

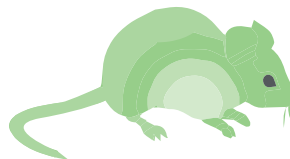
R

Gene of interest

Determine Function



Genetic Intervention



Gene 1

Gene 1 -/-



F

Genetic heterogeneity in population

Determine Drivers



Phenotype Analysis



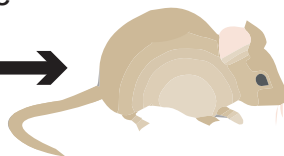
Gene 1 Gene 2 Gene 3



F

QTLs/SNP/Genes associated with Body Weight found

Phenotype Analysis



Gene 1 Gene 2 Gene 3



Population Mean Body Weight ~ 25g

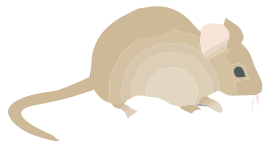
Strain X mean Weight ~ 30 g

R

Follow up Study 1

Follow up Study 2

Follow up Study 3



Gene 1 Protein Inhibitor
Mean Weight - 28g

Gene 2 Knock out
Mean Weight - 17g

Gene 3 siRNA Knockout
Mean Weight - 26g