

Single-axis high-throughput data

Microarrays

Bulk RNA-seq

GWAS

- Many measurements along **one** axis
- Calibration and discovery sets **coincide**

Multi-axis high-throughput data

eQTL

Multimodal single-cell

Biobank

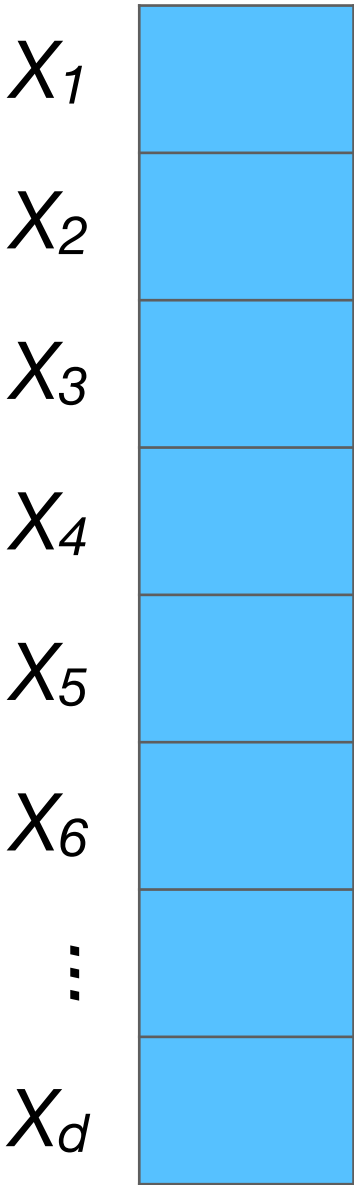
Single-cell CRISPR screen

- Many measurements along **multiple** axes
- Calibration and discovery sets **distinct**

