a. DeepProfile

AML data collected over time without phenotype labels

Prior Data

Regularization
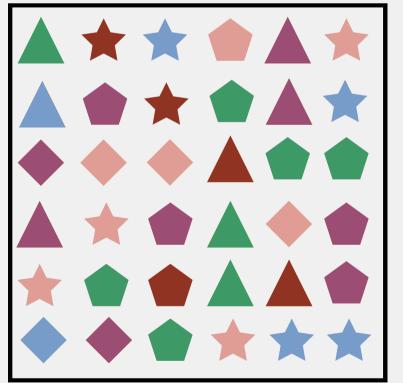
Representation Learning

VAE

Encodings

Representations

Transfer Learning

In vitro data with phenotype labels

b. MultiPLIER

Large and Hetrogeneous Collection of Human Gene Expression Data

Prior Data

Regularization

Representation Learning

PLIER

Latent Variables

Representations

Transfer Learning

Rare disease data