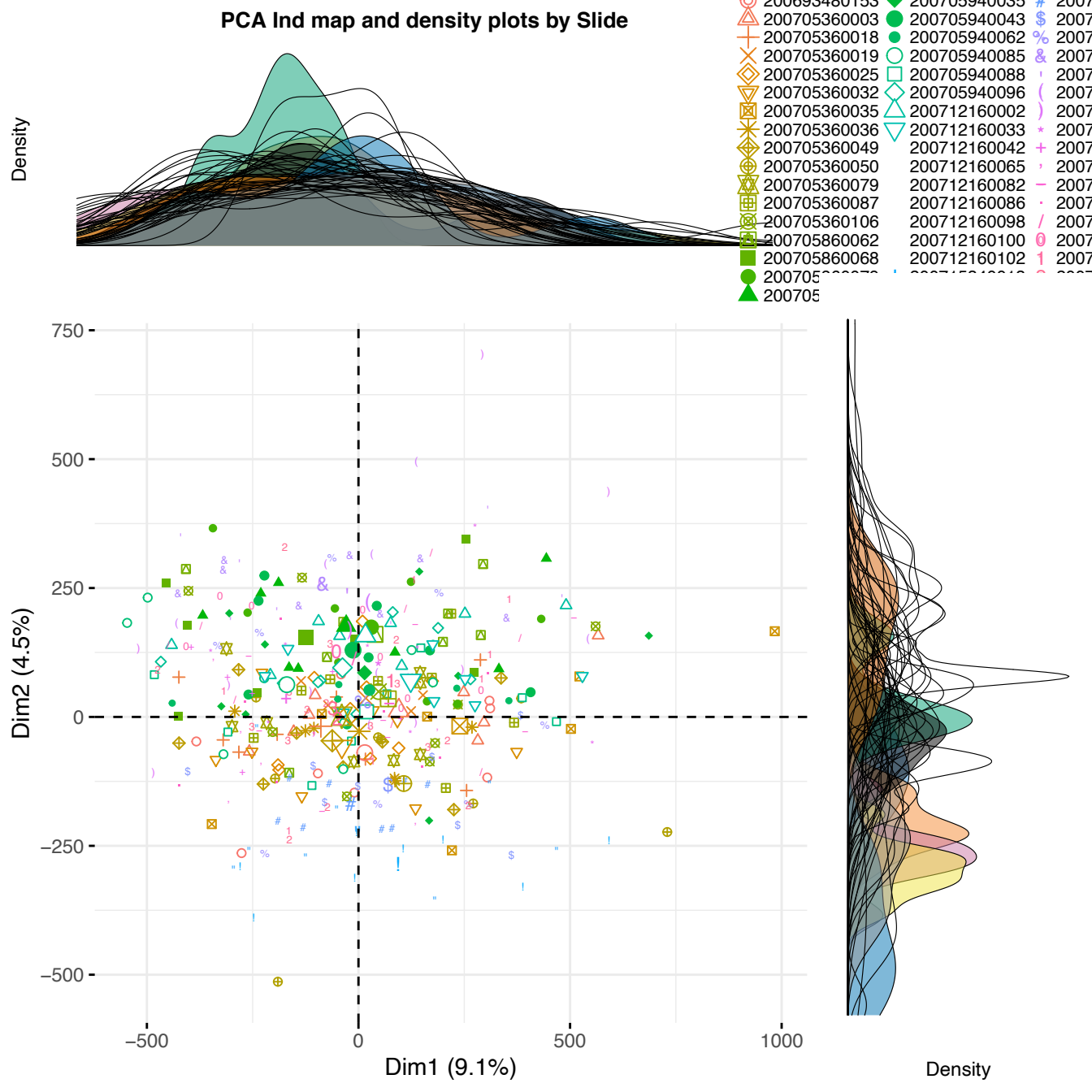
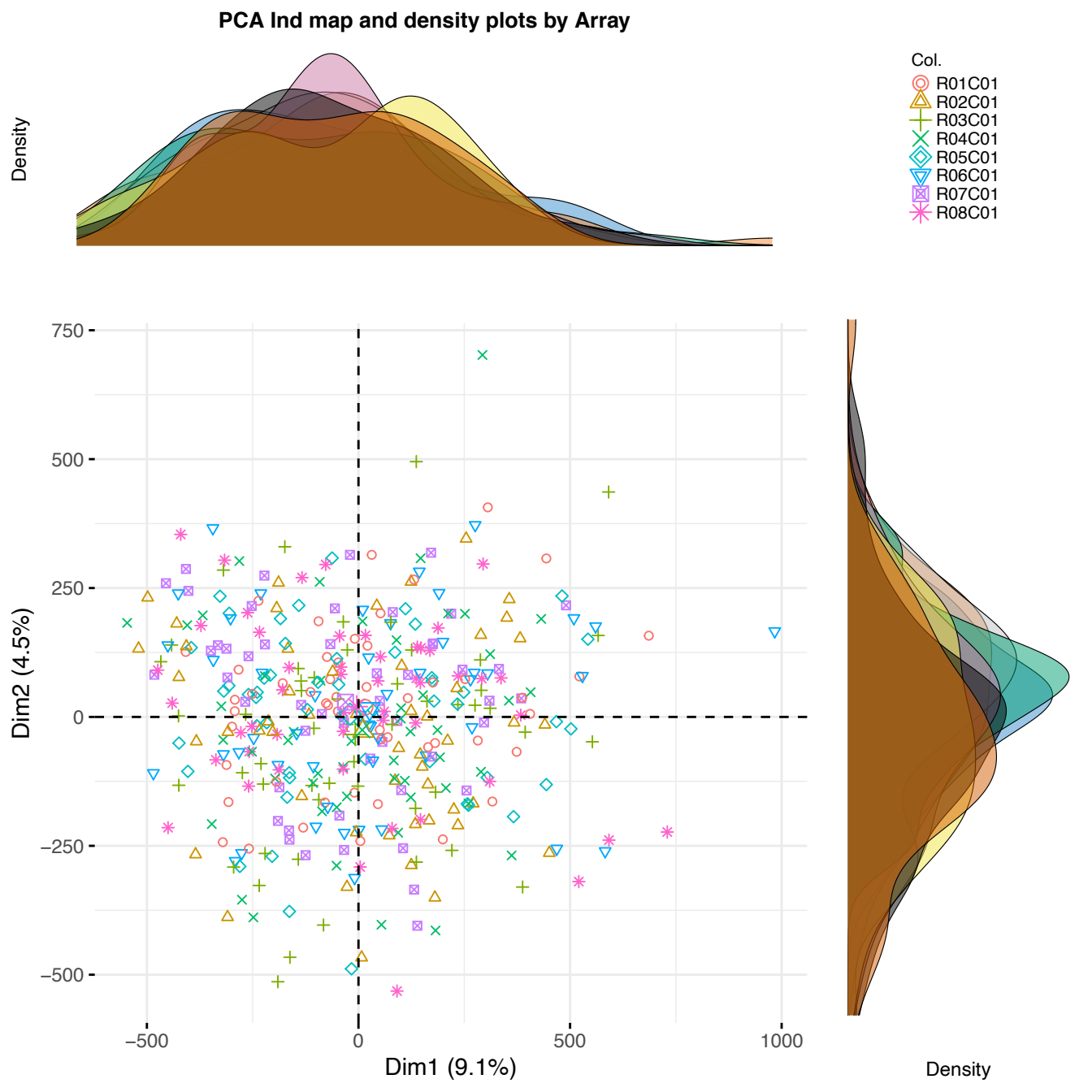
