

Intersectional lines

Generation and phenotyping of a new collection of *Drosophila* transgenic lines dedicated to intersectional approaches

We are planning to generate and phenotype a collection of transgenic lines carrying zip-LexA-Activation Domain which then can be combined with GAL4 line collections (such as Janelia Farm collection) to refine transgene expression by intersectional approaches (Ting et al., *Genetics* 188, 229-233, 2011). We are planning to use InSITE swappable vectors to generate our collection so that the zip-LexA-Activation Domain cassette can be easily exchanged to all other cassettes from InSITE collection (Gohl et al., 2011, *Nat Methods* 8, 231-237).

We will then phenotype the generated zip-LexA-AD collection in embryos and in the adult fly brain (collaboration with F. Rouyer lab). The generated image data will be annotated and available via dedicated and searchable database.

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Coupling with GAL4

- InSITE system: Integrase swappable in vivo targeting element

(in vivo swapping approach for enhancer trapping)