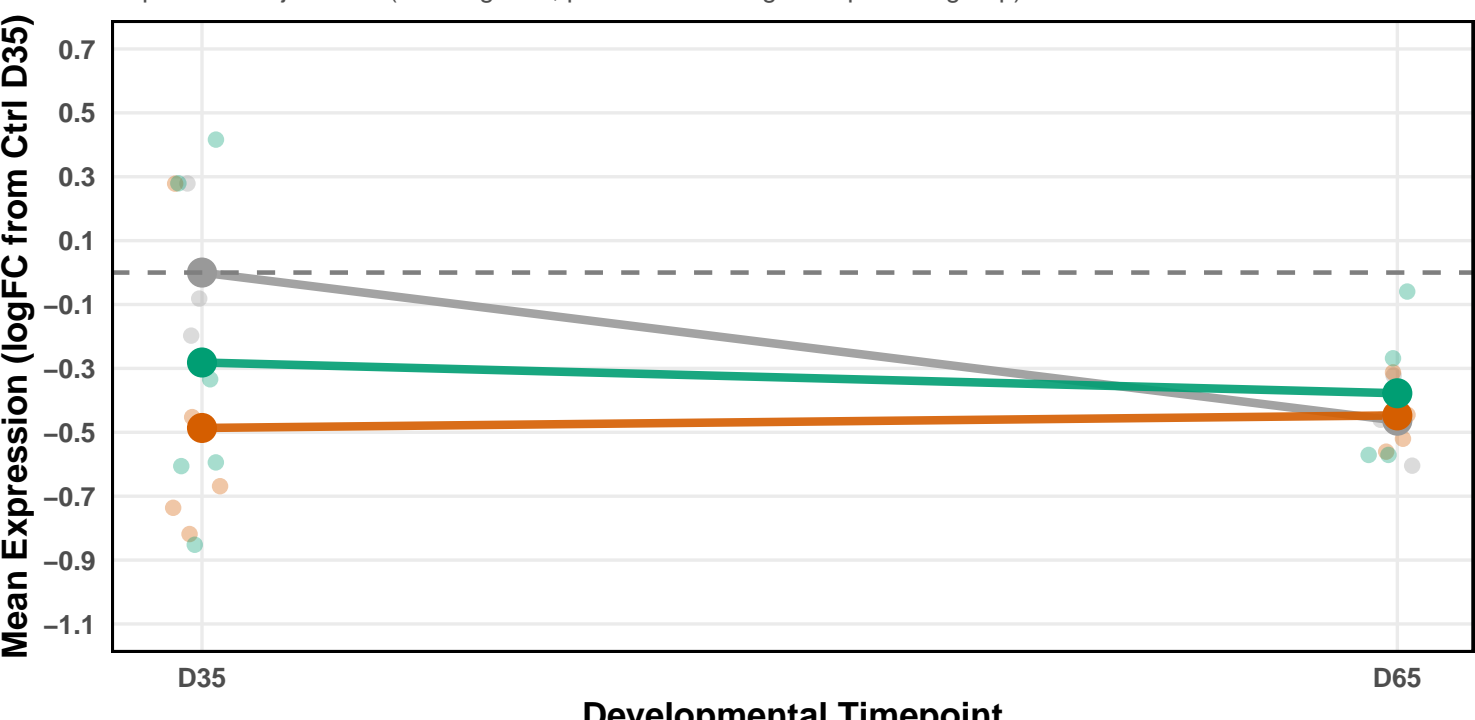


Critical Period Trajectories: Cytoplasmic & Mitochondrial Dynamics

DRP1 mutants show paradoxical response with mitochondrial compensation

