
Motivation for CPPOP: one patient cohort, two gene expression data

$$Z_1 \hat{\beta}_1 \approx Z_2 \hat{\beta}_2$$

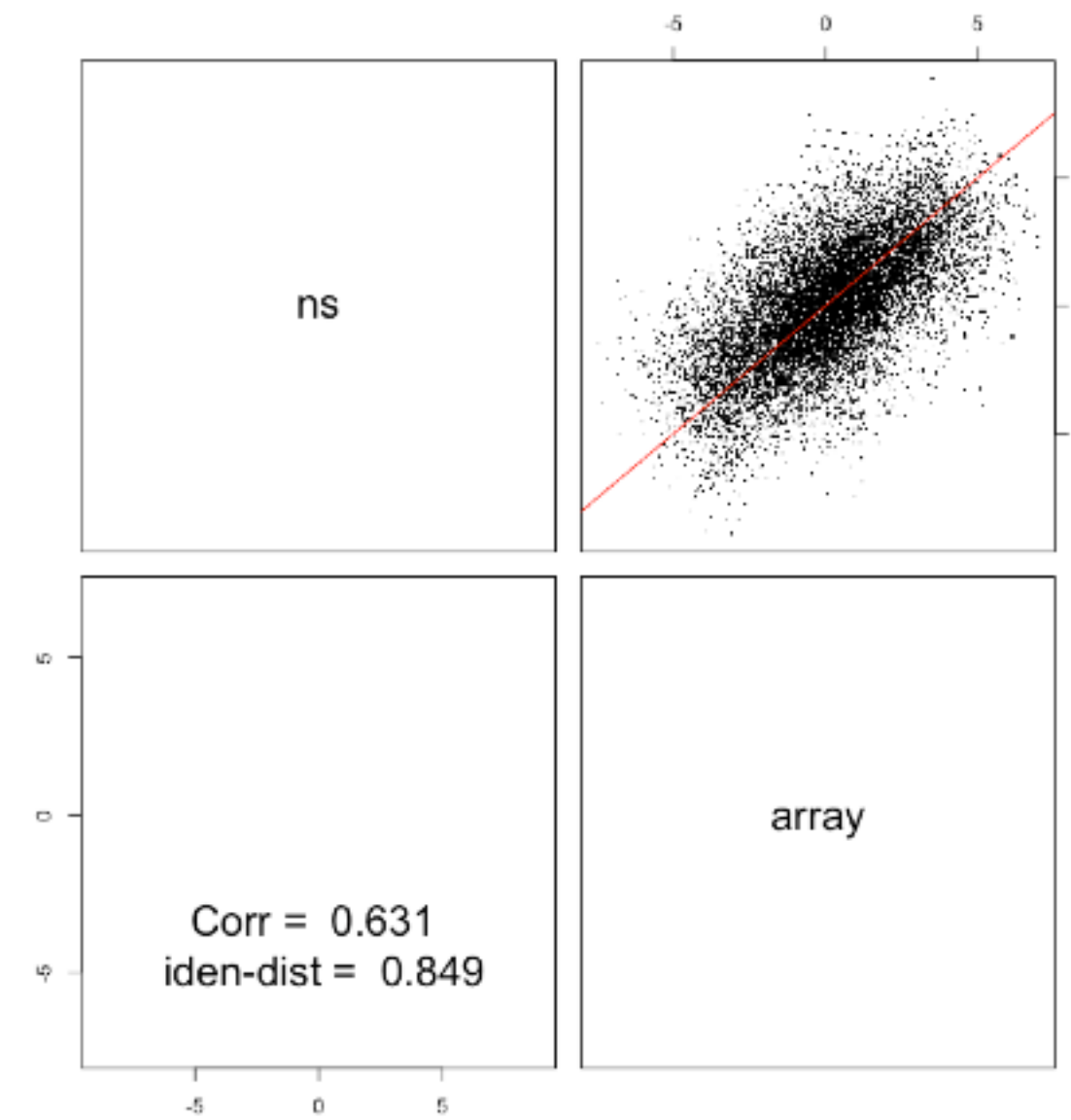
means

$$Z_1 \approx Z_2 \text{ column-wise}$$

$$\hat{\beta}_1 \approx \hat{\beta}_2 \text{ element-wise}$$

CPOP framework

1. Perform a weighted Lasso by placing higher weights on features closer to the identity line
2. Perform a Ridge regression and only retain those features with coefficients similar to each other



$$Z_1 \approx Z_2$$

$$\hat{\beta}_1 \approx \hat{\beta}_2$$