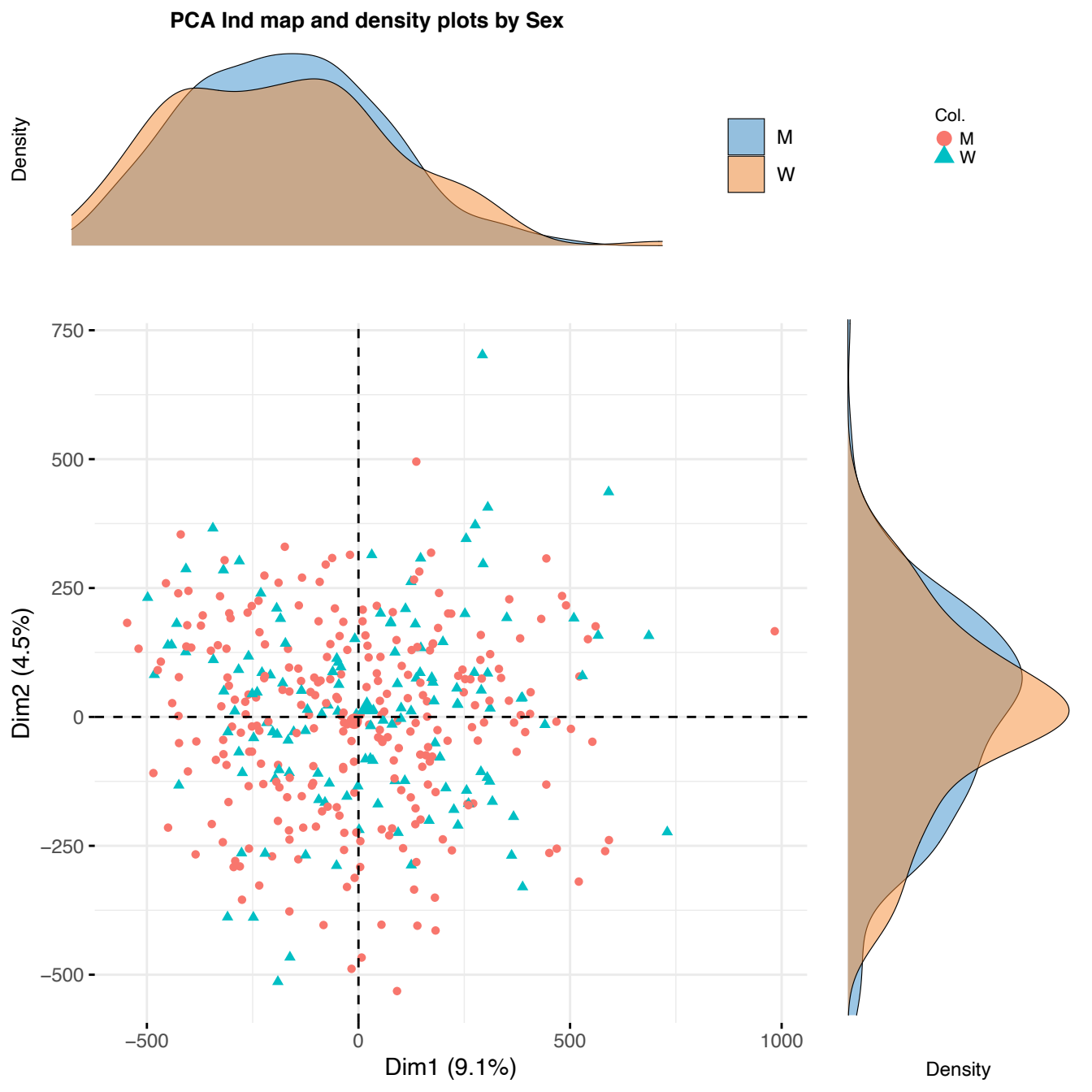