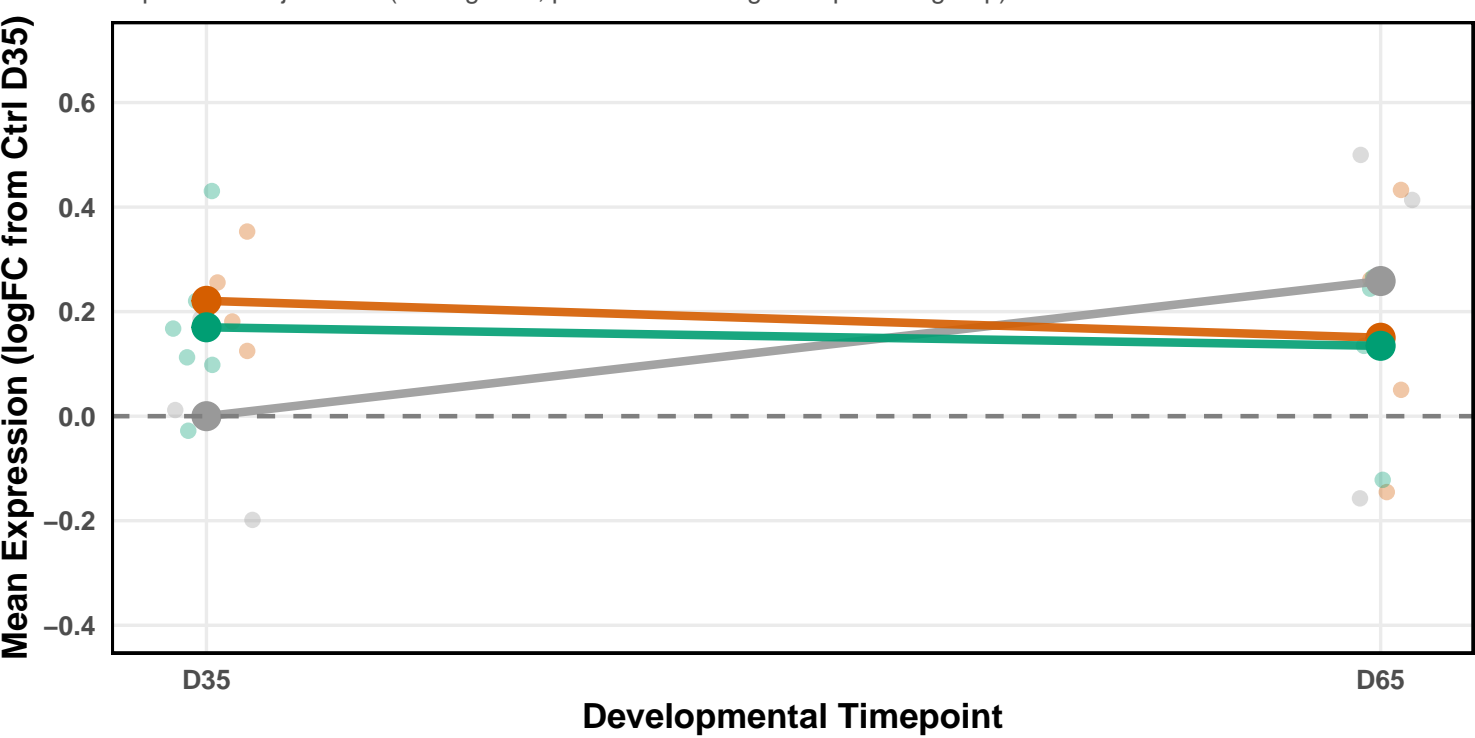
Ribosome Biogenesis: Compensatory Upregulation

Expression trajectories (n=158 genes; points: n=3 biological replicates/group)



