allotetraploid [ <i>A. ipaensis</i> x <i>A. correntina</i> ] 4x and its derivatives <b>Ye Chu</b> University of Georgia, USA
<b>17:20-17:40</b>	Fine mapping towards identifying major QTLs and candidate resistance genes for TSWV on Chromosome A01 of Peanut <b>Chuanzhi Zhao</b> University of Georgia, USA; Shandong Academy of Agricultural Sciences
<b>17:40-18:00</b>	The positional cloning of Bunch1 gene that controls branching habit in peanut <b>Ran Hovav</b> Plant Sciences Institute, ARO, Bet-Dagan, Israel
<b>18:00 – 18:20</b>	Increasing power to dissect morphological and disease resistance traits in peanut using multi-parental mapping populations <b>Baozhu Guo</b> USDA-ARS Crop Protection and Management Research Unit
<b>19:00-21:00</b>	<b>Open Ceremony</b> <b>Dinner</b> Grand Ballroom

**Wednesday, October 23, 2019**

**Session V: Plenary Lecture**

Chairperson: **Victor Nwosu**

**8:00 - 8:40**

The origin and evolution of peanut inform new pathways to genetic diversity and sustainability

**David Bertoli**

Professor and GRA (Georgia Research Alliance)  
Distinguished Investigator  
University of Georgia, USA

**Session VI: Genetic Trait Mapping & Gene Discovery II**

Chairpersons: **Xingjun Wang & Peggy Ozias-Akins**

**8:40 - 9:00**

Marker Assisted Breeding to Develop Peanut Cultivars with Resistance to Late Leaf Spot

**Corley Holbrook**

USDA-ARS Crop Breeding and Genetics Research Unit

**9:00 - 9:20**

Genome of an allotetraploid wild peanut *Arachis monticola*: a de novo assembly

**Dongmei Yin**

Henan Agriculture University

**9:20 - 9:40**

Identification of QTL with resistance to Northern root-knot nematode in peanut

**Mei Yuan**

Shandong Peanut Research Institute

**9:40 - 10:00**

Identification of AhNPR-A04 as a leaf spot disease related gene in peanut through MutMap combined with BSR approach

**Suoyi Han**

Henan Academy of Agricultural Sciences

**10:00 - 10:20**

**Coffee and Tea Break**

**Session VII: Germplasm Diversity & Utilization**

Chairpersons: **Chuanzhi Zhao & Rajeev Varshney**

**10:20 - 10:40**

Genetic diversity of historical and contemporary African germplasm lines

**Peggy Ozias-Akins**

University of Georgia, USA

<b>10:40 - 11:00</b>	Genomic analysis identifies genomic variation and history of peanut breeding <b>Zheng Zheng</b> Henan Academy of Agricultural Sciences
<b>11:00 - 11:20</b>	Mobilizing genetic diversity for strengthening peanut breeding programs in Africa <b>Daniel Fonceka</b> National Agricultural Research Center, Senegal
<b>11:20 - 11:40</b>	Twelve complete chloroplast genomes of wild peanuts: great genetic resources and a better understanding of <i>Arachis</i> phylogeny <b>Shihua Shan</b> Shandong Peanut Research Institute
<b>11:40 - 12:00</b>	Identification of abiotic stress tolerant germplasms and functional analysis of related genes in peanut ( <i>Arachis hypogaea</i> L.) <b>Xiaoyuan Chi</b> Shandong Peanut Research Institute
<b>12:00 - 13:30</b>	<b>Lunch</b>
<b>Session VIII: Crop Improvement I</b> Chairpersons: <b>Han Xia &amp; Manish Pandey</b>	
<b>14:00 - 14:20</b>	Integrating resistance to major soil-borne diseases in peanut through conventional and genomic approaches <b>Boshou Liao</b> Chinese Academy of Agricultural Sciences, Oil Crop Research Institute
<b>14:20 - 14:40</b>	University of Georgia, USA GWAS and Co-expression Network Reveal Ionomic Variation in Cultivated Peanut <b>Charles Chen</b> Auburn University, USA
<b>14:40 - 15:00</b>	QTL identification for seed weight and size based on a high-density SLAF-seq genetic map in peanut ( <i>Arachis hypogaea</i> L.) <b>Jing Chen</b> Shandong Peanut Research Institute
<b>15:00 - 15:20</b>	Translation initiation factor eIF4E and eIFiso4E are both required for peanut stripe virus infection in Peanut <b>Yucheng Chi</b> Shandong Peanut Research Institute
<b>15:20 - 15:40</b>	Genetic dissection of growth-habit related traits in cultivated peanut

