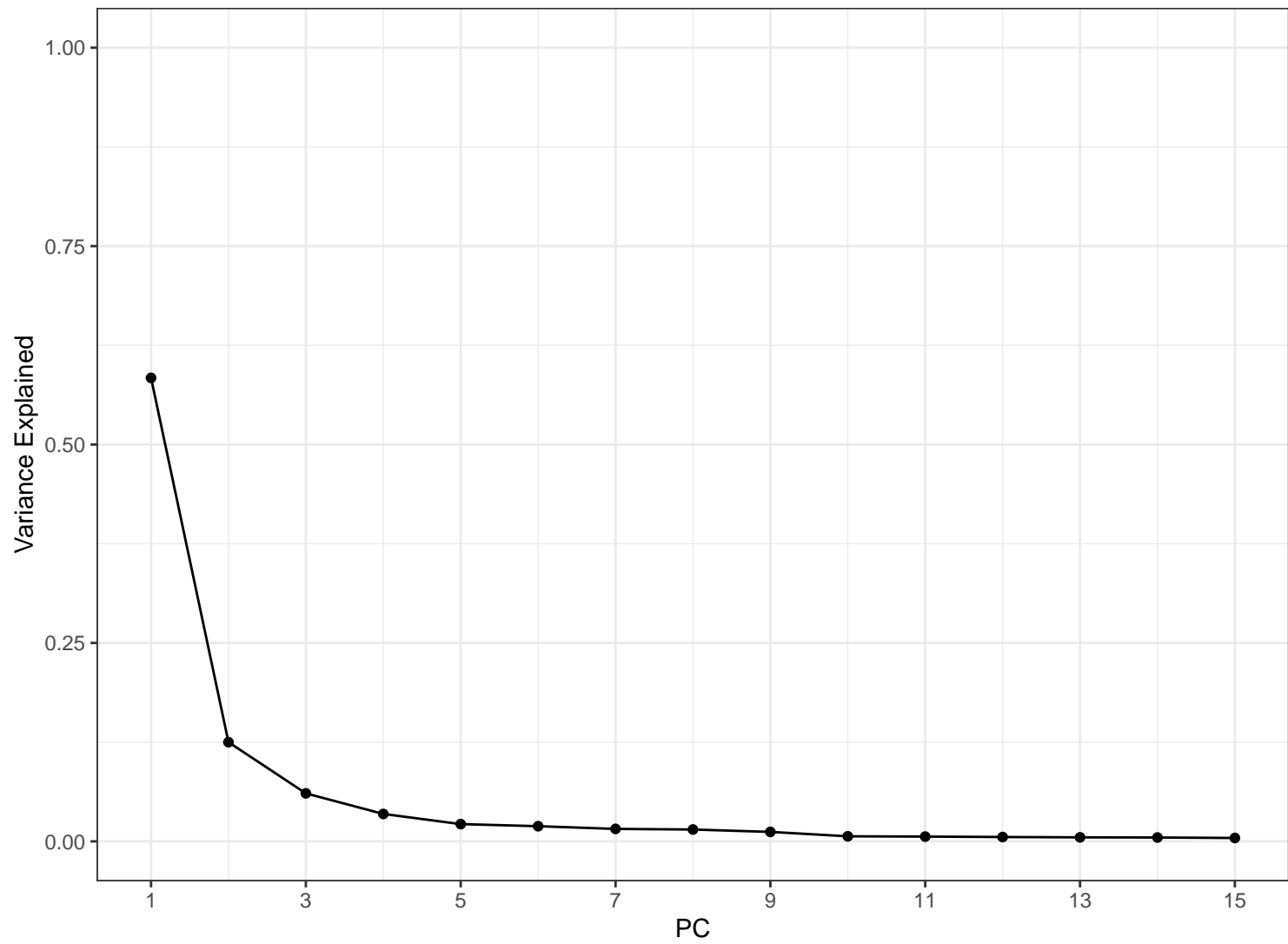


Cell Type Normalized Counts Fidelity Scree Plot

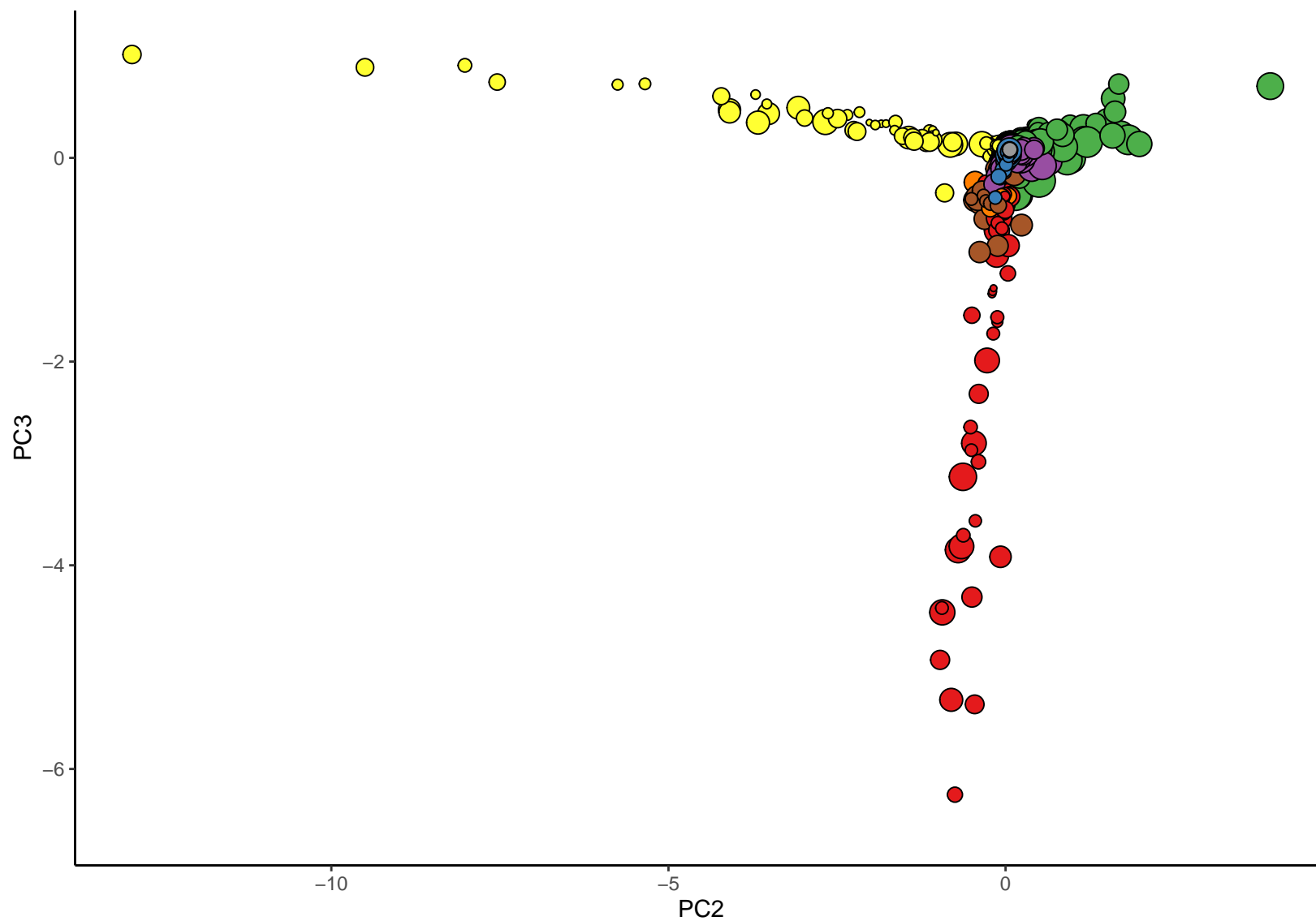
762 cell types, 30 datasets, 8,723 genes



Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Median # Unique Genes

• 300 • 1,000 • 3,000 • 6,000 • 8,000

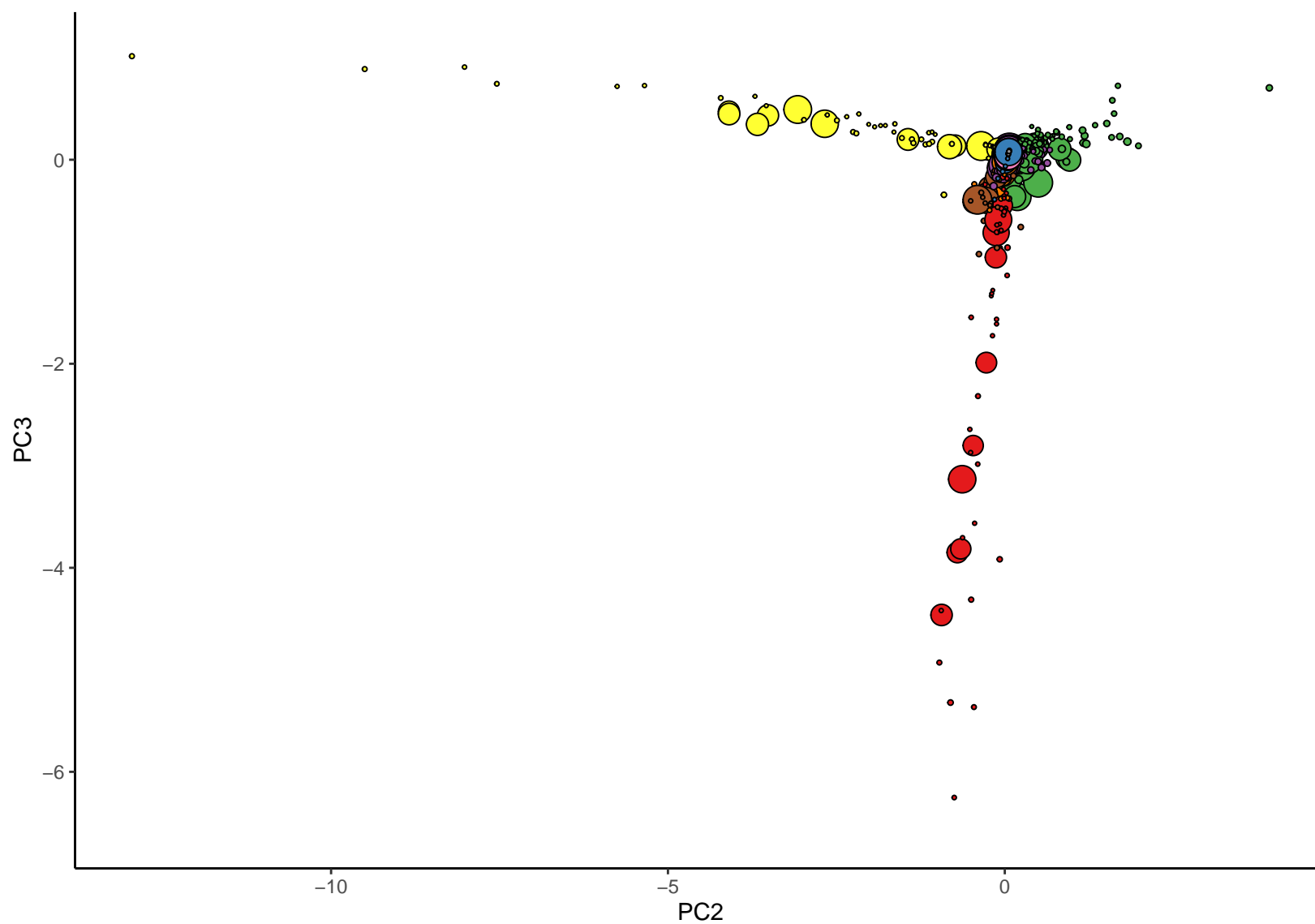
Cell Class

ASC	INH	OPC
END	MIC	PER
EXC	OG	VSMC

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Median # UMIs

• 400 • 10,000 • 50,000 • 100,000 • 1,000,000 • 2,000,000

