The Validation Journey
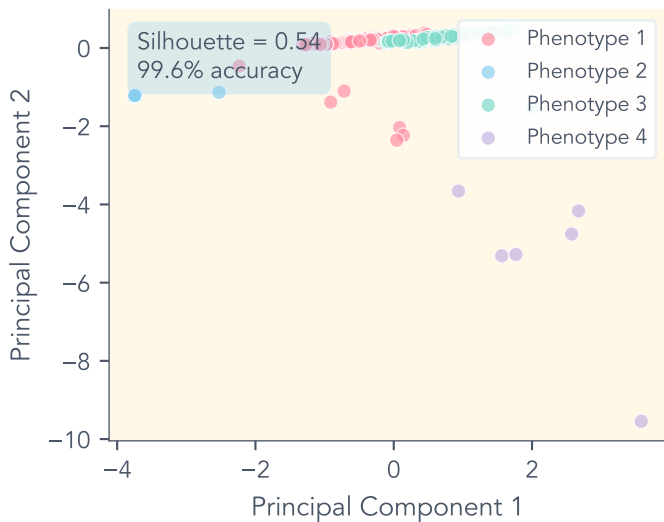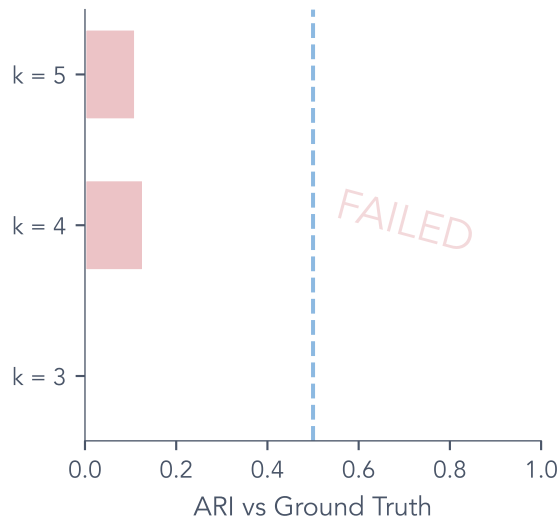## From apparent phenotypes to continuous variation
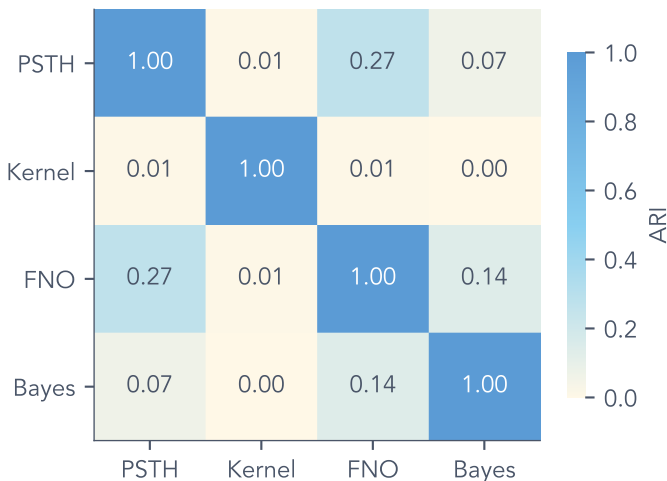
A Initial Finding: 4 Apparent Phenotypes

Silhouette = 0.54
99.6% accuracy

- Phenotype 1
- Phenotype 2
- Phenotype 3
- Phenotype 4

Principal Component 2

Principal Component 1

B Round-Trip Validation

k = 5

k = 4

k = 3

FAILED

ARI vs Ground Truth

C Method Agreement Matrix

	PSTH	Kernel	FNO	Bayes
PSTH	1.00	0.01	0.27	0.07
Kernel	0.01	1.00	0.01	0.00
FNO	0.27	0.01	1.00	0.14
Bayes	0.07	0.00	0.14	1.00

ARI

D Only 8.6% Genuine Outliers

- Outliers (22)
- Normal (234)
- Population

Individual Tracks

(seconds)