	<p style="text-align: center;"><b>Lifeng Liu</b> Hebei Agricultural University</p>
15:40 - 16:00	<p style="text-align: center;">Screening of genomic selection training population for ahFAD2A and ahFAD2B mutant alleles responsible for high oleic trait in peanut (<i>Arachis hypogaea</i> L.)</p> <p style="text-align: center;"><b>Sunil Chaudhari</b> ICRISAT, INDIA</p>
16:00 - 16:20	<b>Coffee and Tea Break</b>
<p><b>Session IX: Crop Improvement II</b> Chairpersons: <b>Shihua Shan &amp; Jake Fountain</b></p>	
16:20 - 16:40	<p style="text-align: center;">Decreasing content of very long chain fatty acids in peanut</p> <p style="text-align: center;"><b>Dongxin Huai</b> Chinese Academy of Agricultural Sciences, Oil Crop Research Institute</p>
16:40 - 17:00	<p style="text-align: center;">Comparative analysis of lipidomes and transcriptomes reveals molecular mechanism of cold tolerance in peanut</p> <p style="text-align: center;"><b>Haiqiu Yu</b> Shenyang Agricultural University</p>
17:00 - 17:20	<p style="text-align: center;">Evaluation of <i>A. ipaënsis</i> x <i>A. correntina</i> wild-peanut derived materials for resistance to fall armyworm</p> <p style="text-align: center;"><b>Chandler Levison</b></p>
17:20 - 17:40	<p style="text-align: center;">Chromosome correspondence between karyotype and genome sequence map of <i>Arachis duranensis</i></p> <p style="text-align: center;"><b>Pei Du</b> Henan Academy of Agricultural Sciences</p>
17:40 - 18:00	<p style="text-align: center;">The Molecular and Ecological Mechanism of Improving Iron Nutrition in Peanuts Intercropped with Maize in Calcareous Soil</p> <p style="text-align: center;"><b>Yuanmei Zuo</b> China Agricultural University</p>
18:30 - 21:00	<b>Dinner</b>

**Thursday, October 24, 2019**

**Session IX: Biotic & Abiotic Stresses**

Chairpersons: **Xinguo Li & Ran Hovav**

<b>8:00 - 8:20</b>	Understanding the genetic and molecular mechanisms for resistance to aflatoxin contamination in groundnut <b>Rajeev K. Varshney</b> ICRISAT, India
<b>8:20 - 8:40</b>	Identification of metabolites and transcripts involved in salt stress and recovery in peanut <b>Guowei Li</b> Shandong Academy of Agricultural Sciences
<b>8:40 - 9:00</b>	Virus Induced Gene Silencing of AhABI4s Enhance Salt Tolerance of Peanut Seedling via Regulation of Ion Homeostasis <b>Lu Luo</b> Shandong Agricultural University
<b>9:00 - 9:20</b>	Stress-related transcriptional signaling and its roles in aflatoxin production and stress tolerance in <i>Aspergillus flavus</i> <b>Jake Fountain</b> University of Georgia, USA
<b>9:20 - 9:40</b>	Identification and molecular mechanism dissection of drought resistance in peanut ( <i>Arachis hypogaea</i> L.) <b>Xiurong Zhang</b> Shandong Agricultural University
<b>9:40 - 10:00</b>	Two adjacent genomic regions on chromosome B02 control genetic resistance to bacterial wilt in peanut <b>Huaiyong Luo</b> Chinese Academy of Agricultural Sciences, Oil Crop Research Institute
<b>10:00 - 10:20</b>	<b>Coffee and Tea Break</b>
<b>Session X: Crop Production &amp; Cultivation</b>	
Chairpersons: <b>Zheng Zheng &amp; Sunil Chaudhari</b>	
<b>10:20 - 10:40</b>	Progress in peanut photosynthesis under abiotic stress <b>Xinguo Li</b> Shandong Academy of Agricultural Sciences
<b>10:40 - 11:00</b>	Farmer's perceived constraints to groundnut production, and their variety choice and preferred traits in eastern Ethiopia:

	<p>implications for drought tolerance breeding</p> <p><b>Seltene Abady</b> University of KwaZulu-Natal, African Centre for Crop Improvement, South Africa; ICRISAT</p>
<b>11:00 - 11:20</b>	<p>Comparative transcriptome analysis identified key genes for seed germination in response to Zn fertilizers in peanuts</p> <p><b>Weichang Yu</b> Shenzhen University</p>
<b>11:20 - 11:40</b>	<p>Research on diversity of rhizosphere microorganism in peanut //maize intercropping system</p> <p><b>Xiaozhu Chen</b> Jilin Academy of Agricultural Sciences</p>
<b>11:40 - 12:00</b>	<p>Identification of quantitative trait loci for surrogate traits of water use efficiency, pod yield and yield related traits in groundnut (<i>Arachis hypogaea</i> L.) under different water regimes</p> <p><b>D. L. Savithramma</b> University of Agricultural Sciences, GKVK, India</p>
<b>12:00 - 13:30</b>	<b>Lunch</b>
<p><b>Session XI: The Path Forward</b></p> <p><b>AAGB and International Peanut Community</b></p> <p>Chairperson: <b>Tom Stalker &amp; Steve Brown</b></p>	
<b>14:00 - 14:30</b>	<p><b>Closing Remarks</b></p> <p><b>Wan Shubo</b>, President, SAAS</p>
<b>14:30 - 17:30</b>	<b>Tour Shandong Academy of Agricultural Sciences</b>
<b>19:00 - 22:00</b>	<b>Closing Remarks and Dinner</b>