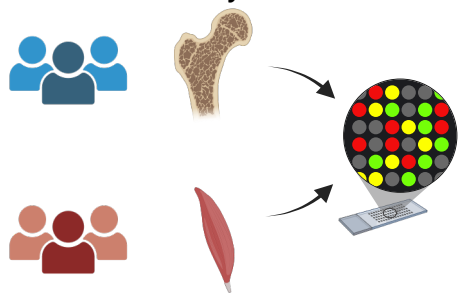
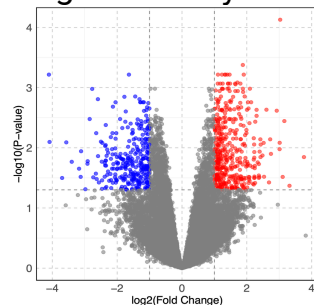


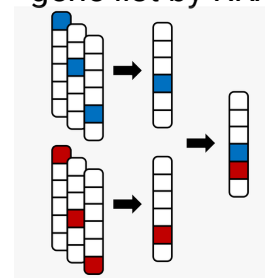
Osteoporosis & Sarcopenia
microarray datasets



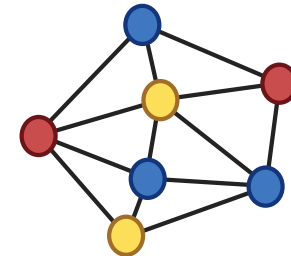
Differentially expressed
genes analysis



Combining a consensus
gene list by RRA

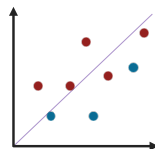


PPI & enrichment analysis

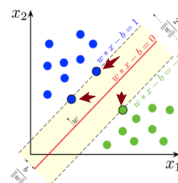


Machine learning models

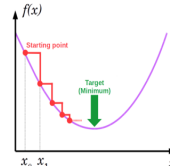
Logistic
regression



SVM



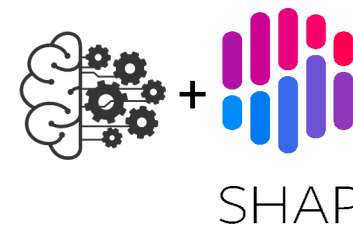
Gradient
boosting



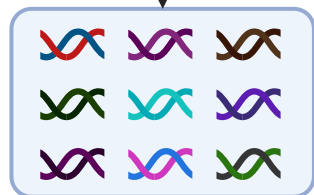
Random forest



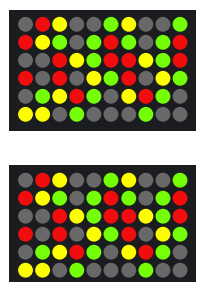
Interpretable ML &
visualization



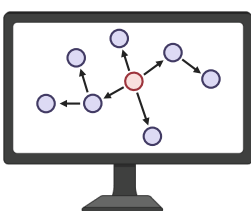
Biomarker genes



Computational validation

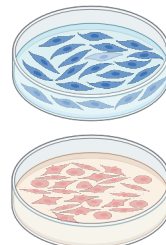


Using the expression levels of
biomarker genes as features

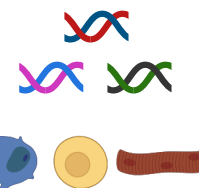
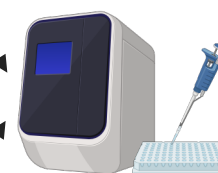


+

In vitro modeling



RT-qPCR



Experimental validation