PCA Ind map and density plots by Plate
Density
Col.
EPIC_Juni2016_05
EPIC_Juni2016_06
EPIC_Juni2016_07
EPIC_Juni2016_08
EPIC_Juni2016_09
750
500
250
0
−250
−500
Dim2 (4.5%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Ind map and density plots by Slide
Density
200705360003
200705360018
200705360019
200705360025
200705360032
200705360035
200705360036
200705360049
200705360050
200705360079
200705360087
200705360106
200705860062
200705860068
200705940035
200705940043
200705940062
200705940085
200705940088
200705940096
200712160002
200712160033
200712160042
200712160065
200712160082
200712160086
200712160098
200712160100
200712160102
750
500
250
0
−250
−500
−500
0
500
1000
Dim2 (4.5%)
Dim1 (9.1%)
Density


PCA Ind map and density plots by Array
Density
Col.
R01C01
R02C01
R03C01
R04C01
R05C01
R06C01
R07C01
R08C01
750
500
250
0
−250
−500
Dim2 (4.5%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Ind map and density plots by Group (dex/veh)
Density
dex
veh
Col.
dex
veh
750
500
250
0
−250
−500
Dim2 (4.5%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Ind map and density plots by Sex
Density
M
W
Col.
M
W
750
500
250
0
−250
−500
Dim2 (4.5%)
−500
0
500
1000
Dim1 (9.1%)
Density

Summary table of P–values for PCs

	P_Plate	P_Slide	P_Array	P_DEX	P_Sex
PC1.Pr..F.	3.922155e-01	9.945351e-01	0.9987875	1.110613e-54	0.8555600
PC2.Pr..F.	8.354970e-61	4.096623e-63	0.2114685	5.293460e-01	0.7496652
PC3.Pr..F.	6.856596e-48	8.309976e-56	0.7807499	7.607718e-03	0.1534051
PC4.Pr..F.	1.603862e-10	1.103622e-33	0.5920072	3.768405e-03	0.4001160
PC5.Pr..F.	3.484037e-19	1.185011e-73	0.9841669	1.437972e-01	0.3542154
PC6.Pr..F.	1.871551e-01	5.848914e-11	0.9996185	3.784186e-01	0.6083503

