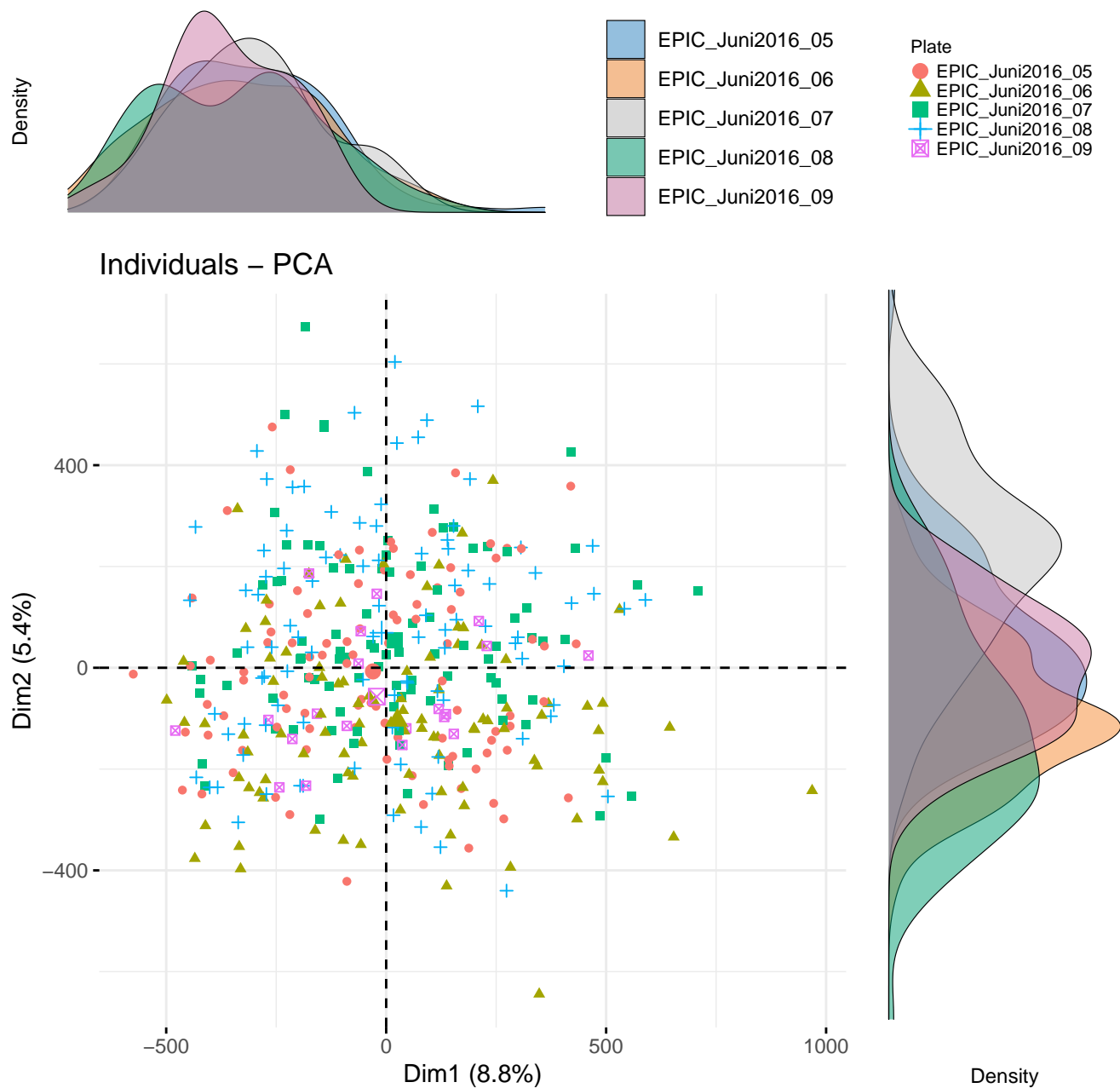




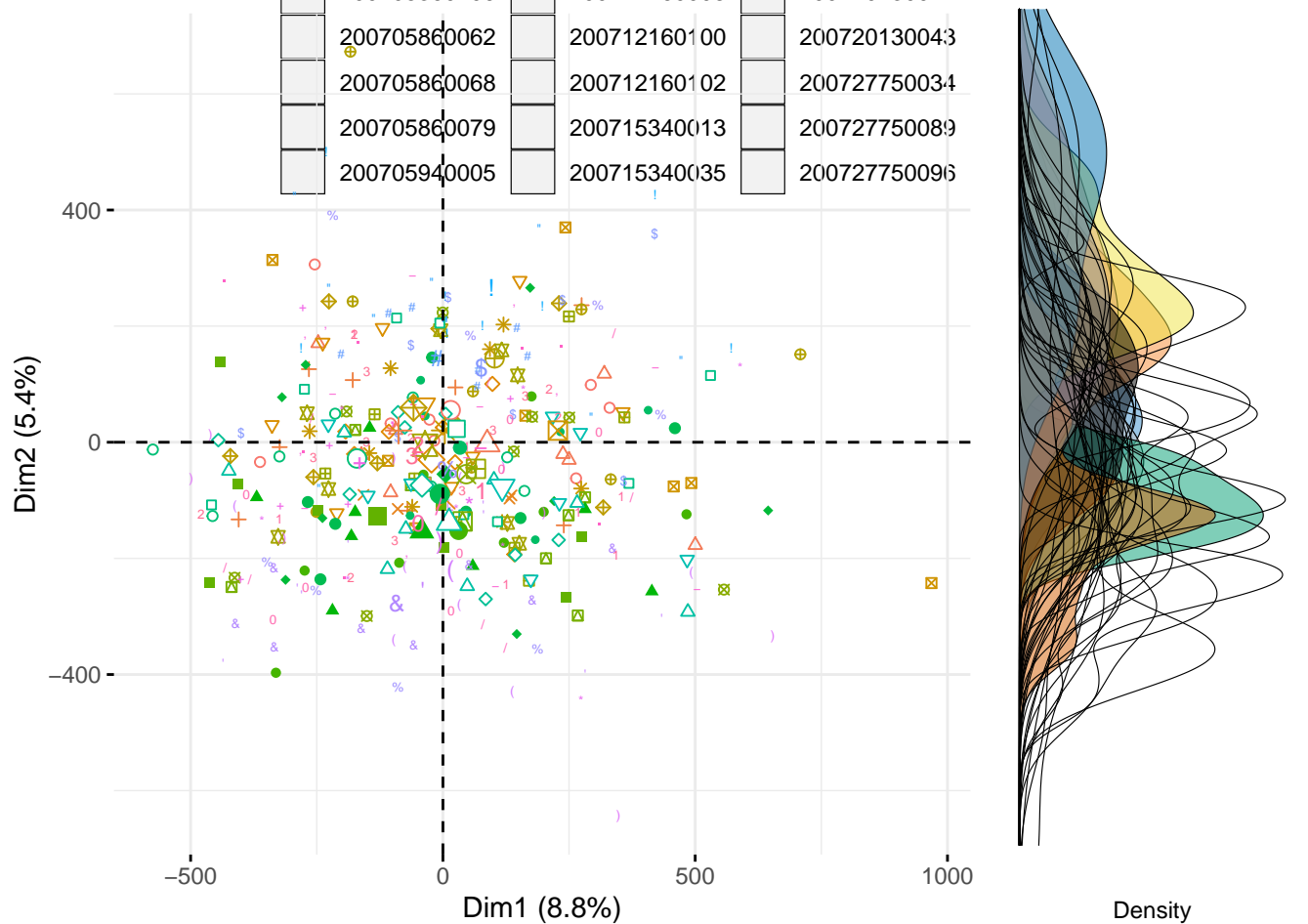
# A Individual map and density plot before correction by Plate

