

Figure S1: Histograms of the radial distance from the wall for the five groups analysed: WT (N=26), *mef2ca*^{b1086/b1086} (N=29), *mef2ca*^{b1086/+} (N=19), *mef2cb*^{fh288/fh288} (N=30) and *mef2cb*^{fh288/+} (N=30). Notice the inversion of the axis direction to facilitate distribution adjustment.

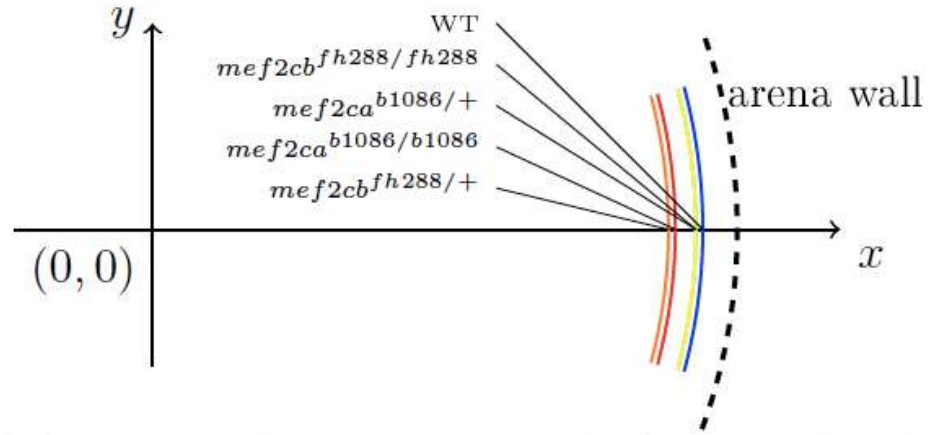


Figure S2: Location of the median of the swimming radial distance for the five groups analysed: WT (N=26) in blue, $mef2ca^{b1086/b1086}$ (N=29) in red, $mef2ca^{b1086/+}$ (N=19) in yellow, $mef2cb^{fh288/fh288}$ (N=30) in green and $mef2cb^{fh288/+}$ (N=30) in orange.

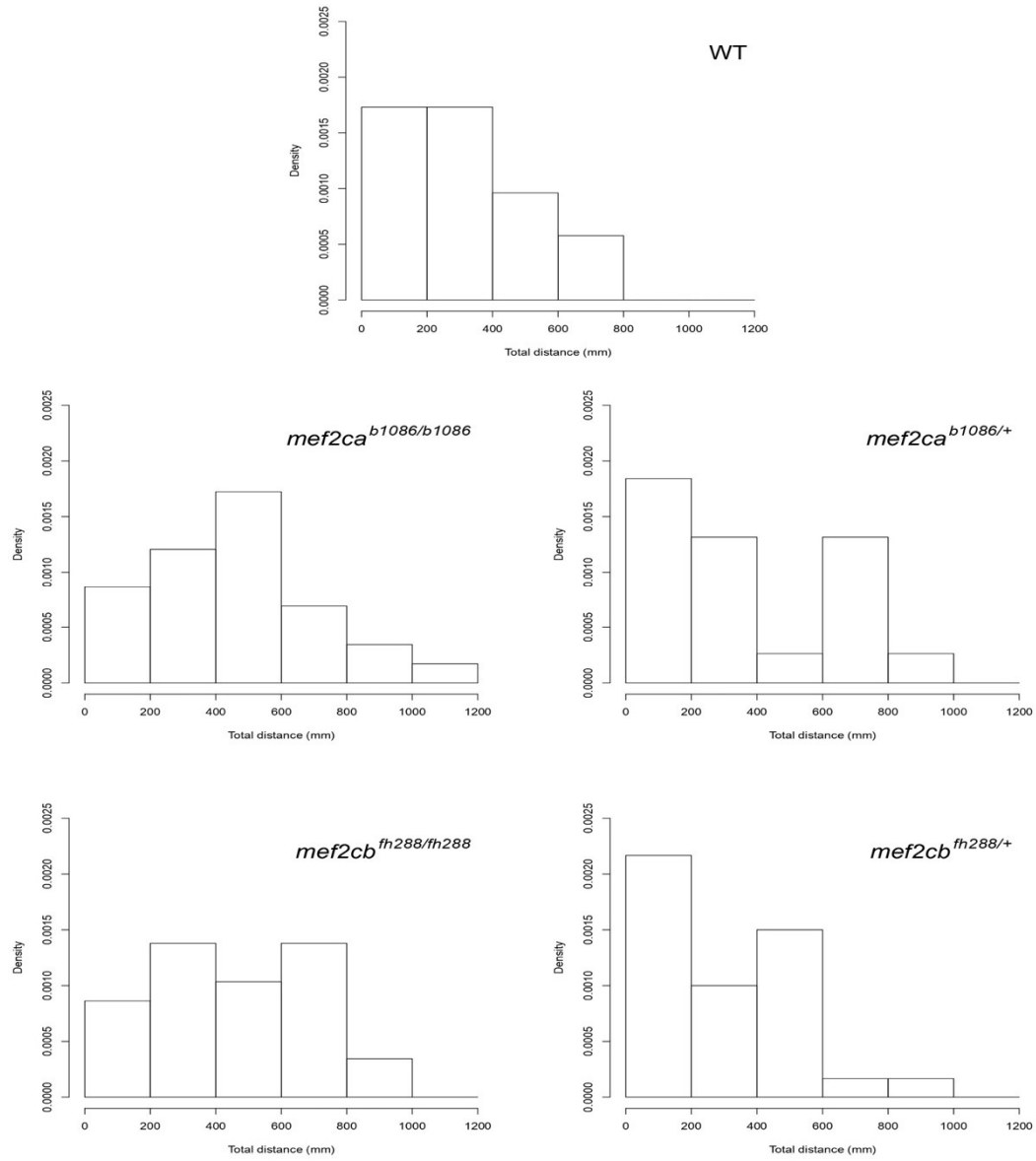


Figure S3: Histograms of the total distance covered by each fish for the five groups analysed: WT (N=26), *mef2ca^{b1086/b1086}* (N=29), *mef2ca^{b1086/+}* (N=19), *mef2cb^{fh288/fh288}* (N=30) and *mef2cb^{fh288/+}* (N=30).