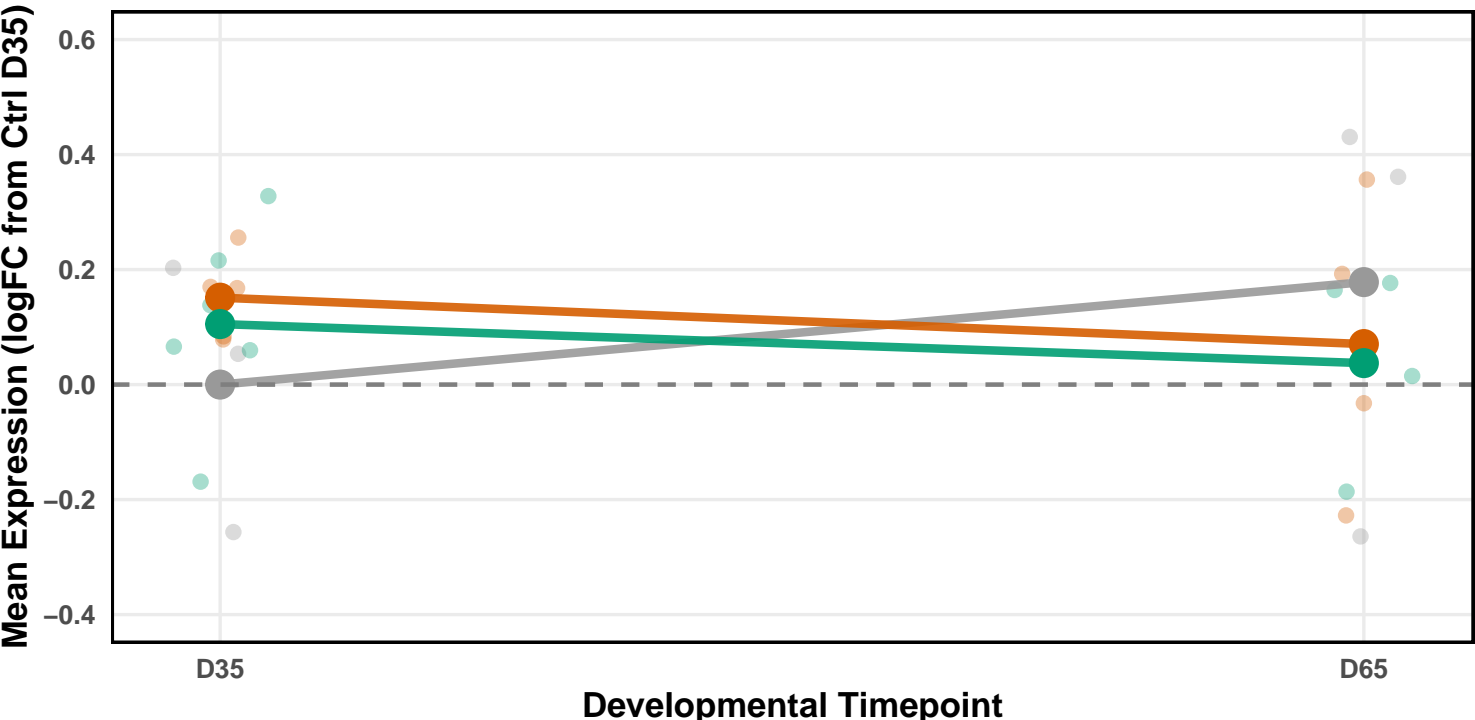
Cytoplasmic Translation: Functional Failure

Expression trajectories (n=76 genes; points: n=3 biological replicates/group)



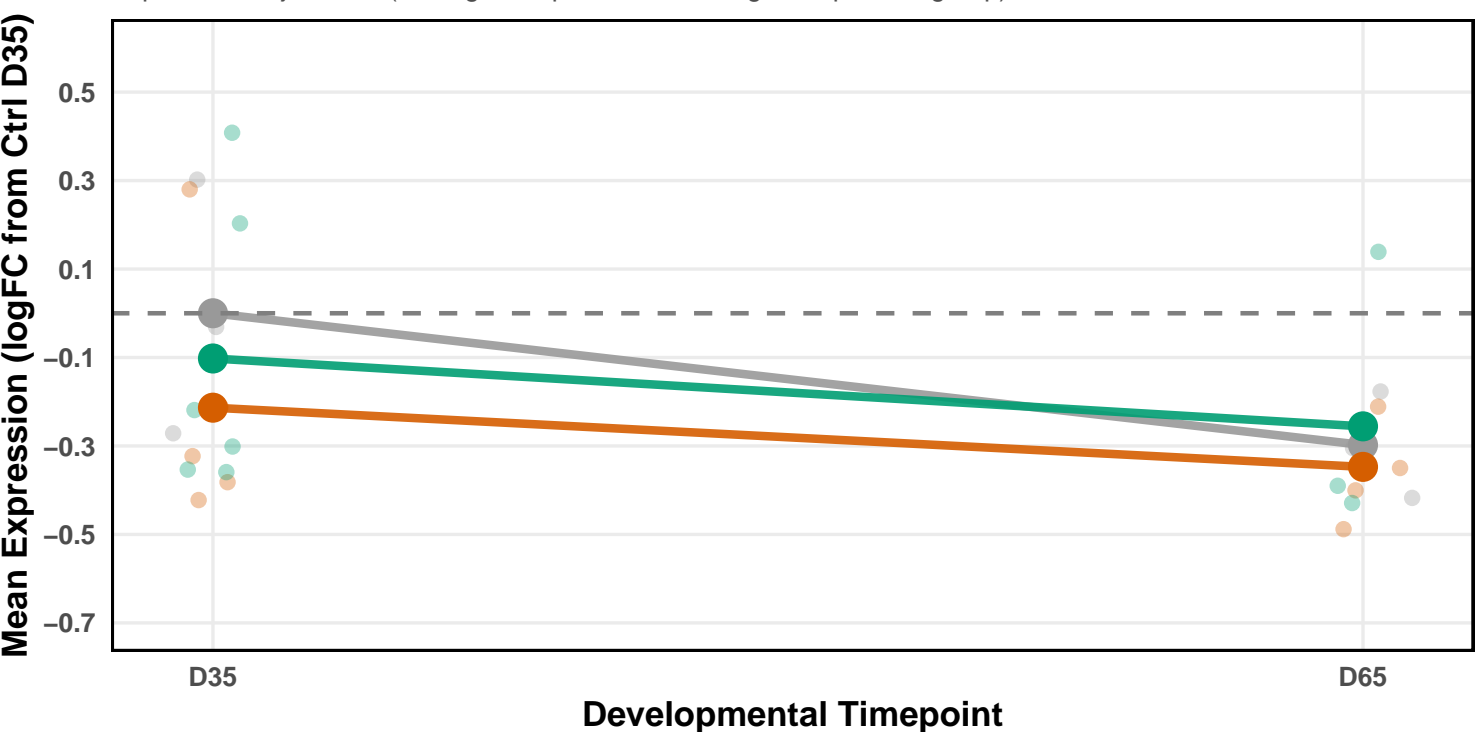
Synaptic Ribosomes: Critical Period Failure