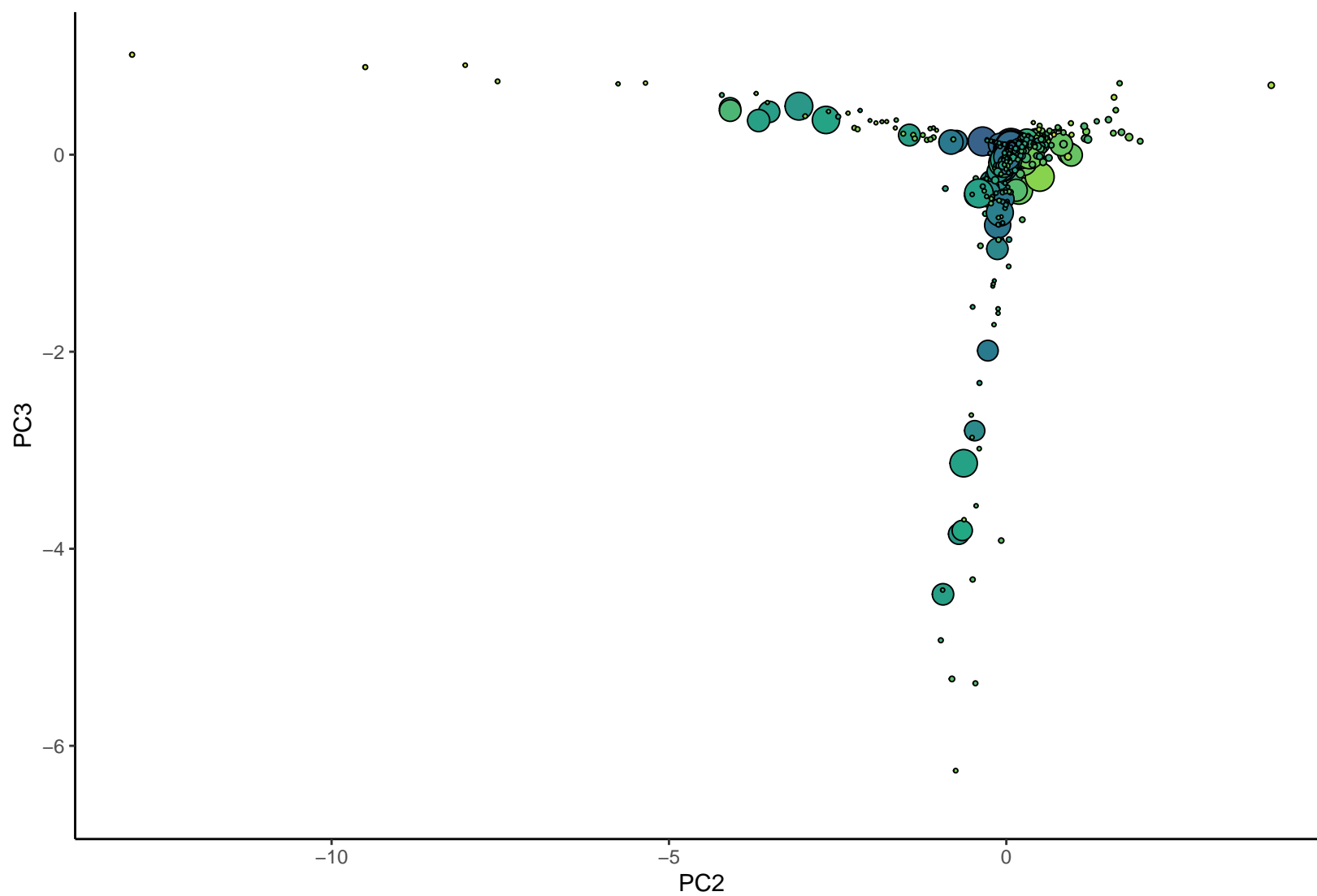
Cell Class

ASC	INH	OPC
END	MIC	PER
EXC	OG	VSMC

Cell Type Fidelity

762 cell types from 18 studies

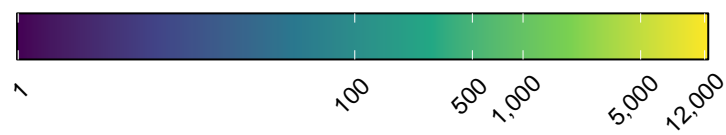
8,723 protein coding genes



Median # UMIs

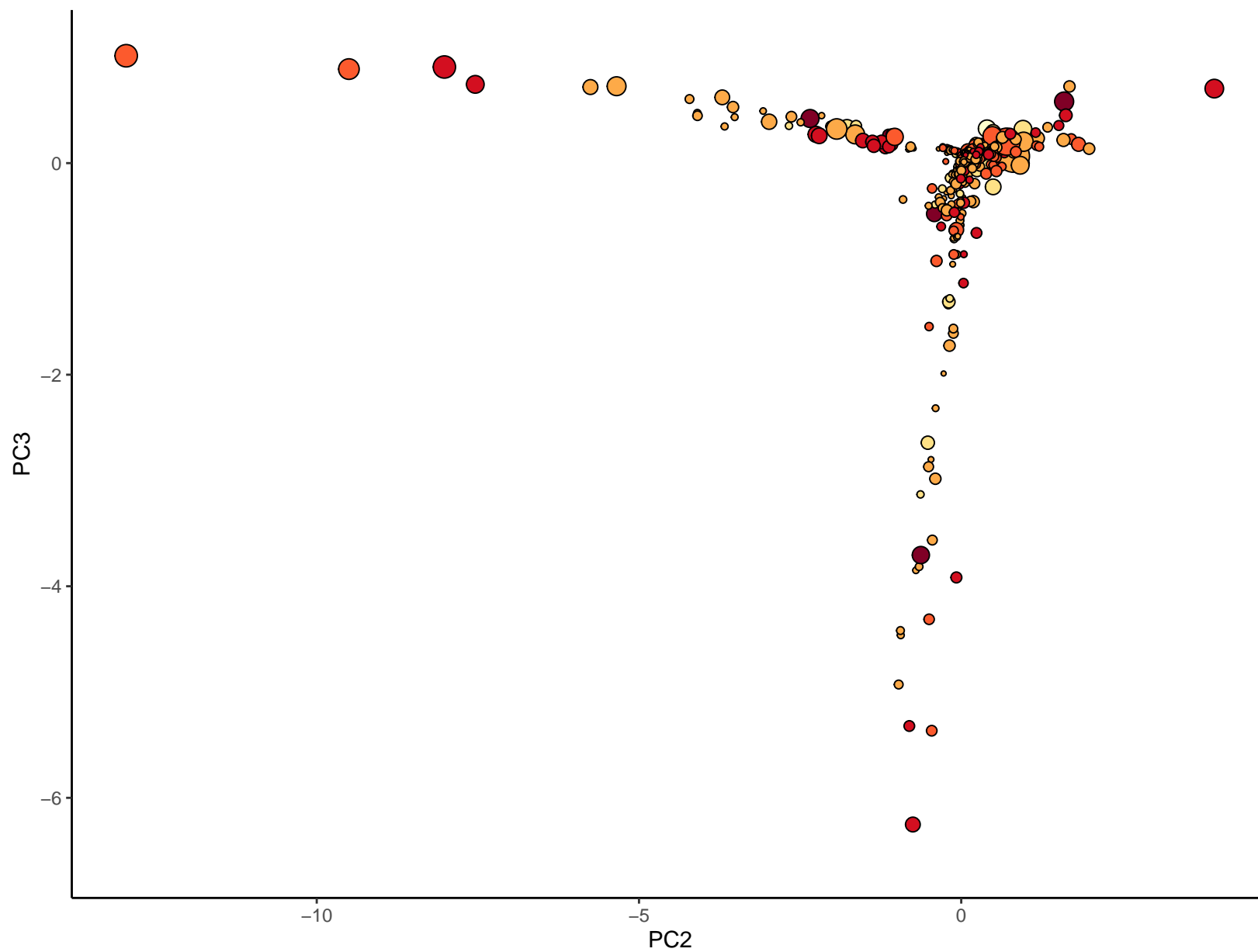
• 400 • 10,000 • 50,000 • 100,000 • 1,000,000 • 2,000,000

