

**SDB Bootcamp 2012 – *Arabidopsis thaliana* – T. Western, Biology Dept., McGill University**

Topics:

1. Arabidopsis lifecycle, morphology and crossing
  - a. Handout – basic Arabidopsis growth & handling
  - b. Demo (& practise?) – crossing
2. Genetics of floral development in Arabidopsis – sample undergraduate developmental biology lab
  - a. Handout – genetics of floral organ identity lab – building of a genetic model from phenotypes – ABC model of floral organ identity (developed for BIOL 263 Developmental Biology – UBC-Okanagan [formerly Okanagan University College])
  - b. Demo – pared down version of lab
3. Use of *GUS* ( $\beta$ -*GLUCURONIDASE*) reporter gene for spatial/temporal study of gene expression – have designed a plant gene expression lab at transcript level using promoter-reporter gene paired with qualitative RT-PCR for use in a Cell & Molecular Biology lab course at McGill University (BIOL 301)
  - a. Handout – GUS staining
  - b. Demo (time allowing) – observation of stained tissue (no time to do staining)