Expression trajectories (n=65 genes; points: n=3 biological replicates/group)



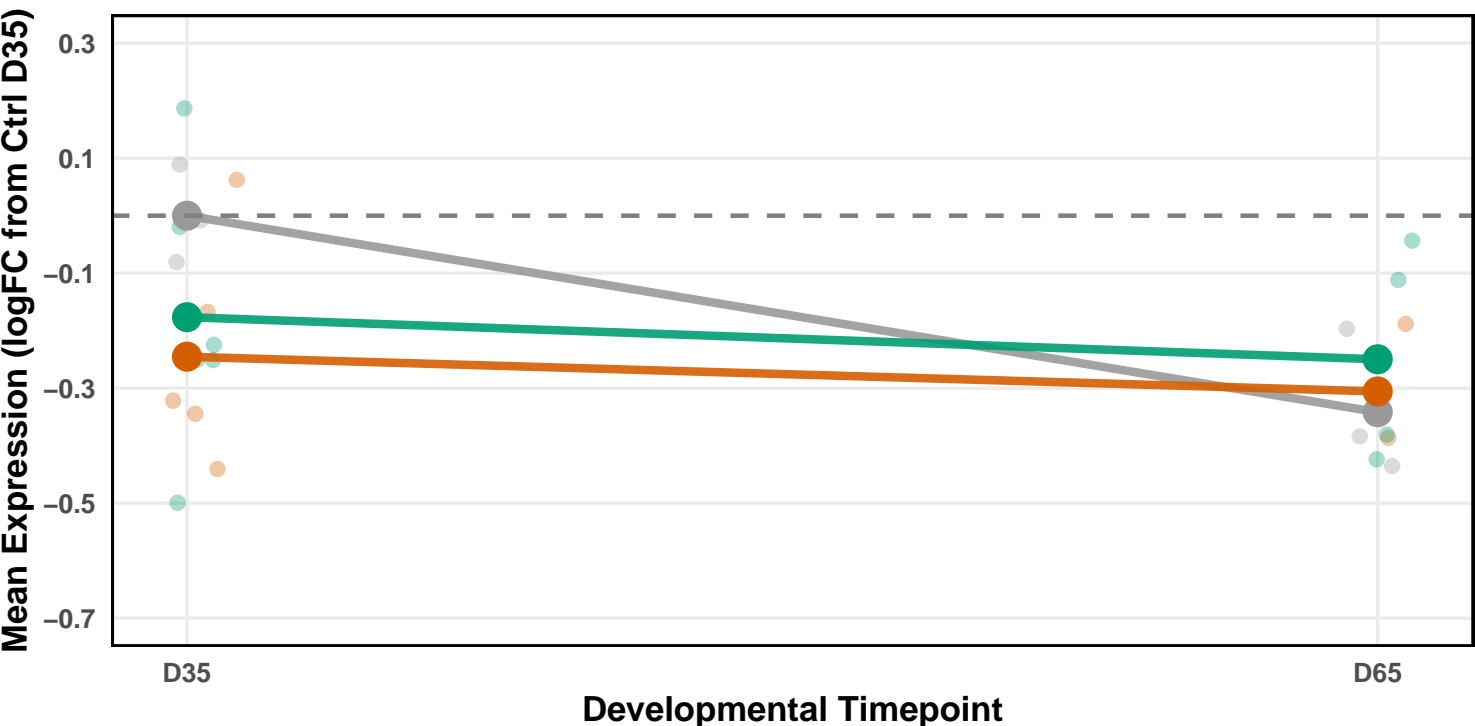
Mitochondrial Ribosome: Compensation Response