Nuclei



Cell Type Fidelity

762 cell types from 18 studies
8,723 protein coding genes

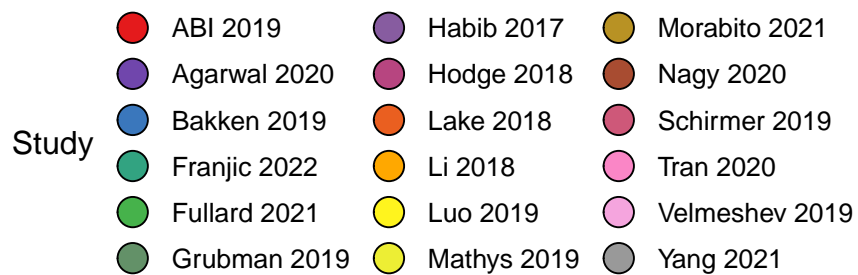


Nuclei

• 1 • 100 • 500 • 1,000 • 5,000 • 12,000

Year ○ 2017 ○ 2018 ○ 2019 ○ 2020 ○ 2021 ○ 2022

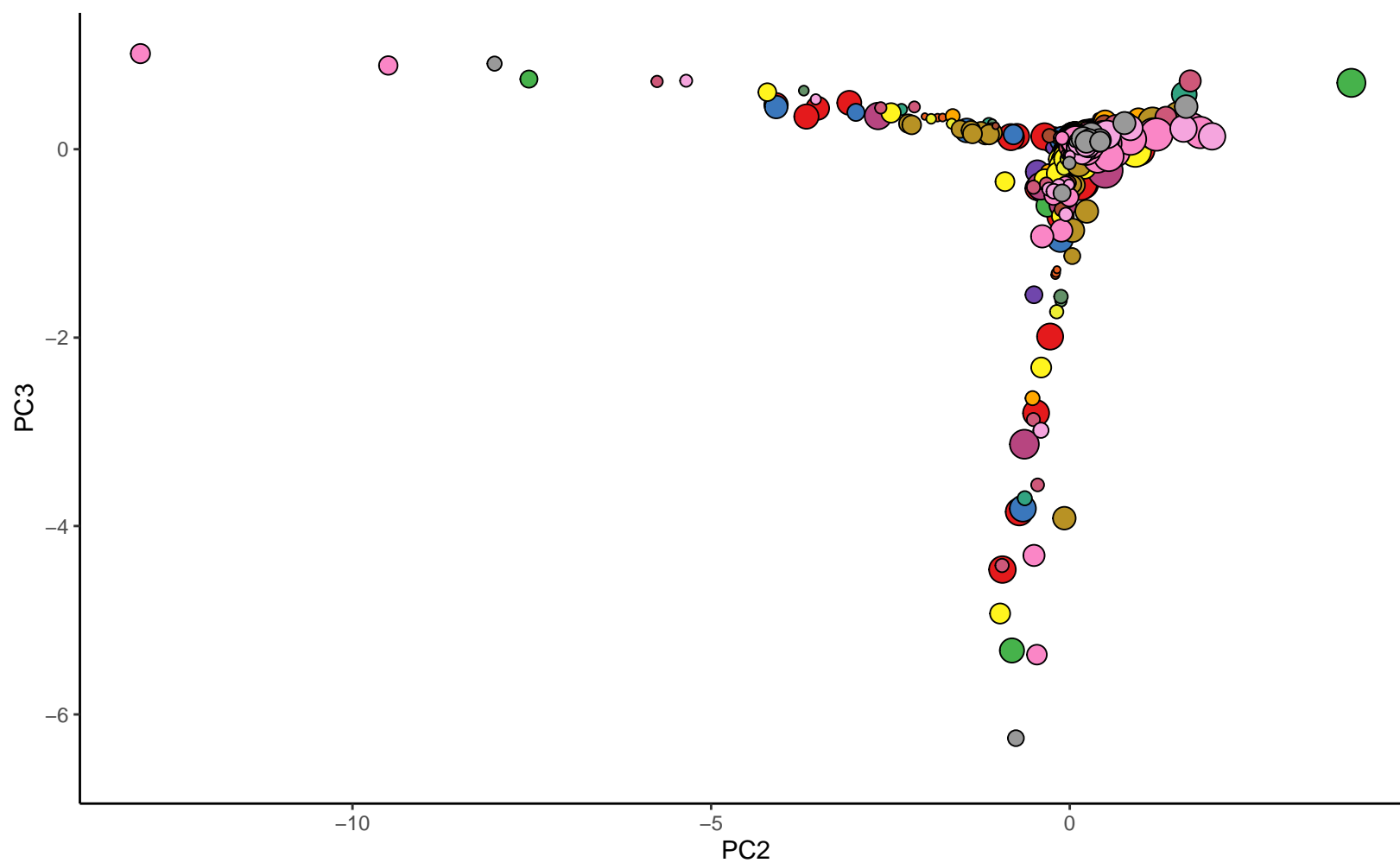
762 cell types from 18 studies
8,723 protein coding genes



