









Summary table of P-values for PCs

	P_Plate	P_Slide	P_Array	P_DEX	P_Sex
PC1.PrF.	0.9917515	9.990913e-01	0.99944647	5.968521e-56	0.7670946
PC2.PrF.	0.3921612	1.042123e-12	0.05645145	9.917867e-02	0.9406909
PC3.PrF.	0.8802535	5.041086e-18	0.33043800	8.711692e-04	0.7729645
PC4.PrF.	0.3993451	1.497983e-113	0.75954692	2.110780e-01	0.1162546
PC5.PrF.	0.3811272	3.247096e-35	0.99786683	8.457689e-02	0.3123548
PC6.PrF.	0.9939091	1.461761e-08	0.99889383	4.119977e-01	0.5092612

ANOVA results for Plate

```
$PC1
Analysis of Variance Table
Response: pc
                    Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 18816 4704 0.067 0.9918
Residuals
                    398 27943379 70209
$PC2
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 91330 22832 1.0286 0.3922
Residuals
                    398 8834463 22197
SPC3
Analysis of Variance Table
Response: pc
                    Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 18148 4536.9 0.2964 0.8803
                    398 6091705 15305.8
Residuals
SPC4
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 40985 10246 1.015 0.3993
                    398 4017809 10095
Residuals
$PC5
Analysis of Variance Table
Response: pc
                    Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 37256 9314.1 1.0499 0.3811
                   398 3530661 8871.0
Residuals
SPC6
Analysis of Variance Table
Response: pc
                     Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate 4 1842 460.5 0.0572 0.9939
Residuals
                    398 3204575 8051.7
SPC7
Analysis of Variance Table
Pagnonga: no
```

ANOVA results for Slide

```
SPC1
Analysis of Variance Table
Response: pc
                                       Df Sum Sq Mean Sq F value Pr(>F)
as.factor(as.character(prin.comp$Slide)) 50 1765752 35315 0.4745 0.9991
                                      352 26196443 74422
Residuals
Analysis of Variance Table
Response: pc
                                       Df Sum Sq Mean Sq F value
as.factor(as.character(prin.comp$Slide)) 50 3025938 60519 3.6107 1.042e-12
                                      352 5899856 16761
Residuals
as.factor(as.character(prin.comp$Slide)) ***
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
                                       Df Sum Sq Mean Sq F value
as.factor(as.character(prin.comp$Slide)) 50 2420210 48404 4.6179 < 2.2e-16
Residuals
                                      352 3689643 10482
as.factor(as.character(prin.comp$Slide)) ***
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
                                       Df Sum Sq Mean Sq F value
as.factor(as.character(prin.comp$Slide)) 50 3424478 68490 38.007 < 2.2e-16
Residuals
                                      352 634317 1802
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 Cim Ca Mean Ca F value
                                                                    Dr/SF1
```

ANOVA results for Array

```
SPC1
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 35151 5022 0.071 0.9994
Residuals
             395 27927044 70701
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 302766 43252 1.9813 0.05645 .
              395 8623027 21830
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
$PC3
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 122108 17444 1.1508 0.3304
Residuals
          395 5987744 15159
SPC4
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 42396 6056.6 0.5956 0.7595
            395 4016398 10168.1
Residuals
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 6780 968.6 0.1074 0.9979
Residuals
              395 3561137 9015.5
$PC6
Analysis of Variance Table
Response: pc
               Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array 7 4975 710.8 0.0877 0.9989
              395 3201441 8104.9
Residuals
$PC7
Analysis of Variance Table
```

ANOVA results for Sample Group

```
SPC1
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group 1 12920689 12920689 344.46 < 2.2e-16 ***
                    401 15041506 37510
Residuals
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 0.1 ... 1
SPC2
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample Group 1 60385 60385 2.7314 0.09918 .
Residuals
                     401 8865408 22108
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 0.1 ... 1
SPC3
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value
                                                  Pr(>F)
prin.comp$Sample_Group 1 166761 166761 11.252 0.0008712 ***
                    401 5943092 14821
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group 1 15819 15819 1.569 0.2111
                    401 4042975 10082
Residuals
SPC5
Analysis of Variance Table
Response: pc
                      Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample Group 1 26402 26402.2 2.9895 0.08458 .
Residuals
                     401 3541515 8831.7
Signif. codes: 0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ...... 1
SPC6
Analysis of Variance Table
Pagnonga: no
```

ANOVA results for Sex

```
SPC1
Analysis of Variance Table
Response: pc
            Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 6124 6124 0.0878 0.7671
Residuals 401 27956071 69716
Analysis of Variance Table
Response: pc
             Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 123 123.4 0.0055 0.9407
          401 8925670 22258.5
Residuals
SPC3
Analysis of Variance Table
Response: pc
             Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 1270 1269.6 0.0833 0.773
Residuals
          401 6108583 15233.4
SPC4
Analysis of Variance Table
Response: pc
             Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 24925 24925 2.4778 0.1163
Residuals 401 4033870 10060
$PC5
Analysis of Variance Table
Response: pc
             Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 9081 9081.4 1.0233 0.3124
Residuals 401 3558836 8874.9
$PC6
Analysis of Variance Table
Response: pc
            Df Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex 1 3485 3485.4 0.4364 0.5093
Residuals
          401 3202931 7987.4
SPC7
Analysis of Variance Table
Peanonae: na
```