Cephalopod eye ESTs

- Elimination genes positive to RNA of non-camera eye molluscs on the custom array
- Elimination of genes which homolog(s) were found in non-camera eye molluscan ESTs

Cephalopod camera eye-specific candidates

- 1) Confirmation of developmental functions
  - 53.8% (3,075/5,707) of positive genes to pygmy squid embryonic RNA and 364 embryonic stage-specific genes
  - 156 positively selected genes in the cephalopod lineage
  - 1,571 genes having homologs in the vertebrate eye ESTs
  - Centaurin gamma, cornichon homologs
  - Ets-4 homolog

- 2) Estimation of lineage specific functional changes

- 3) Comparison with vertebrate eye genes

Experimental validation