Cell Type Fidelity

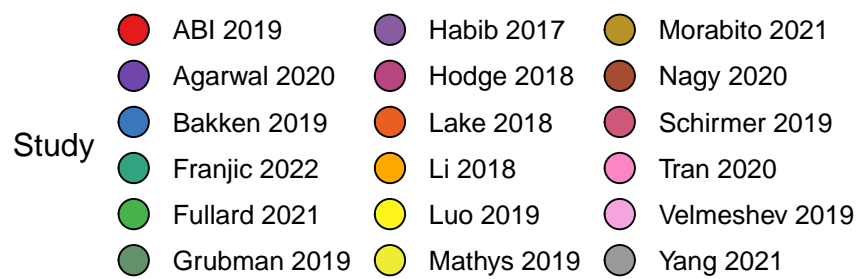
762 cell types from 18 studies

8,723 protein coding genes



Median # Unique Genes

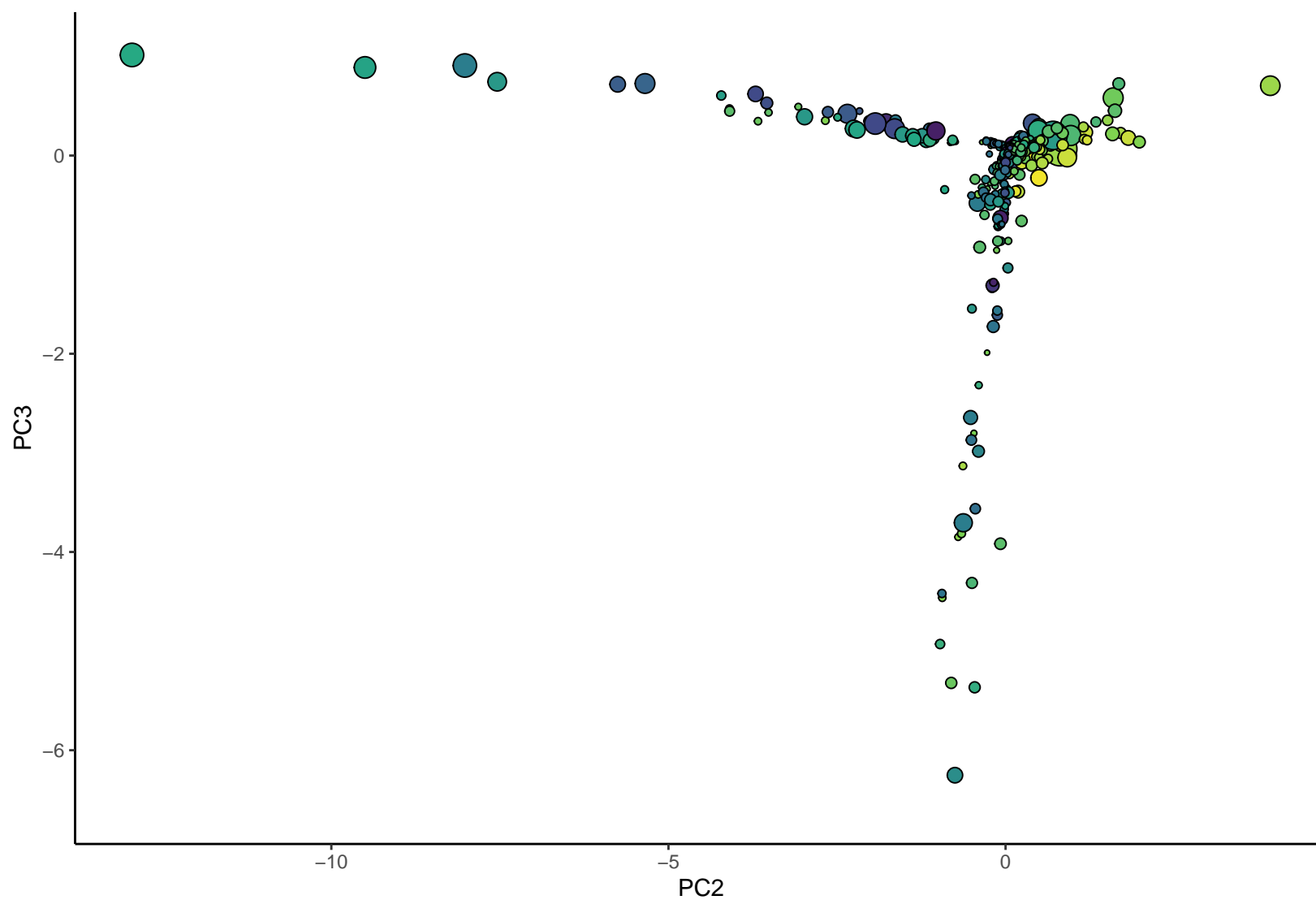
• 300 • 1,000 • 3,000 • 6,000 • 8,000



Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

• 1 • 100 • 500 • 1,000 • 5,000 • 12,000

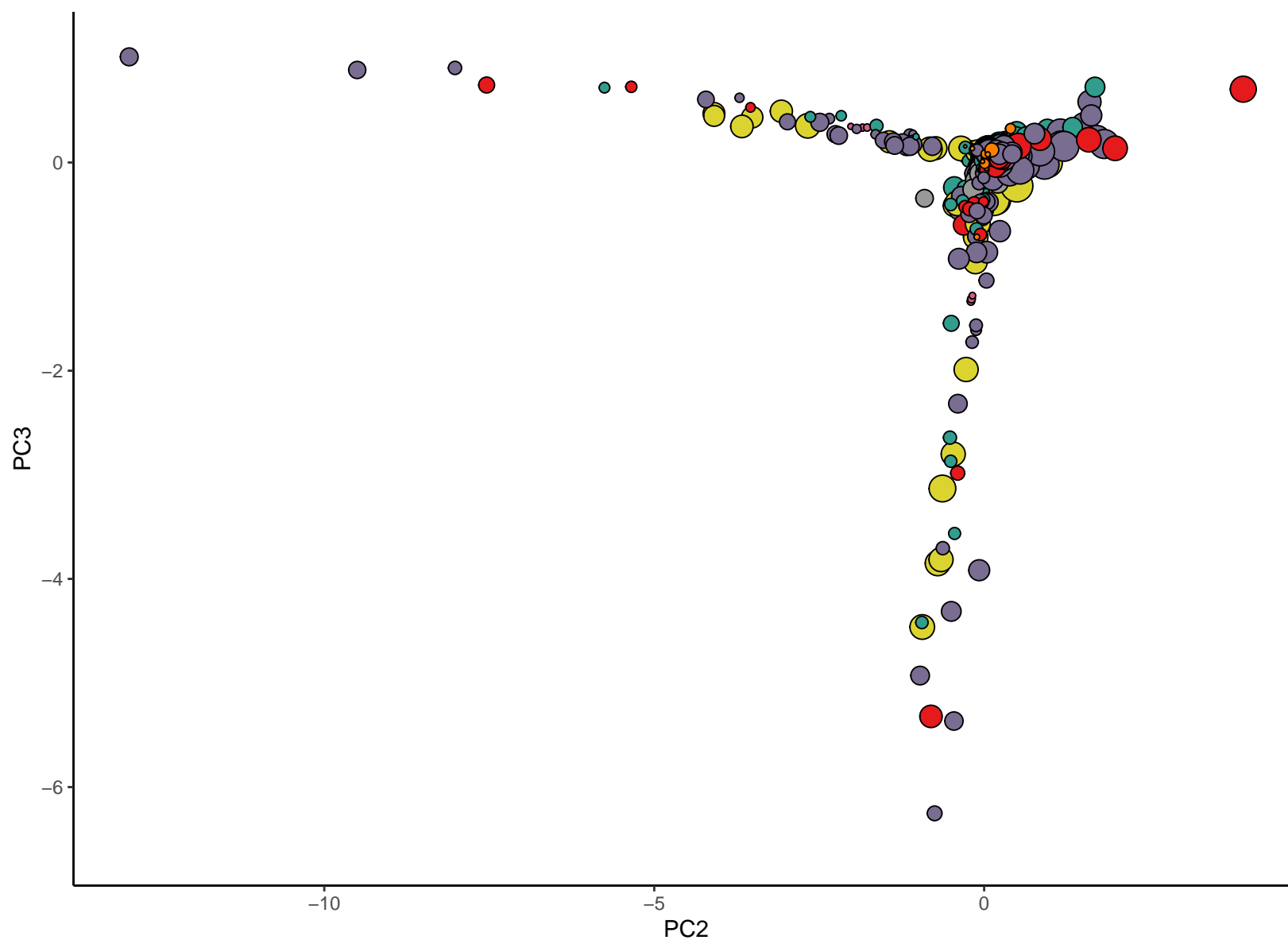
Median # Unique Genes



Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Median # Unique Genes

• 300 • 1,000 • 3,000 • 6,000 • 8,000

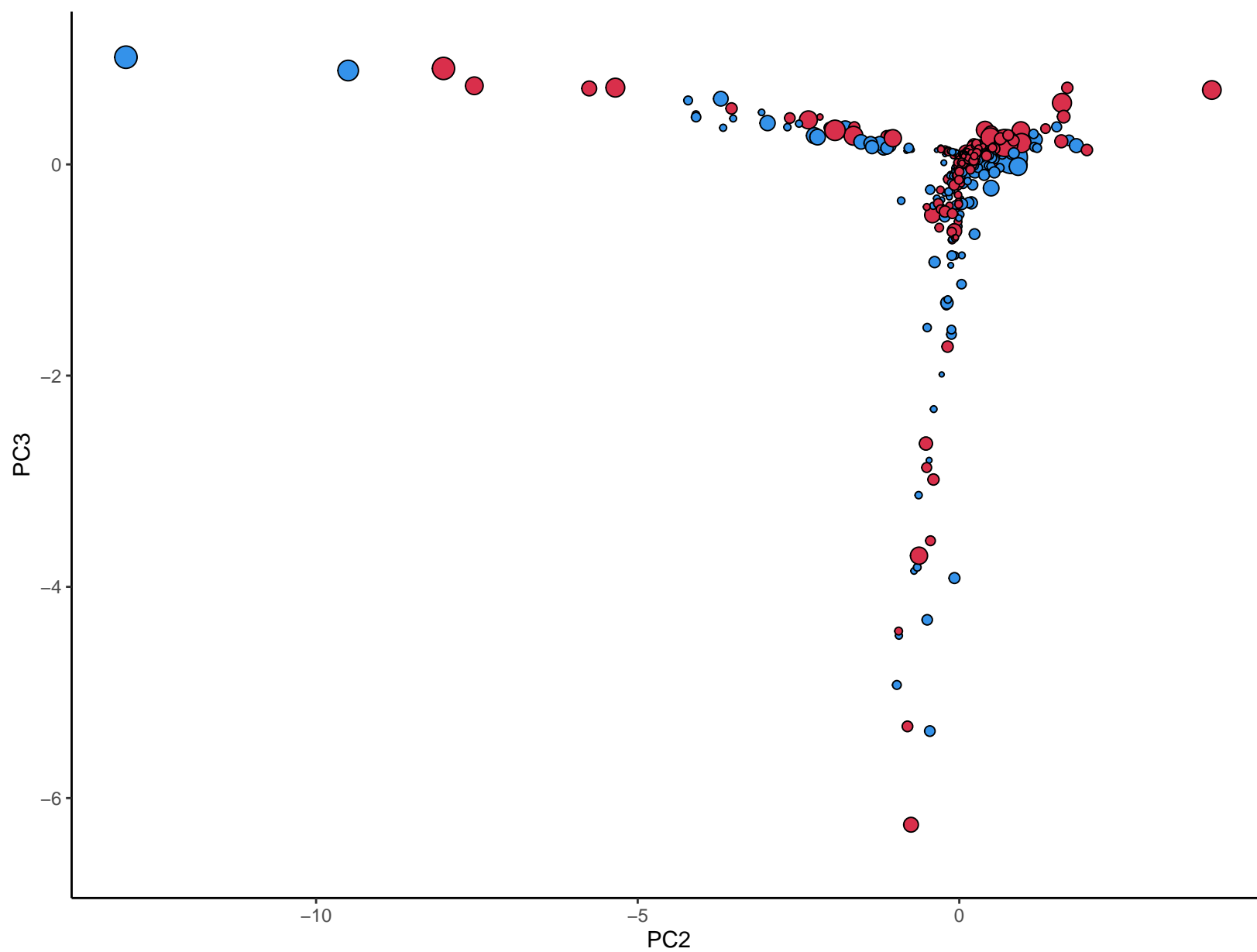
Platform

10x Chromium	10x Chromium V3	SMART-Seq v4	snmCAT-seq
10x Chromium V2	DroNc-seq	snDrop-seq	

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

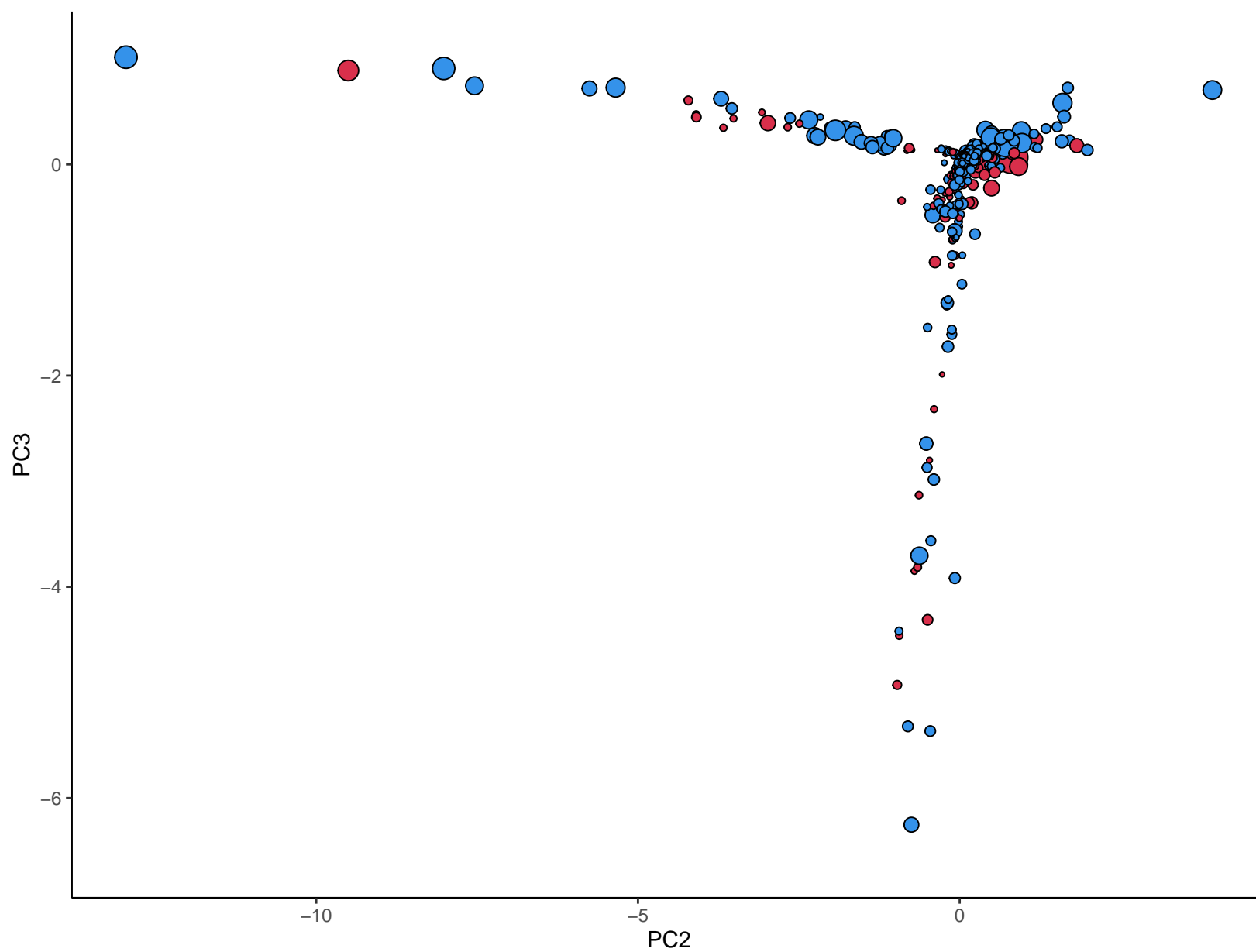
• 1 • 100 • 500 • 1,000 • 5,000 • 12,000

