

## **INVITED LECTURE H6**

### **Molecular mechanisms of flower initiation**

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The transition from vegetative to reproductive growth is the most dramatic phase change in the life of flowering plants. This developmental switch responds to various environmental and endogenous signals and results in the generation of flowers, which bear reproductive organs for seed production. In the last two decades, intensive investigations have progressively unraveled the underlying mechanisms of flower initiation in the model plant *Arabidopsis*. Our recent studies suggest that several MADS-box transcription factors play key roles in mediating the successive changes of flower initiation, including flowering time control, floral meristem specification and floral organ patterning. This talk will discuss the molecular functions and genetic interactions of these regulators in flower initiation.