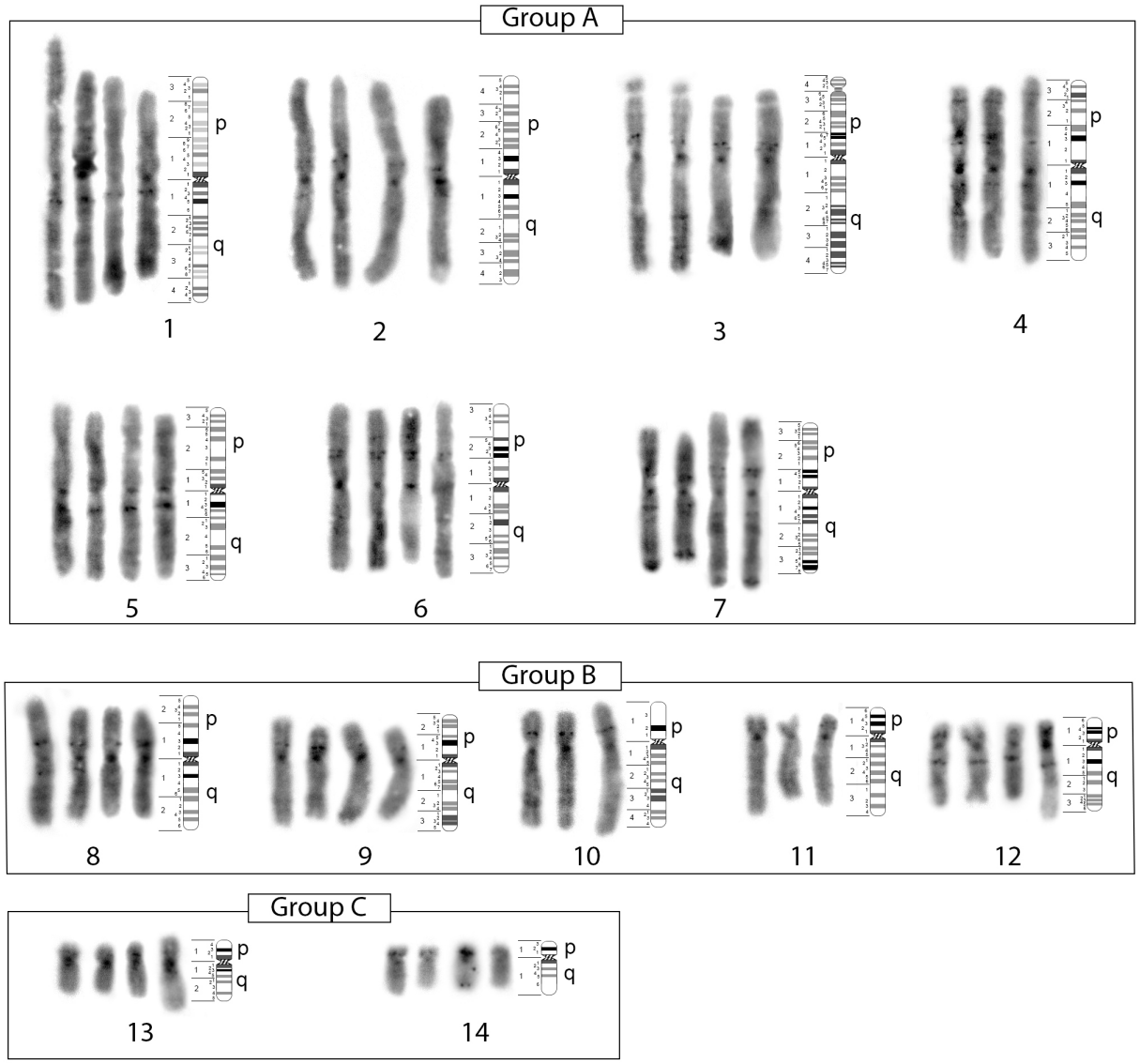
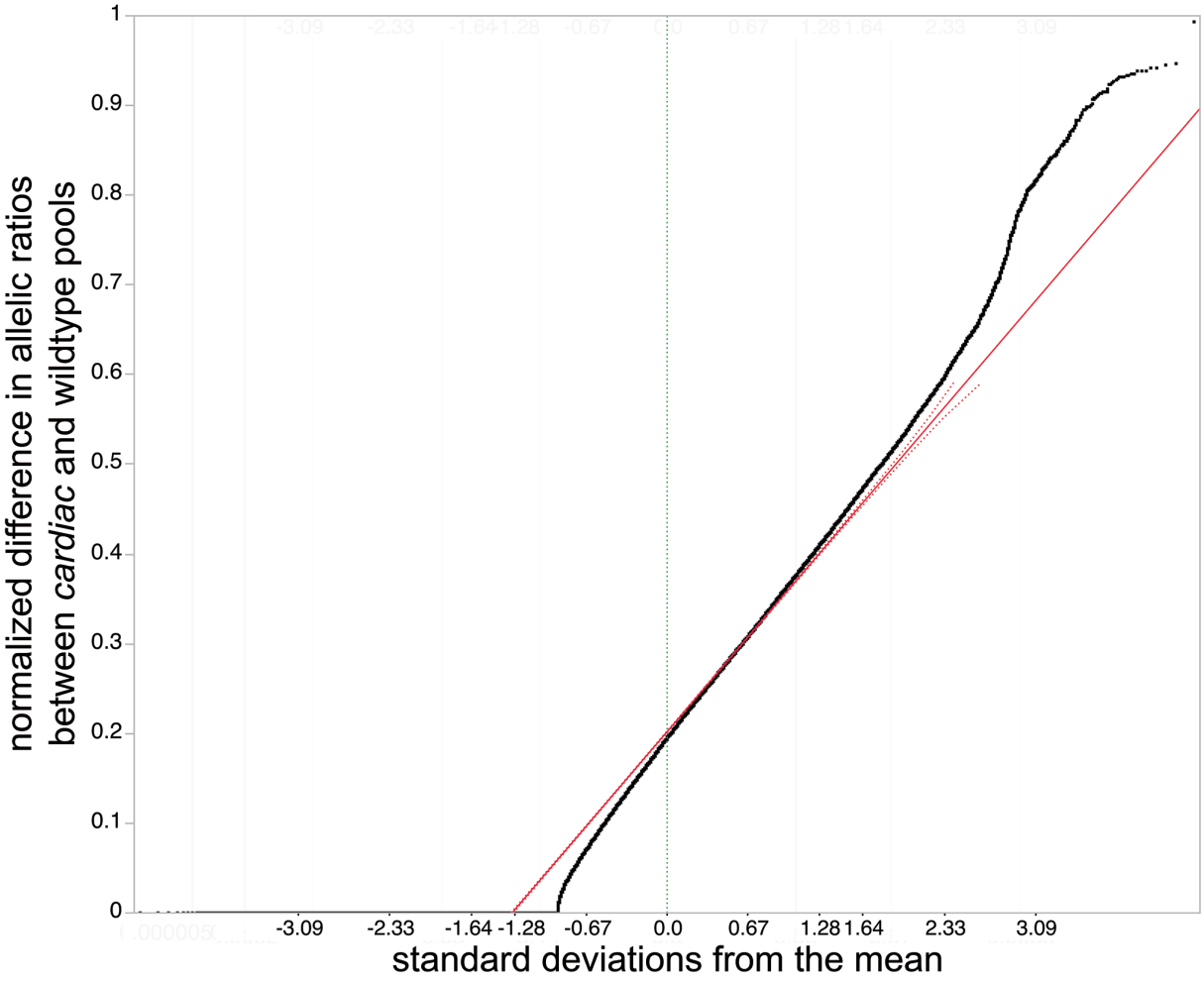
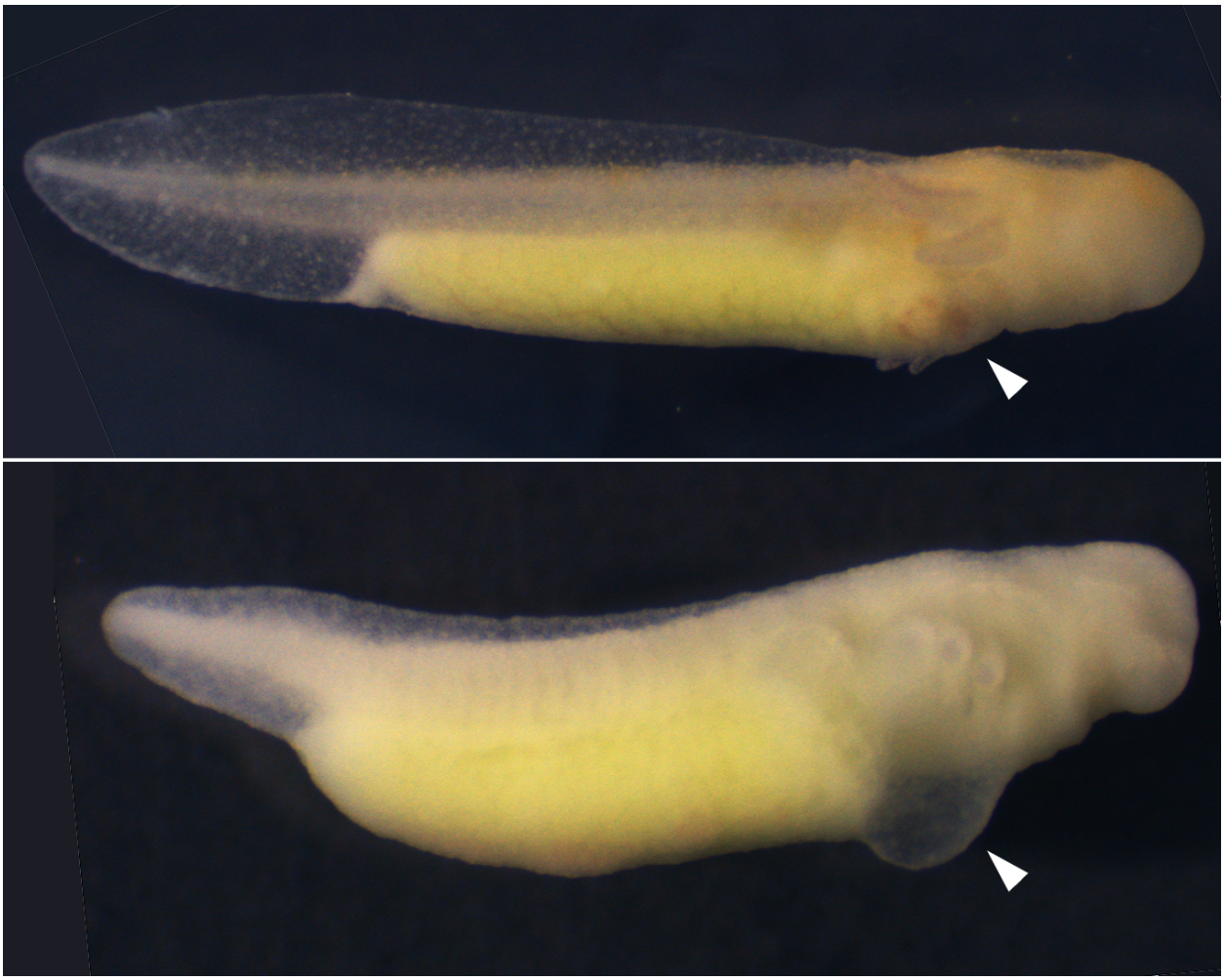
SUPPLEMENTARY FIGURES



Supplementary Figure 1 – An idiogram and corresponding reverse-DAPI images of 14 salamander chromosomes. Several representative images, from different spreads, are shown for each chromosome. Note that *A. mexicanum* is diploid with a genome consisting of 14 pairs of chromosomes. Chromosomes are named in order from largest to smallest, based on their apparent length in metaphase. Chromosomes fall into three general size groups designated A, B and C. Band nomenclateure was established by dividing chromosomes into approximately equal segments that were typically delimited by boundaries between dark and light bands. Two gradations of gray were used to depict reverse DAPI banding patterns; strong DAPI-positive puncta (bands that do not necessarily span the breadth of large chromosomes) are designated by black bars, other stronger and fainter bands are respectively designated by dark and light gray bands in idiograms.



Supplementary Figure 2 – Distribution of allele ratio deviations after normalization, in comparison to an idealized normal distribution with the same mean and dispersion. Black dots represent observed differences (normalized) between *cardiac* and wildtype embryos. The red lines represent expectations under an ideal normal distribution (solid line) and its 95% confidence intervals (dashed line).



Supplementary Figure 3 – Example of two siblings from a cross segregating for the *cardiac* mutation; top – wildtype, bottom cardiac homozygote. Note the thoracic edema and lack of erythrocytes in the developing heart (white arrows) of cardiac mutants. Higher resolution image from Figure 4.