2.7. Heatshock induction in *Parhyale* embryos/hatchlings

- For heat-shock, fill small Petri-dishes with FASW (for each animal individual dish) and place them covered into an 37°C incubator until the water reached 37°C.
- Place the animals/embryos into the dishes with prewarmed water and incubate them at 37°C for 20-30min.
- After the incubation at 37°C the animals should be placed back into room temperature FASW (e.g. place them back into original dishes).
- First heatshock responses can be expected 3 hours after heatshock (Pavlopoulos et al. 2010). The DsRed expression however can be detected for days after heatshock, therefore it is reasonable to check the DsRed expression 6-12 hours later to make sure that large quantities of the DsRed protein are produced.

**Fig 8** The same embryo before and 1 day after heatshock.  
*A - A’’* Expression before heat shock, lateral view with anterior up: the 3xP3 reporter indicates that this animal is transgenic (arrowhead) .  
*B - B’’* The same embryo after heat shock and documented 24 hours after A - A’’ in same view. The heat shock responds is visible throughout the embryo, especially in the CNS and VNC. The white arrow points to the putative germ cells.  
*C - C’’* Dorsal view on the same embryo, anterior is to the right. The putative germ cells are indicated by the white arrows.
2.9. References and helpful literature/links

**Parhyale embryology:**

**Parhyale transgenesis:**

**Parhyale established protocols:**

**More protocols, images and other information:**
- [http://patelweb.berkeley.edu/](http://patelweb.berkeley.edu/)

**Amphipod development:**