FACS Y N

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

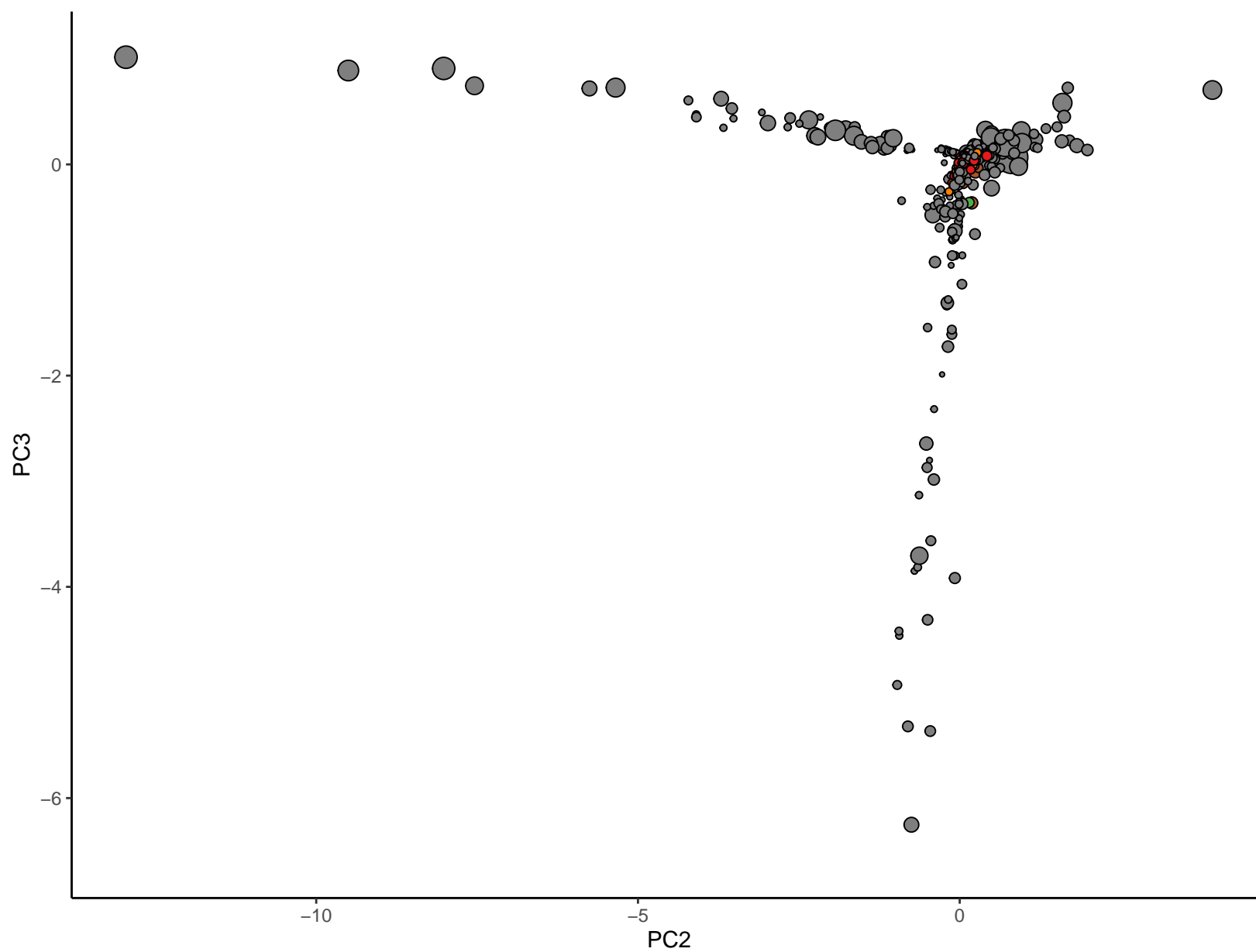
• 1 • 100 • 500 • 1,000 • 5,000 • 12,000

Unbiased Sampling Y N

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

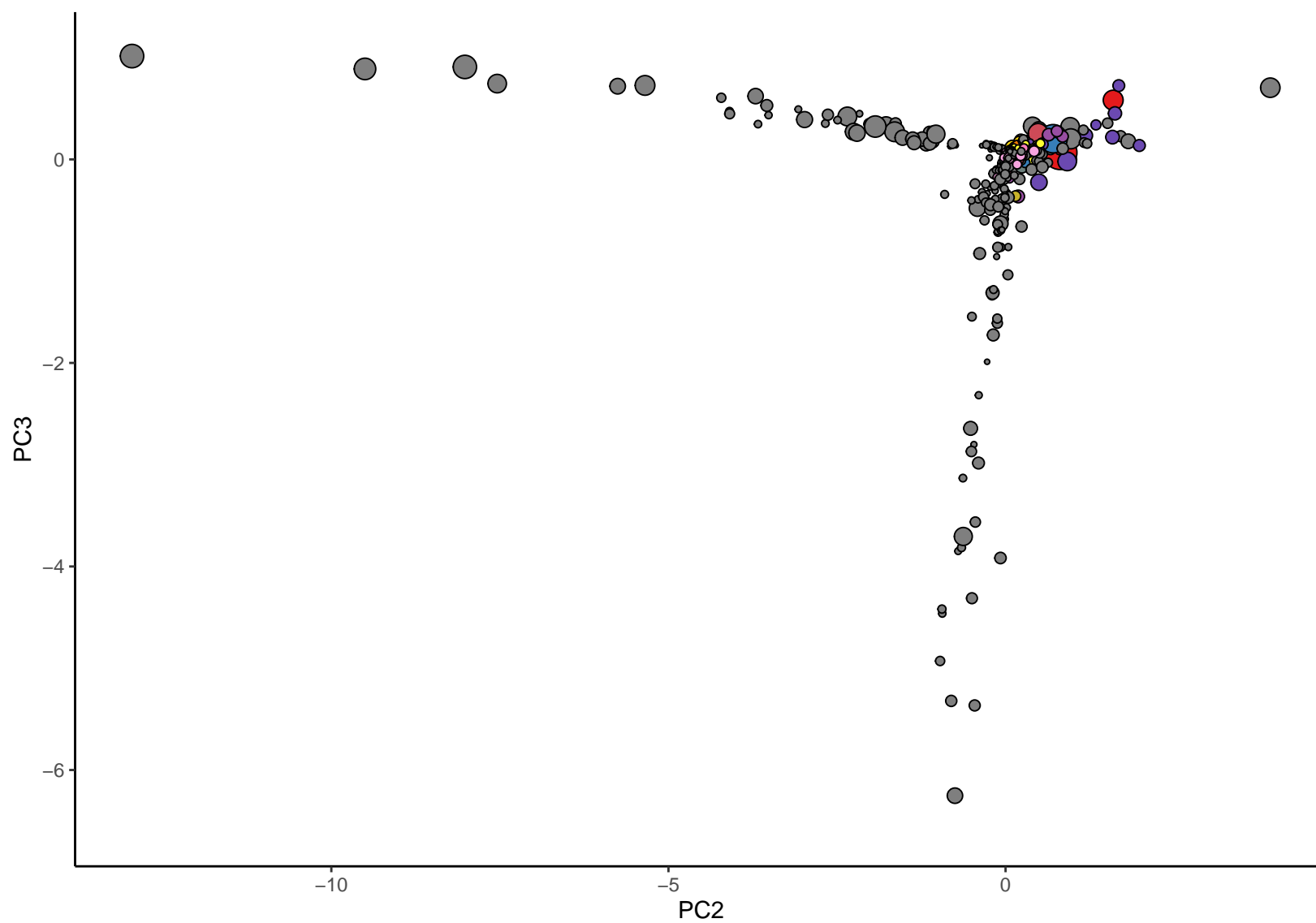
• 1 • 100 • 500 • 1,000 • 5,000 • 12,000

