



Figure 1. *FLC* expression is epigenetically silenced by cold and reset during embryo development. (A) The floral repressor gene, *FLC*, is highly expressed in young seedlings. As plants perceive cold, the expression is quantitatively repressed, dependent on the length of cold experienced. As temperatures warm in spring, the repression is epigenetically maintained until seed development when it is reset. This ensures that each generation of seedlings requires vernalization. (B) Epigenetic and transcriptional pathways activate or inhibit *FLC* expression and, hence, contribute to flowering time control. Chromatin modifications and noncoding RNAs contribute in different ways to each pathway.