China

http://www.*Arabidopsis*.org/info/2010_projects/China.jsp
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Arabidopsis research takes place mainly in the Beijing and Shanghai areas, including Peking University, China Agricultural University, Tsinghua Univeristy, and Chinese Academy of Sciences. Funding for *Arabidopsis* research is improving in China as the National Science Foundation of China (NSFC), the main funding agency for basic research, will double its budget in the next five years. A new Center for Signal Transduction & Metabolomics (*C*-STM) using model plants was established at the Institute of Botany, CAS in 2005. This center will focus on hormone and peptide signaling, secondary metabolites, and plant toxins. On November 30, 2005, more than 300 participants attended the annual Workshop on *Arabidopsis* Research, held at Peking University.

Current Research Projects

- In 2005, NSFC funded Dr. De Ye at China Agricultural University and Dr. Zhong-Nan Yang at Shanghai Normal University to support two key projects on sexual plant reproduction focusing on male sterility in *Arabidopsis*.
- To facilitate international collaboration on research in epigenetics, the Chinese Academy of Sciences (CAS) funded a team project headed by Dr. Xiao-Feng Cao at the Institute of Genetics and Developmental Biology, Beijing.

A special issue of the Journal of Integrative Plant Biology dedicated to *Arabidopsis* research in China was published in January 2006. Significant progress achieved by Chinese *Arabidopsis* researchers in broad aspects of plant sciences was reviewed by Prof. Zhihong Xu of Peking University. Areas include:

- the epigenetic control in leaf development by Dr. Hai Huang's group on *RDR6* gene and in root development by Dr. Xiaoya Chen's and Dr. Huishan Guo's group on miRNA160 and miRNA164 respectively, and by Dr. Shunong Bai and coworkers on histone modification;
- the role of hormone signaling in leaf development by Dr. Lijia Qu's group on the functional study of *IAMT1* gene and *MSBP1* by Dr. Hong-Wei Xue's group;
- the genetic control on pollen tube growth by Dr. De Ye's group on *VGD1* and *TPD1* genes and gametogenesis by Dr. Wei-Cai Yang's group on *SWA1* gene function; and
- the role of blue light receptor in stomata opening by Dr. Hong-Quan Yang's group.
- In addition, progress has been made in understanding plant responses to stresses, includes functional studies on *AtNAC2* by Shou-Yi Chen's group, *LOS4* by Dr. Zhi-Zhong Gong's group, *AtERF7* by Dr. Chun-Peng Song's group, and *NHO1* by Dr. Jianmin Zhou's group
- . Finally, large scale whole genome profiling on 18 different organs and/or tissues was performed using 70mer oligomer microarrays by Dr. Xing-Wang Deng and coworkers at the Peking-Yale Joint Center for Plant Molecular Genetics and Agro-biotechnology

Major funding sources for *Arabidopsis* functional genomics:

- National Science Foundation of China
  83 Shuangqing Road, Haidian District, Beijing 100080, China
  www.nsfc.gov.cn/