Subtype CGE FEZF2 MGE RORB NA

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

• 1 • 100 • 500 • 1,000 • 5,000 • 12,000

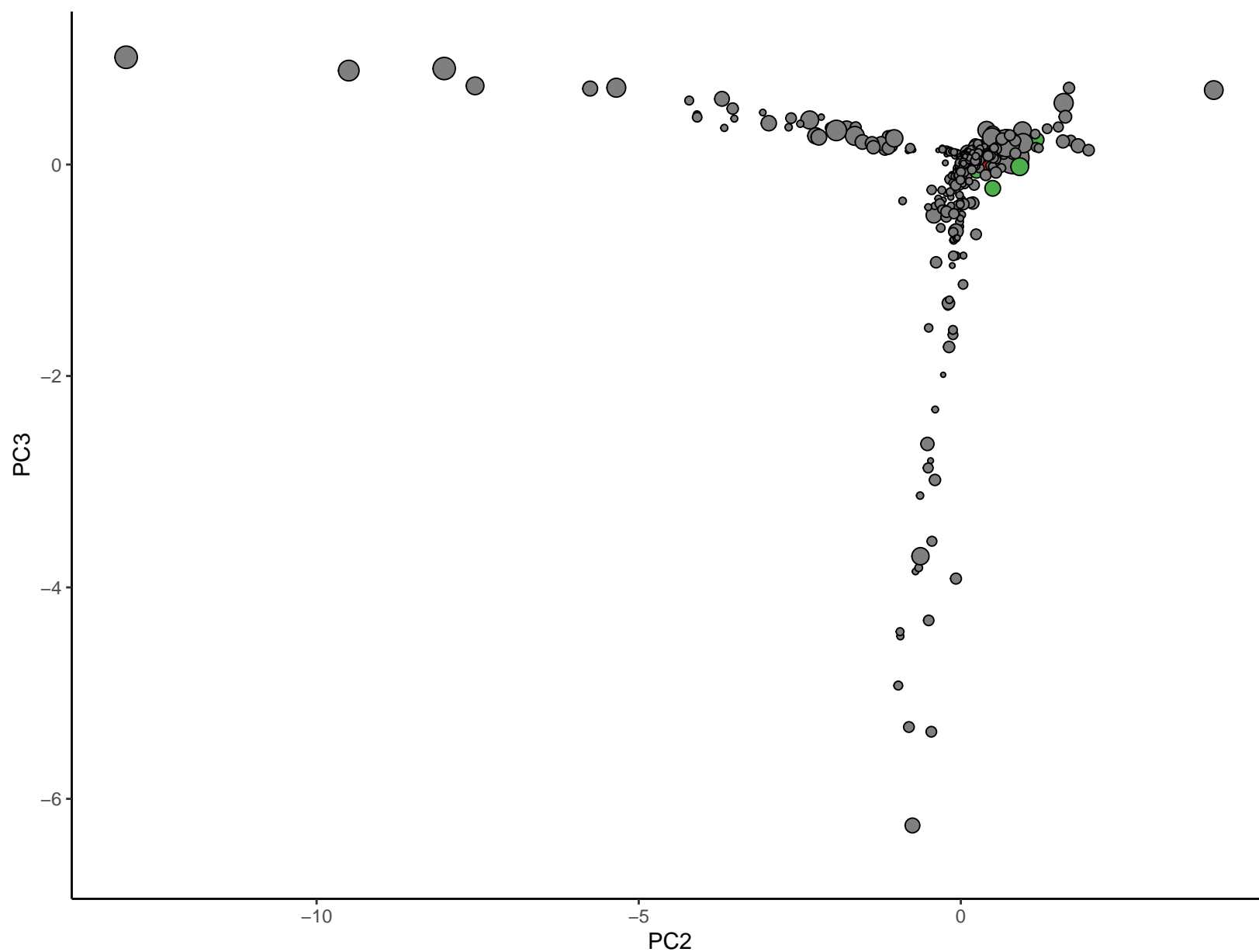
Subtype

L2	L3	L4	L5	LAMP5/PAX6	VIP
L2-3	L3-4	L4-5	L5-6	PVALB	NA
L2-4	L3-5	L4-6	L6	SST	

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

• 0 • 0 • 100 • 300 • 12,400

Hodge 2018 Subtype



Exc Deep layers



Exc Superficial layers



GABAergic ADARB2



GABAergic LHX6

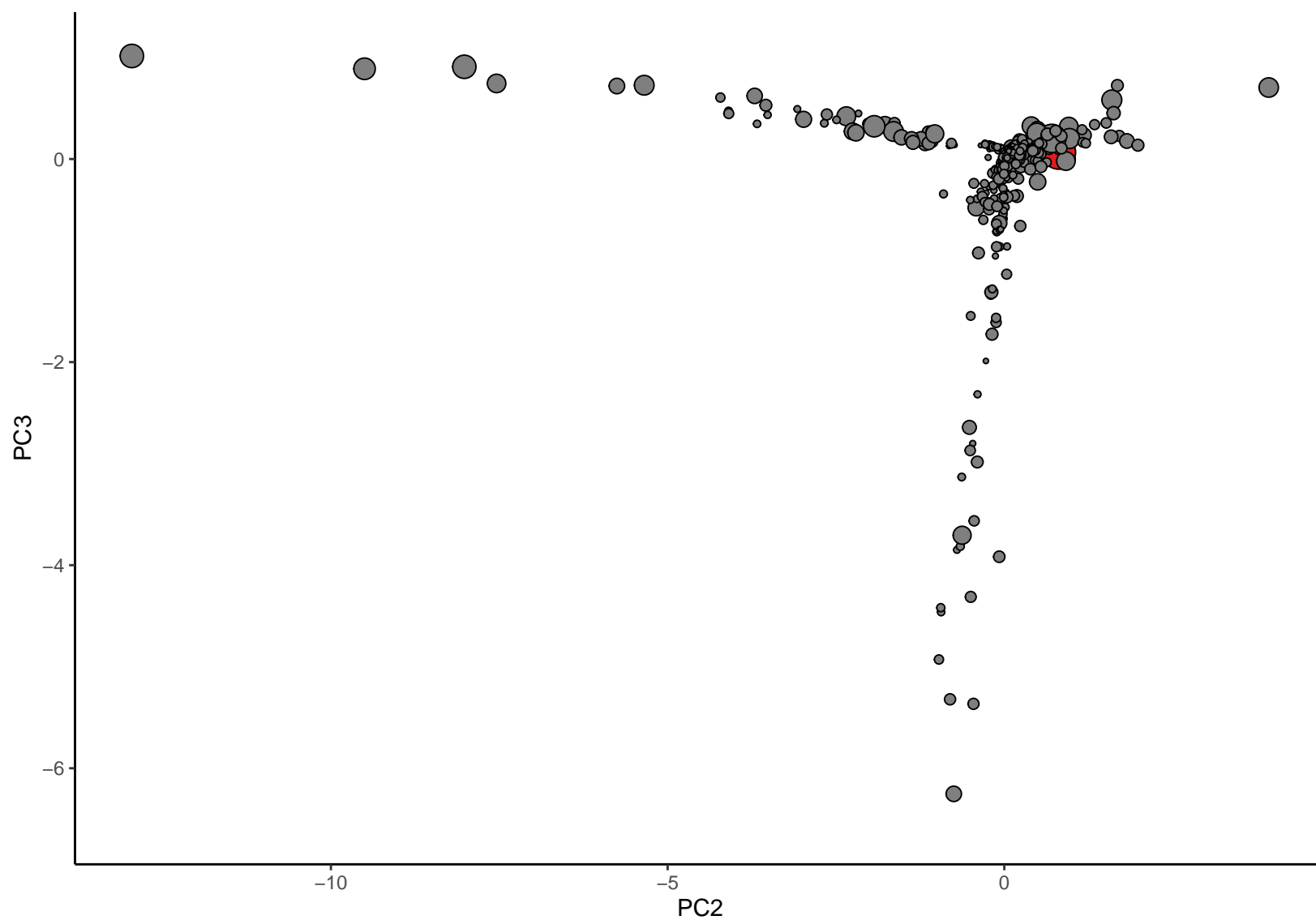


NA

Cell Type Fidelity

762 cell types from 18 studies

8,723 protein coding genes



Nuclei

• 0 • 0 • 100 • 300 ● 12,400

Bakken 2019 Subtype

● L2/3 IT	● L5/6 NP	● L6 IT Car3	● Pvalb	● Sst Chodl
● L5 ET	● L6 CT	● L6b	● Sncg	● Vip
● L5 IT	● L6 IT	● Lamp5	● Sst	● NA