

# Yangfen--Curriculum Vitae

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## Education

2017-up PhD student in Center of plant structural and functional genomics of the Institute of experimental botany AS CR

2016-2017 PhD student in Max Planck Institute of Plant Breeding Research, Germany

2013-2016 Master student in Shanghai Center for Plant Stress Biology, Chinese Academy of Science, Shanghai, China

2009-2013 Bachelor in Bioscience, Shandong university, Weihai, China.

## Research focus:

My project focuses on understanding the function of SMC5/6 complex during the generative development in *Arabidopsis thaliana*. Flowering plants undergo a series of complex developmental transitions including production of gametes and seeds during generative development. Structural maintenance of chromosomes (SMC) 5/6 complex has a crucial function in control of genome stability and DNA damage repair. However, precise molecular mechanisms of SMC5/6 complex functions in plants are unknown. I found that several of the SMC5/6 complex subunits are influential in pollen development and fertility. Furthermore, mutations in HPY2 and SIN1 subunits of the SMC5/6 complex result in the increased frequency of aborted seeds. This suggests that SMC5/6 complex has unknown function in gametogenesis and seed development. I will focus on molecular and genetic characterization of this phenotype in *Arabidopsis thaliana*.

## Publication

Bai G, Yang DH, Zhao Y, Ha S, Yang F, Ma J, Gao XS, Wang ZM, Zhu JK. (2013). Interactions between soybean ABA receptors and type 2C protein phosphatases. *Plant Molecular Biology* 83, 651–664.

Wang S, Bai G, Wang S, Yang L, Yang F, Wang Y, et al. (2016) Chloroplast RNA-Binding Protein RBD1 Promotes Chilling Tolerance through 23S rRNA Processing in *Arabidopsis*. *PLoS Genet* 12(5): e1006027.

