

遺伝子実験施設セミナー

Center for Gene Research Seminar  
Nagoya University

**K-homology nuclear ribonucleoproteins regulate floral organ identity and determinacy in Arabidopsis**

Speaker: **Prof. Antonio Vera**

Área de Genética

Departamento de Biología Aplicada

Universidad Miguel Hernández, Spain



Date: 2014 July 28 (Mon), 16:00~17:00

Room: F301 (Center for Gene Res. F-Bldg.)

Arabidopsis *FLK* and *PEP* encode K-homology proteins similar to human hnRNP K that antagonistically regulate the repressor of flowering time *FLC*. Now, we show that *PEP* and *FLK* collaborate to sustain the floral C-function accomplished by another key MADS-box factor, the homeotic gene *AG*. Genetic and molecular analyses functionally link *PEP* and *FLK* to other RNA-binding proteins previously known to regulate *AG*, and strongly suggest that they participate in a joint gene activity that facilitates pre-mRNA maturation by preventing premature/erroneous processing. Our results define specific morphogenetic roles for *PEP* and *FLK* and may reflect their importance for regulatory coupling between different developmental pathways and the multifaceted character of plant KH-type hnRNPs.

