Symmetric non–monotonicity, asymmetric covariates

(A) Raw **(B) Signal** **(C) Cond. ComBat** **(D) Causal ComBat**

I. High Overlap

II. Moderate Overlap

III. Limited Overlap

Outcome

Covariate

Batch
0
1

— Expected Signal
-- Linear Model Fit

Batch Effect

Residual Signal Disparity