Major shift

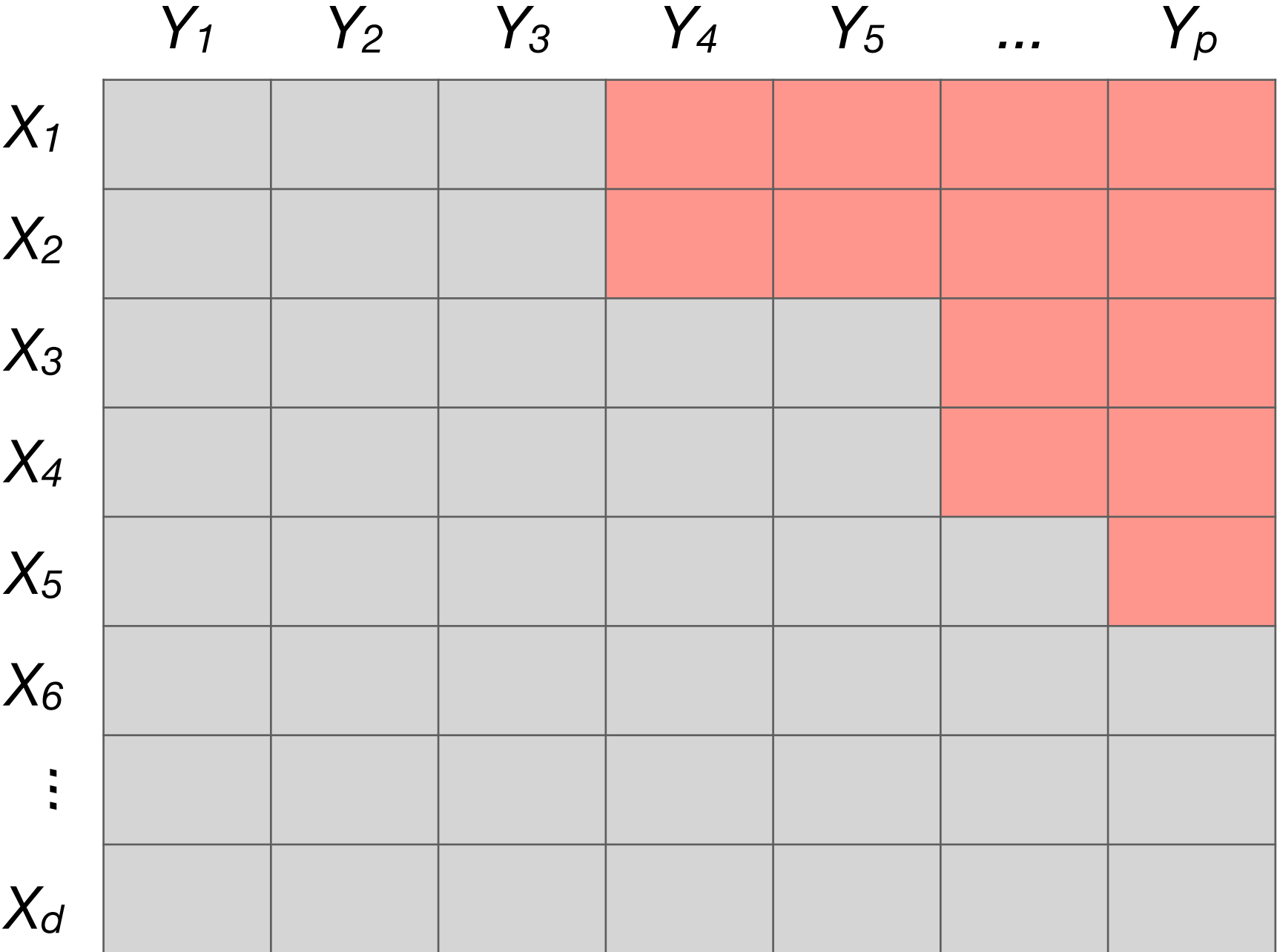


a

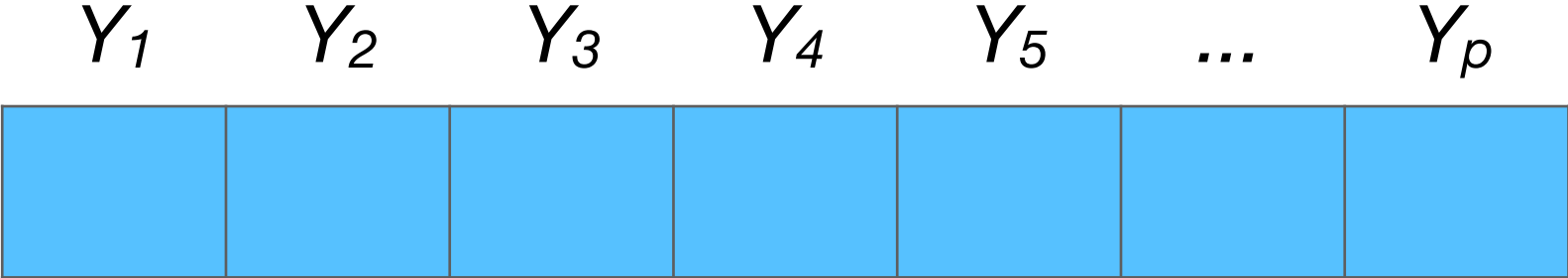


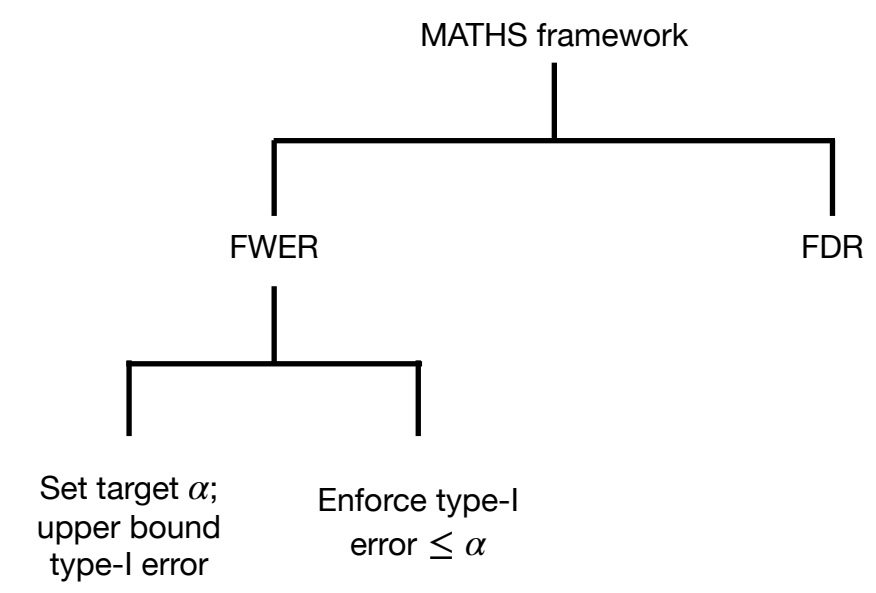
Calibration set
Discovery set
Mixed calibration/
discovery set

c



b





Input: Training data, validation data, and discovery data;
candidate testing procedures; and target type-I error.

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