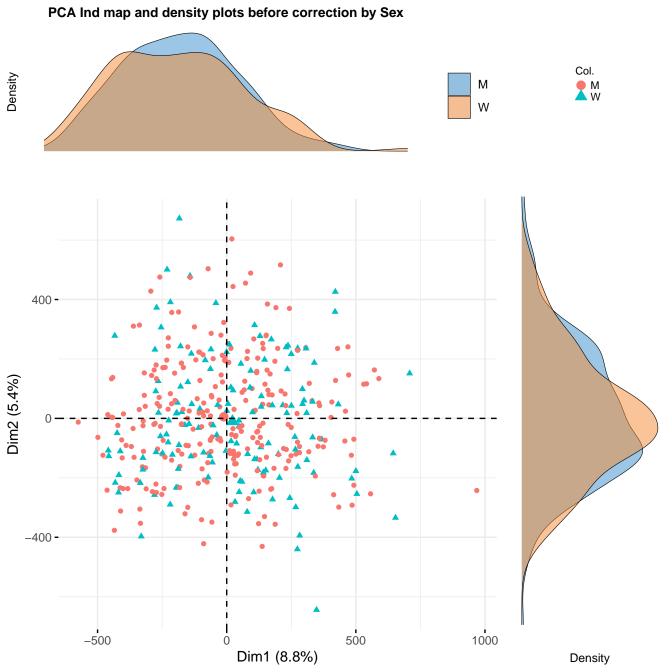


PCA Ind map and density plots before correction by Group (dex/veh) Col. Density dex veh dex veh 400 -Dim2 (5.4%) -400 **-**500 1000 -500 Dim1 (8.8%) Density



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

	P_Plate	P_Slide	P_Array	P_DEX	P_Sex
PC1.PrF.	3.584438e-01	9.911839e-01	7.085990e-01	3.491603e-54	0.7621092
PC2.PrF.	7.263513e-37	3.182475e-32	5.787849e-21	2.709166e-01	0.6017284
PC3.PrF.	1.995854e-61	4.116877e-82	1.162186e-11	1.648580e-01	0.1665054
PC4.PrF.	1.035088e-01	9.843404e-07	4.540187e-05	3.805267e-04	0.4175180
PC5.PrF.	8.744589e-17	2.289277e-46	2.193012e-02	2.511310e-01	0.1440686
PC6.PrF.	1.884224e-02	9.600490e-12	1.049526e-01	1.415589e-01	0.6514740

## ANOVA results for Plate before batch correction

```
SPC1
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 286550 71637 1.0953 0.3584
                    398 26029952 65402
Residuals
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value
prin.comp$Sample_Plate 4 5694470 1423618 54.937 < 2.2e-16 ***
                    398 10313565 25913
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 0.1 ... 1
$PC3
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value
prin.comp$Sample_Plate 4 3852286 963072 106.08 < 2.2e-16 ***
Residuals
                    398 3613400
                                  9079
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample Plate 4 131078 32770 1.937 0.1035
                    398 6733352 16918
Residuals
SPC5
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 721105 180276 22.523 < 2.2e-16 ***
Residuals
                    398 3185660
                                 8004
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
$PC6
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
nrin comn¢Gamnle Dlate 4 104104 26026 0 2 9885 0 01884 *
```

## ANOVA results for Slide before batch correction

```
SPC1
Analysis of Variance Table
Response: pc
                                        Df Sum Sq Mean Sq F value Pr(>F)
as.factor(as.character(prin.comp$Slide)) 50 1980144 39603 0.5728 0.9912
                                       352 24336358 69137
Residuals
Analysis of Variance Table
Response: pc
                                        Df Sum Sq Mean Sq F value
as.factor(as.character(prin.comp$Slide)) 50 8260145 165203 7.5055 < 2.2e-16
                                       352 7747890 22011
Residuals
as.factor(as.character(prin.comp$Slide)) ***
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 0.1 ... 1
Analysis of Variance Table
Response: pc
                                       Df Sum Sq Mean Sq F value
as.factor(as.character(prin.comp$Slide)) 50 5680492 113610 22.401 < 2.2e-16
Residuals
                                       352 1785194
                                                   5072
as.factor(as.character(prin.comp$Slide)) ***
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
                                       Df Sum Sq Mean Sq F value
                                                                   Pr(>F)
as.factor(as.character(prin.comp$Slide)) 50 1780830 35617 2.4662 9.843e-07
Residuals
                                       352 5083600 14442
as.factor(as.character(prin.comp$Slide)) ***
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
                                        Df Gim Ga Mean Ga F traline
                                                                  Dr/5F1
```

# **ANOVA** results for Array before batch correction

```
SPC1
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 302818 43260 0.6569 0.7086
            395 26013684 65857
Residuals
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value
prin.comp$Array 7 3899786 557112 18.174 < 2.2e-16 ***
              395 12108249 30654
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 0.1 ... 1
$PC3
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value
prin.comp$Array 7 1135191 162170 10.119 1.162e-11 ***
            395 6330496 16027
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 526815 75259 4.6906 4.54e-05 ***
Residuals 395 6337615 16045
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
SPC5
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 157642 22520.3 2.3727 0.02193 *
Residuals 395 3749123 9491.5
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
SPC6
Analysis of Variance Table
Pagnonga: no
```

# **ANOVA results for Sample Group before batch correction**

```
SPC1
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group 1 11870882 11870882 329.53 < 2.2e-16 ***
                   401 14445620 36024
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 0.1 ... 1
SPC2
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample Group 1 48374 48374 1.2155 0.2709
                    401 15959661 39800
Residuals
$PC3
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group 1 35873 35873 1.9362 0.1649
Residuals 401 7429813 18528
SPC4
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value
                                               Pr(>F)
prin.comp$Sample_Group 1 213020 213020 12.842 0.0003805 ***
Residuals
                    401 6651410 16587
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
SPC5
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group 1 12826 12825.9 1.3208 0.2511
Residuals
                    401 3893940 9710.6
$PC6
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group 1 19211 19211.3 2.1695 0.1416
                   401 3550972 8855.3
Residuals
```

## ANOVA results for Sex before batch correction

```
SPC1
Analysis of Variance Table
Response: pc
            Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 6021 6021 0.0918 0.7621
Residuals 401 26310481 65612
Analysis of Variance Table
Response: pc
            Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 10884 10884 0.2728 0.6017
Residuals 401 15997151 39893
SPC3
Analysis of Variance Table
Response: pc
             Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 35596 35596 1.9211 0.1665
Residuals 401 7430091 18529
SPC4
Analysis of Variance Table
Response: pc
             Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 11256 11256 0.6587 0.4175
Residuals 401 6853174 17090
SPC5
Analysis of Variance Table
Response: pc
            Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 20761 20760.8 2.1423 0.1441
Residuals 401 3886005 9690.8
SPC6
Analysis of Variance Table
Response: pc
            Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 1818 1818.5 0.2044 0.6515
Residuals 401 3568365 8898.7
SPC7
Analysis of Variance Table
Pegnonge: no
```