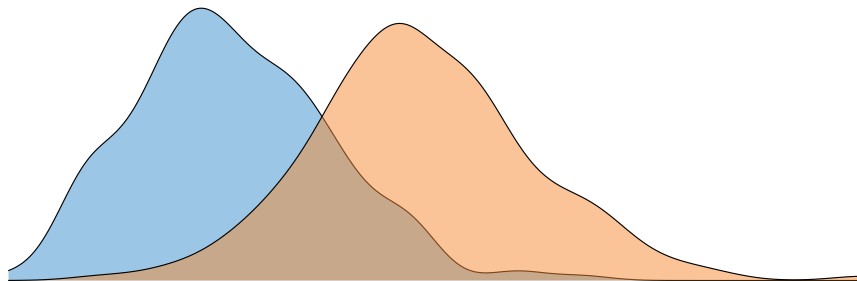




Density

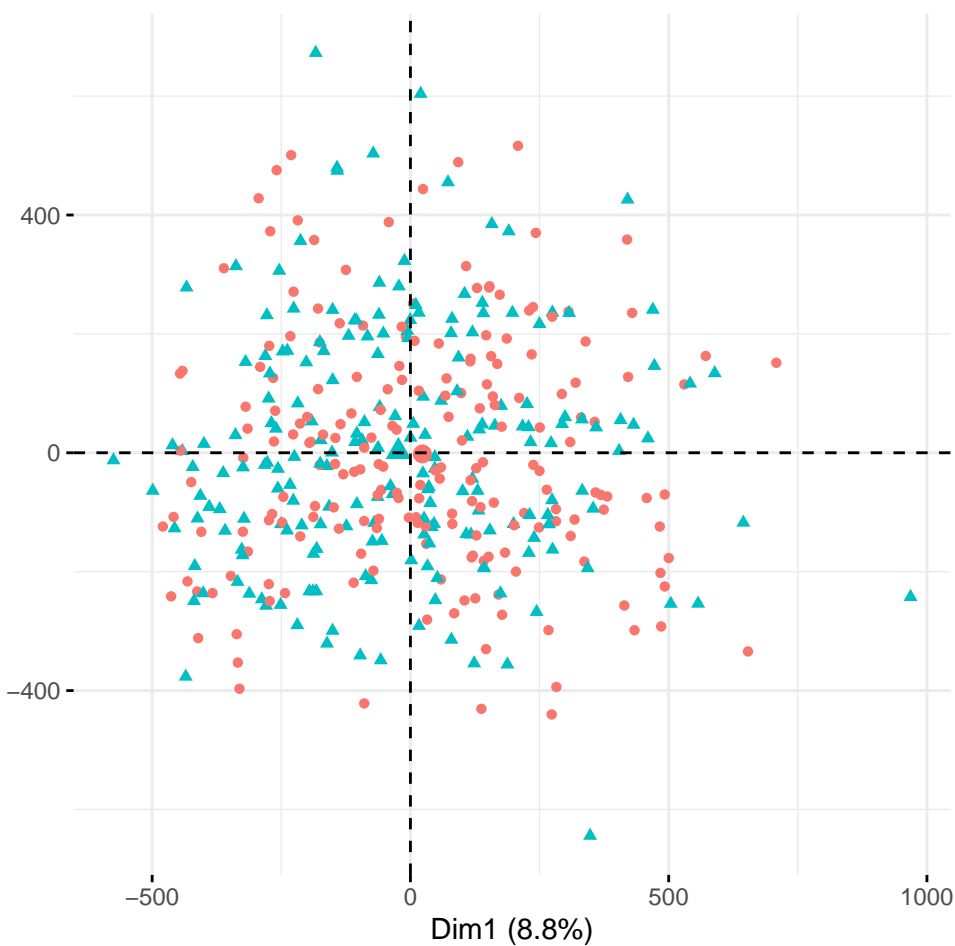


Group

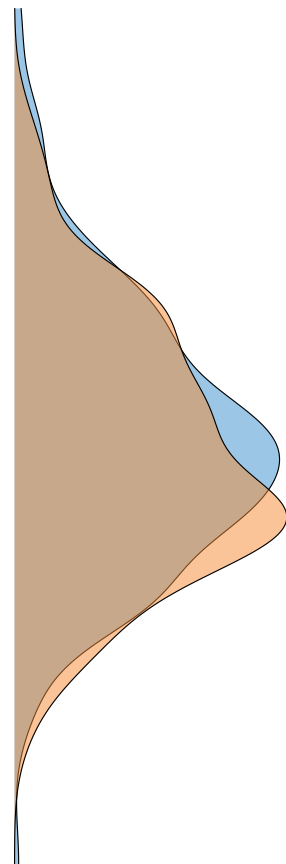
● dex  
▲ veh

PCA before correction

Dim2 (5.4%)