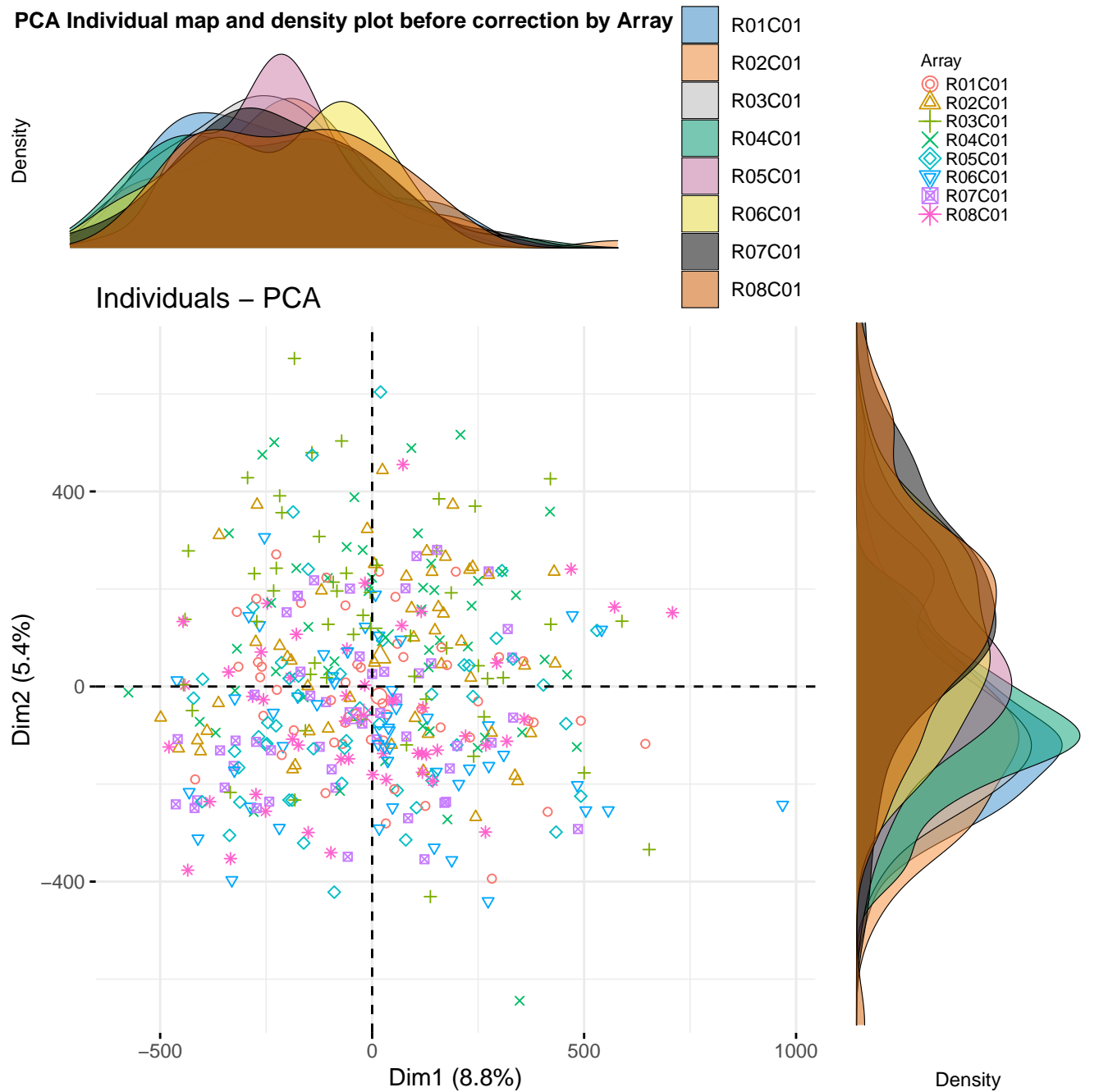


and density plot before correction by Slide

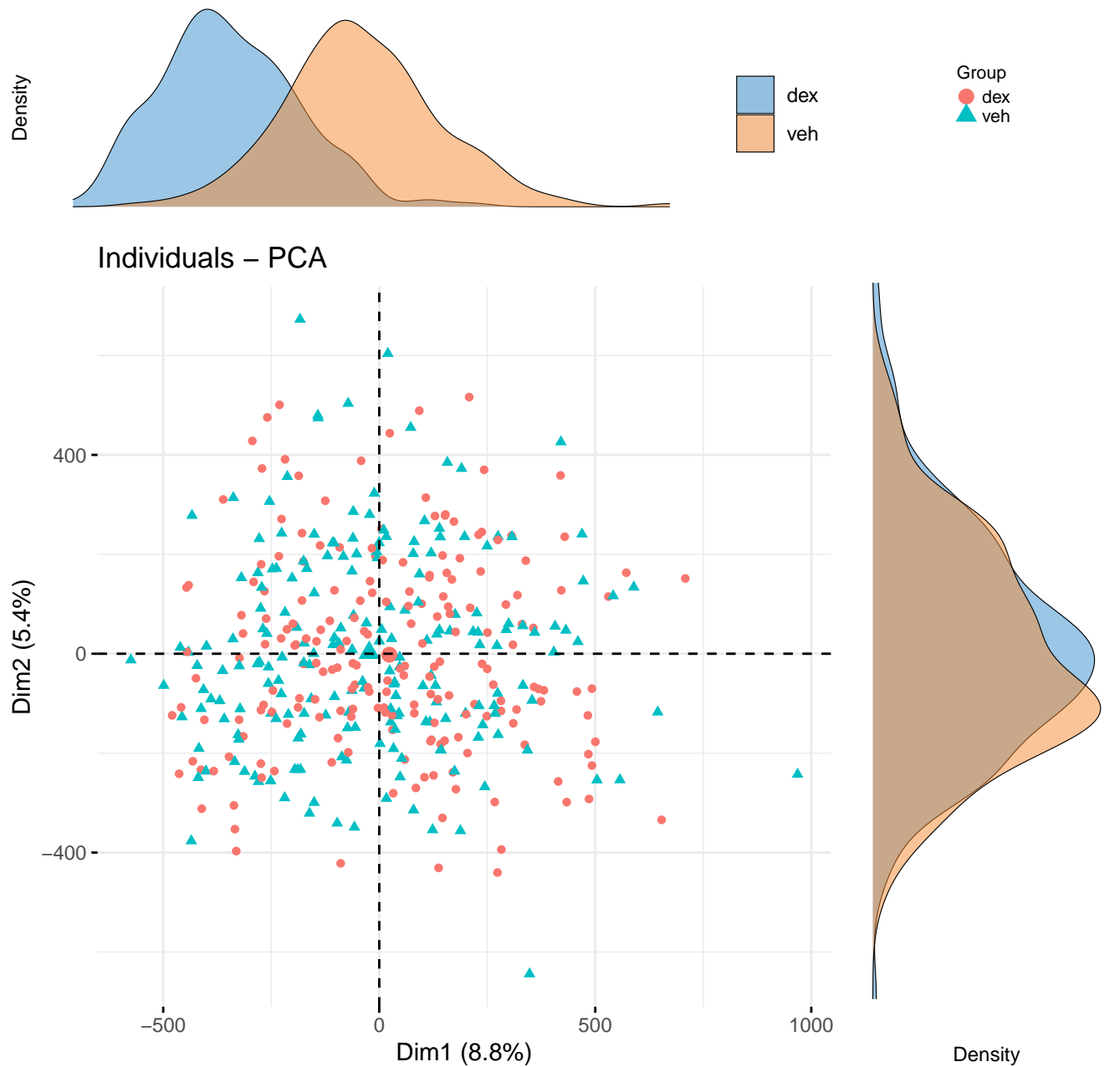


Individuals – PCA

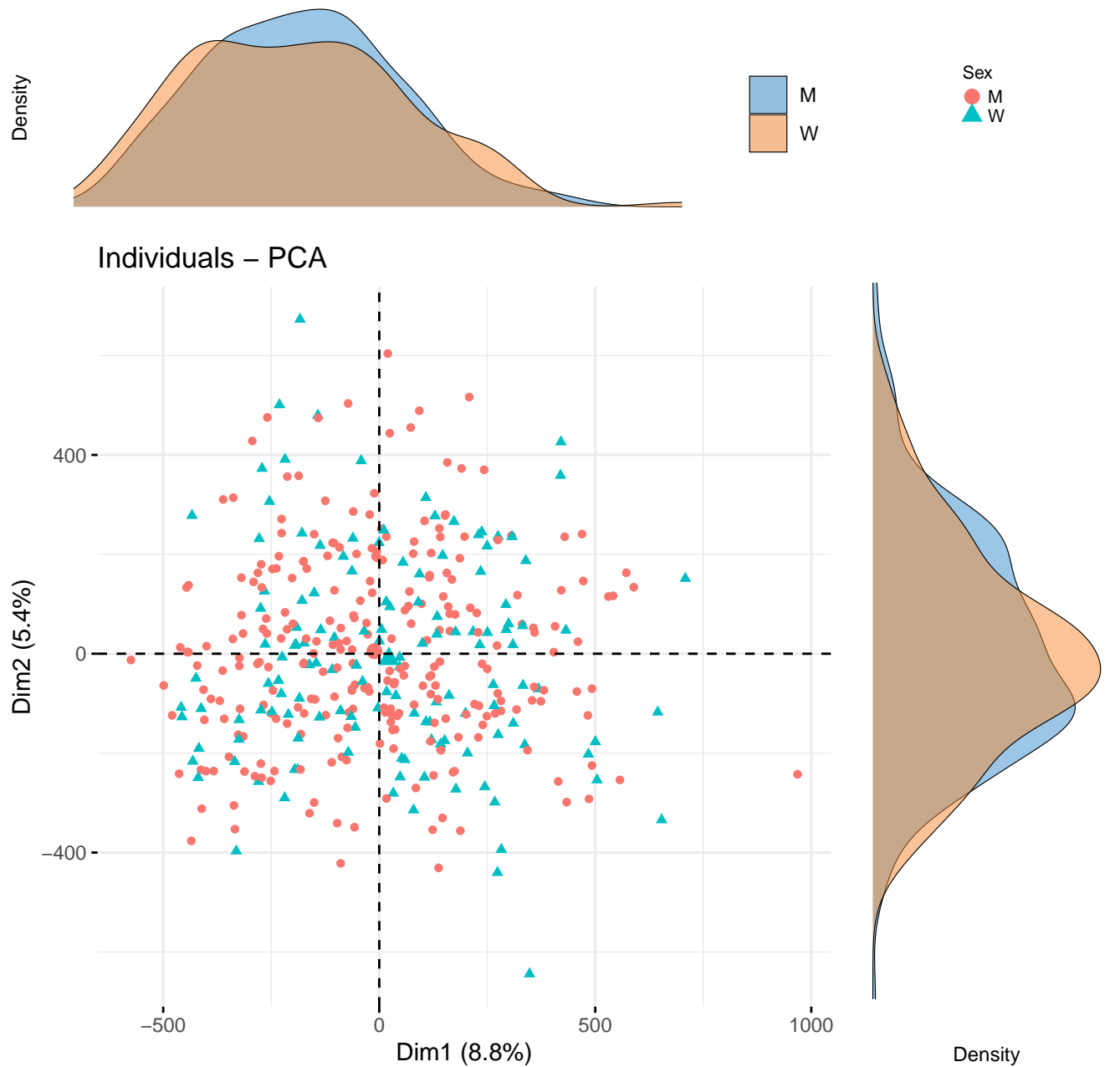




# A Individual map and density plots before correction by Group (dex/veh)



# PCA Individual map and density plot before correction by Sex



## 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 Slide before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
as.factor(as.character(Prin.comp$Slide))  50  2366031    47321  0.6955 0.9414
Residuals                                352 23950471    68041

$PC2
Analysis of Variance Table

Response: pc
              Df Sum Sq Mean Sq F value Pr(>F)
as.factor(as.character(Prin.comp$Slide))  50  7440619   148812  6.1141 < 2.2e-16
Residuals                                352 8567416    24339

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 4799877    95998 12.676 < 2.2e-16
Residuals                                352 2665809    7573

