Using the uncaging method to track the fate of neural plate cells.

injection of caged fluorescein in her5pac-egfp embryos

incubation in the dark

uncaging of the dye via laser

incubation in the dark

detection of the uncaged fluorescein
Use of late cell manipulations

- Collection of a single cell or a specific cell population for transcriptome analysis, ChIP seq etc…

- Follow fate and behaviour of a single cell differentiation in normal or mutant/experimental environment.

- Use transplanted cell as a carrier to deliver ectopic secretion of signal (heterochronic transplants).
Isolation of cell population for transcriptome analysis: rostral neural plate cells

late bud

her5pac:egfp

20µm capillaries and oil/air based system
Clonal analysis by transplant of single cells

Foxg1-/-
Embryos mounted “against” methyl cellulose

Sharp bevelled microcapillary

microinjector
Donor embryo injected with rhodamine dextr.
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<th>Donor</th>
<th>Transplant</th>
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