Expression trajectories (n=77 genes; points: n=3 biological replicates/group)



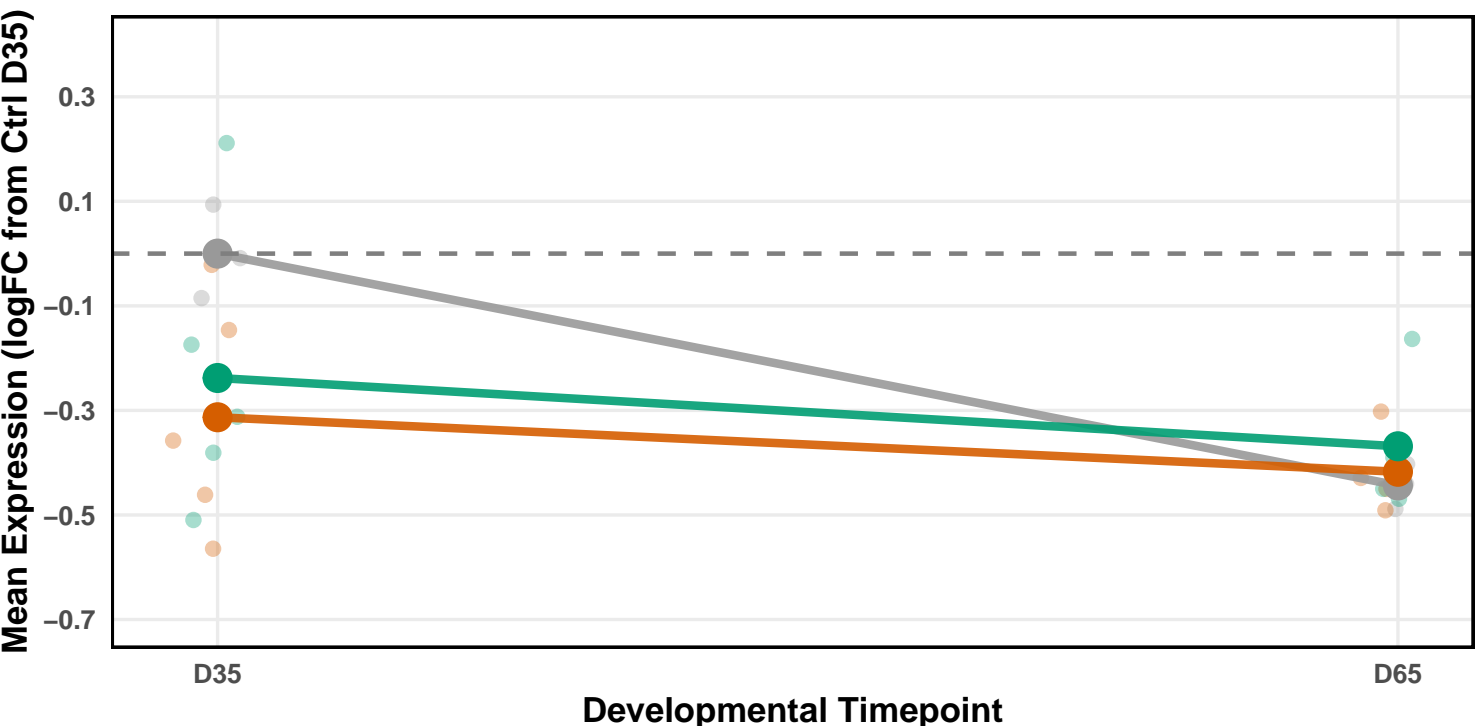
Mito Ribosome Assembly: Early Stress Recovery