Density



## Summary table of P-values for PCs before batch correction

|            | P_Plate | P_Slide | P_Array | P_DEX   | P_Sex   |
|------------|---------|---------|---------|---------|---------|
| PC1.Pr..F. | 0.54207 | 0.94143 | 0.73818 | 0.06788 | 0.21251 |
| PC2.Pr..F. | 0.00000 | 0.00000 | 0.00000 | 0.84504 | 0.46059 |
| PC3.Pr..F. | 0.00000 | 0.00000 | 0.00001 | 0.75903 | 0.91300 |
| PC4.Pr..F. | 0.97917 | 0.00001 | 0.00147 | 0.97509 | 0.17027 |
| PC5.Pr..F. | 0.00000 | 0.00000 | 0.16026 | 0.92386 | 0.10236 |
| PC6.Pr..F. | 0.00014 | 0.00000 | 0.07470 | 0.92649 | 0.26453 |

# ANOVA results for Plate before batch correction

\$PC1

Analysis of Variance Table

Response: pc

|                         | Df  | Sum Sq   | Mean Sq | F value | Pr(>F) |
|-------------------------|-----|----------|---------|---------|--------|
| Prin.comp\$Sample_Plate | 4   | 203341   | 50835   | 0.7748  | 0.5421 |
| Residuals               | 398 | 26113161 | 65611   |         |        |

\$PC2

Analysis of Variance Table

Response: pc

|                         | Df  | Sum Sq   | Mean Sq | F value | Pr(>F)        |
|-------------------------|-----|----------|---------|---------|---------------|
| Prin.comp\$Sample_Plate | 4   | 1844092  | 461023  | 12.954  | 6.327e-10 *** |
| Residuals               | 398 | 14163944 | 35588   |         |               |

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

\$PC3

Analysis of Variance Table

Response: pc

|                         | Df  | Sum Sq  | Mean Sq | F value | Pr(>F)        |
|-------------------------|-----|---------|---------|---------|---------------|
| Prin.comp\$Sample_Plate | 4   | 770089  | 192522  | 11.444  | 8.398e-09 *** |
| Residuals               | 398 | 6695598 | 16823   |         |               |

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

\$PC4

Analysis of Variance Table

Response: pc

|                         | Df  | Sum Sq  | Mean Sq | F value | Pr(>F) |
|-------------------------|-----|---------|---------|---------|--------|
| Prin.comp\$Sample_Plate | 4   | 7546    | 1886.6  | 0.1095  | 0.9792 |
| Residuals               | 398 | 6856884 | 17228.4 |         |        |

\$PC5

Analysis of Variance Table

Response: pc

|                         | Df  | Sum Sq  | Mean Sq | F value | Pr(>F)        |
|-------------------------|-----|---------|---------|---------|---------------|
| Prin.comp\$Sample_Plate | 4   | 452102  | 113026  | 13.021  | 5.647e-10 *** |
| Residuals               | 398 | 3454663 | 8680    |         |               |

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

\$PC6

Analysis of Variance Table

Response: pc

|                         | Df | Sum Sq | Mean Sq | F value | Pr(>F)        |
|-------------------------|----|--------|---------|---------|---------------|
| Prin.comp\$Sample_Plate | 4  | 197778 | 49445   | 5.8253  | 0.0001428 *** |

# ANOVA results for Sample Group before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group 1    218130    218130    3.3516 0.06788 .
Residuals              401  26098372    65083
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

$PC2
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group 1     1527     1527    0.0383  0.845
Residuals              401 16006508    39916

$PC3
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group 1     1754     1753.9    0.0942  0.759
Residuals              401  7463933    18613.3

$PC4
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group 1        17        16.7    0.001  0.9751
Residuals              401  6864414    17118.2

$PC5
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group 1         89         89.1    0.0091  0.9239
Residuals              401  3906676    9742.3

$PC6
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group 1         76         75.9    0.0085  0.9265
Residuals              401 3570107    8903.0
```