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 1691450    33829  2.3019 6.411e-06
Residuals                                352 5172980   14696

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 before batch correction

\$PC1

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$Array	7	286711	40959	0.6215	0.7382
Residuals	395	26029791	65898		

\$PC2

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$Array	7	2393835	341976	9.922	2.004e-11 ***
Residuals	395	13614200	34466		

---  
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\$Array	7	631113	90159	5.2107	1.068e-05 ***
Residuals	395	6834573	17303		

---  
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\$Array	7	391861	55980	3.4163	0.001473 **
Residuals	395	6472569	16386		

---  
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\$Array	7	102178	14596.8	1.5155	0.1603
Residuals	395	3804588	9631.9		

\$PC6

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$Array	7	113967	16281.0	1.8607	0.0747

# 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
```

# ANOVA results for Sex before batch correction

\$PC1

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$sex	1	101929	101929	1.5592	0.2125
Residuals	401	26214573	65373		

\$PC2

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$sex	1	21748	21748	0.5455	0.4606
Residuals	401	15986288	39866		

\$PC3

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$sex	1	223	222.5	0.012	0.913
Residuals	401	7465464	18617.1		

\$PC4

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$sex	1	32156	32156	1.8873	0.1703
Residuals	401	6832274	17038		

\$PC5

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$sex	1	25943	25943.5	2.6807	0.1024
Residuals	401	3880822	9677.9		

\$PC6

Analysis of Variance Table

Response: pc

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Prin.comp\$sex	1	11080	11080.3	1.2484	0.2645
Residuals	401	3559103	8875.6		