At each time point Linear Discriminant Analysis (LDA) was used to distinguish between wild type (WT) and knockout (KO) mice based on miRNA expression data and myofiber size. This analysis was performed in MATLAB 2022a using the [fitcdiscr](https://www.mathworks.com/help/stats/fitcdiscr.html) function which fit an LDA model to the data using the function’s default parameters. The genotype classification was also done using only one characteristic, either miRNA expression or myofiber size. To find the miRNA threshold between WT and KO, the best distinguishing value from the ROC curves for each time point was used. To find the myofiber size threshold, the halfway point between the means of the two group was used.