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   276322   69081  1.0285 0.3922
Residuals              398 26731649   67165

$PC2
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Sample_Plate   4 6896761 1724190   104.6 < 2.2e-16 ***
Residuals              398 6560663   16484
---
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 3009563  752391  76.123 < 2.2e-16 ***
Residuals              398 3933808    9884
---
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  746976  186744  13.762 1.604e-10 ***
Residuals              398 5400722   13570
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Sample_Plate   4  813522  203380   26.03 < 2.2e-16 ***
Residuals              398 3109709    7813
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC6
Analysis of Variance Table

Response: pc
```

ANOVA results for Slide

```
$PC1
Analysis of Variance Table

Response: pc
                                       Df   Sum Sq Mean Sq F value Pr(>F)
as.factor(as.character(prin.comp$Slide))  50  1953597   39072  0.5489 0.9945
Residuals                              352 25054374   71177

$PC2
Analysis of Variance Table

Response: pc
                                       Df  Sum Sq Mean Sq F value    Pr(>F)
as.factor(as.character(prin.comp$Slide))  50 9275996  185520  15.617 < 2.2e-16
Residuals                              352 4181427   11879

as.factor(as.character(prin.comp$Slide)) ***
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    Pr(>F)
as.factor(as.character(prin.comp$Slide))  50 4553507   91070  13.414 < 2.2e-16
Residuals                              352 2389865    6789

as.factor(as.character(prin.comp$Slide)) ***
Residuals
---
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)
as.factor(as.character(prin.comp$Slide))  50 3236368   64727   7.826 < 2.2e-16
Residuals                              352 2911330    8271

as.factor(as.character(prin.comp$Slide)) ***
Residuals
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC5
Analysis of Variance Table

Response: pc
                                       Df  Sum Sq Mean Sq F value    Pr(>F)
```

ANOVA results for Array

```
$PC1
Analysis of Variance Table

Response: pc
                 Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array   7    43104    6158  0.0902 0.9988
Residuals       395 26964867   68265

$PC2
Analysis of Variance Table

Response: pc
                 Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array   7   321616   45945  1.3816 0.2115
Residuals       395 13135808   33255

$PC3
Analysis of Variance Table

Response: pc
                 Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array   7   69375  9910.7  0.5695 0.7807
Residuals       395 6873996 17402.5

$PC4
Analysis of Variance Table

Response: pc
                 Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array   7   85387   12198  0.7948  0.592
Residuals       395 6062311   15348

$PC5
Analysis of Variance Table

Response: pc
                 Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array   7   14232  2033.1  0.2054 0.9842
Residuals       395 3908999  9896.2

$PC6
Analysis of Variance Table

Response: pc
                 Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array   7    3652   521.7  0.0635 0.9996
Residuals       395 3246345  8218.6

$PC7
Analysis of Variance Table

Response: pc
```

ANOVA results for Sample Group

```
$PC1
Analysis of Variance Table

Response: pc
                       Df   Sum Sq  Mean Sq F value    Pr(>F)
prin.comp$Sample_Group   1 12266995 12266995   333.7 < 2.2e-16 ***
Residuals              401 14740976    36761
---
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    13288   13288  0.3963 0.5293
Residuals              401 13444136   33527

$PC3
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value   Pr(>F)
prin.comp$Sample_Group   1  122407  122407  7.1963 0.007608 **
Residuals              401 6820964   17010
---
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_Group   1  127480  127480  8.4913 0.003768 **
Residuals              401 6020218   15013
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group   1   20876 20876.4  2.1452 0.1438
Residuals              401 3902354  9731.6

$PC6
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group   1    6290  6289.7  0.7776 0.3784
```

ANOVA results for Sex

```
$PC1
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1     2234    2234  0.0332 0.8556
Residuals     401 27005737   67346

$PC2
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1     3421    3421   0.102 0.7497
Residuals     401 13454003   33551

$PC3
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   35244   35244  2.0458 0.1534
Residuals     401 6908128   17227

$PC4
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   10858   10858  0.7095 0.4001
Residuals     401 6136840   15304

$PC5
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    8399  8398.7  0.8603 0.3542
Residuals     401 3914832  9762.7

$PC6
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    2130  2130.1   0.263 0.6084
Residuals     401 3247867  8099.4

$PC7
Analysis of Variance Table

Response: pc
```