Expression trajectories (n=24 genes; points: n=3 biological replicates/group)



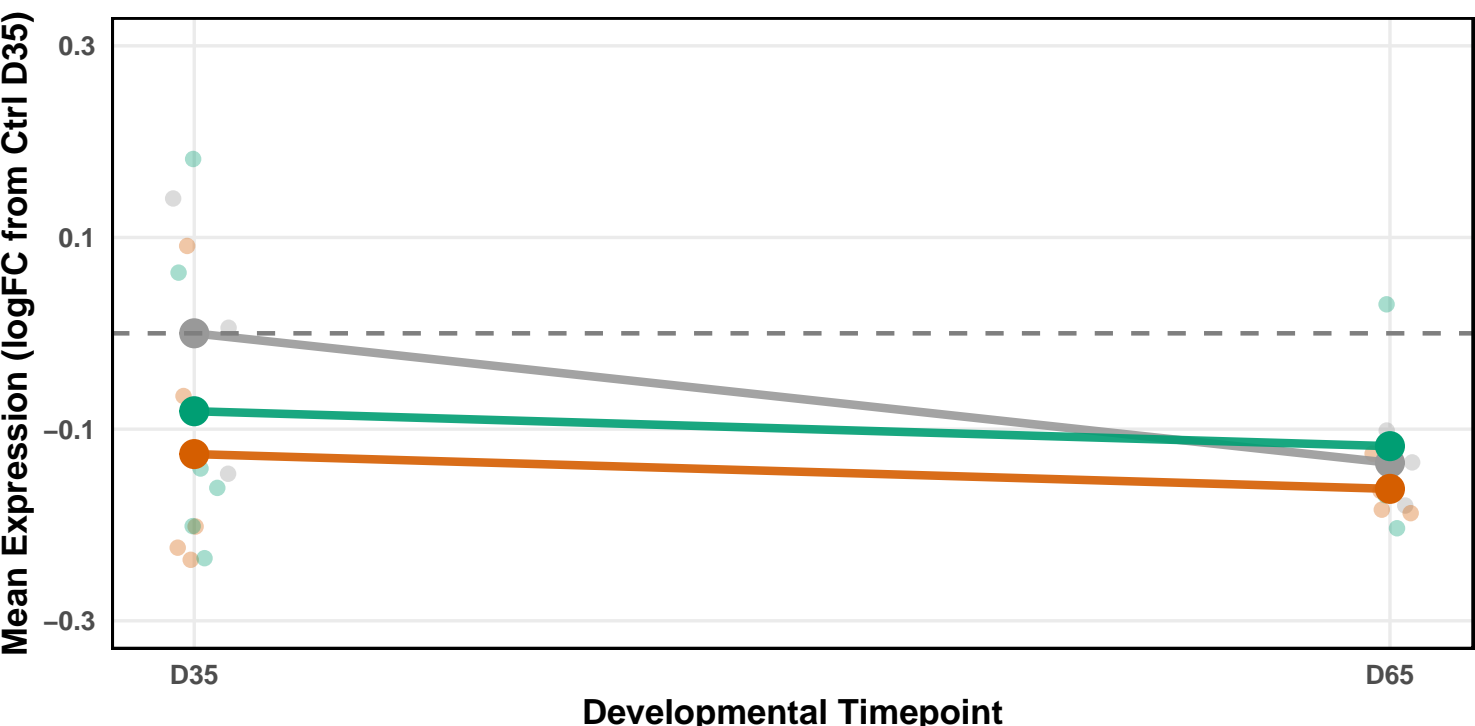
mtDNA Maintenance: Shared Compensation

Expression trajectories (n=29 genes; points: n=3 biological replicates/group)



OXPHOS: Energy Pathway Recovery

Expression trajectories (n=139 genes; points: n=3 biological replicates/group)



Genotype Control G32A mutant R403C mutant