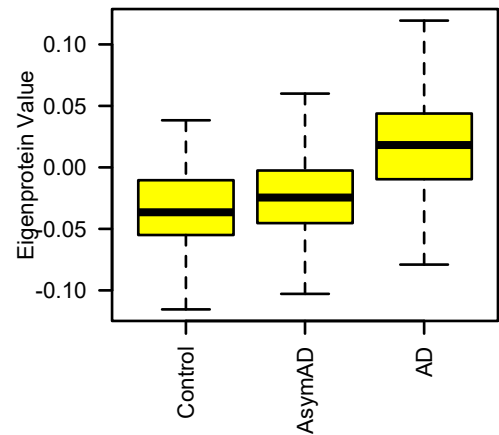
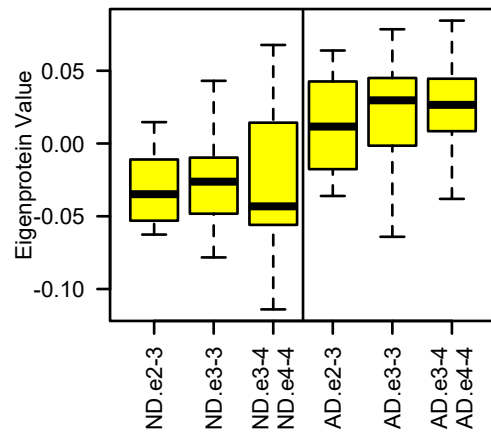


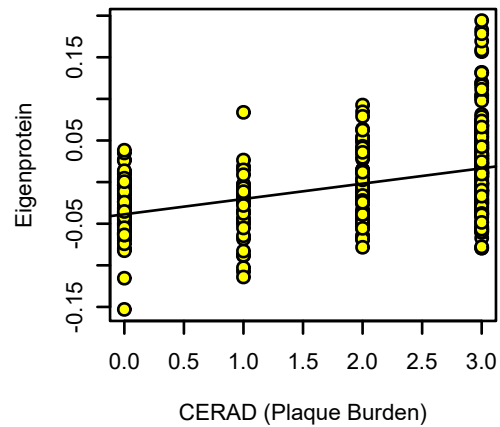
M4 yellow
K-W $p = 4.6e-28$



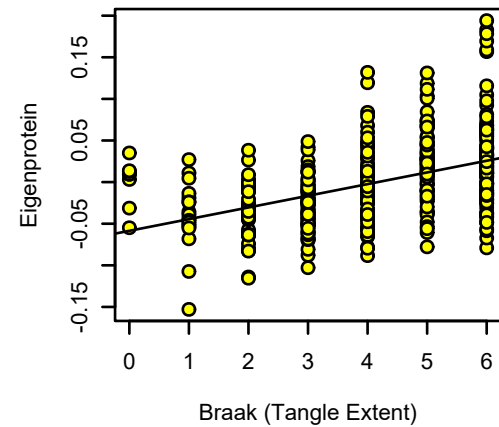
M4 yellow
ND K-W $p = 0.84$ | AD K-W $p = 0.32$



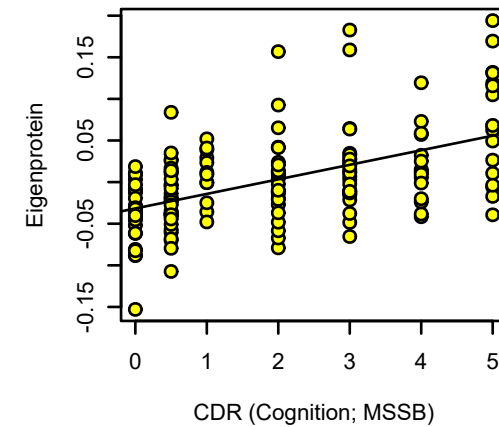
bicor=0.46, $p=1.3e-23$
cor=0.44, $p=2.9e-21$



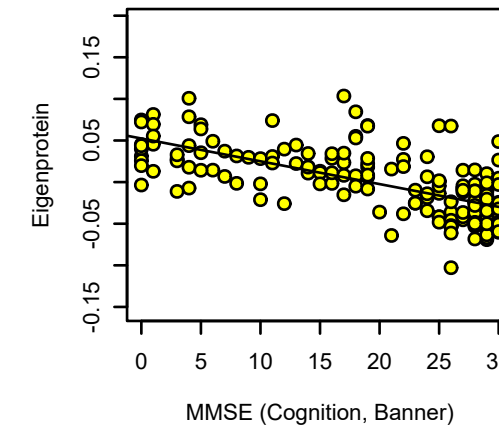
bicor=0.49, $p=4.7e-27$
cor=0.46, $p=2.5e-23$



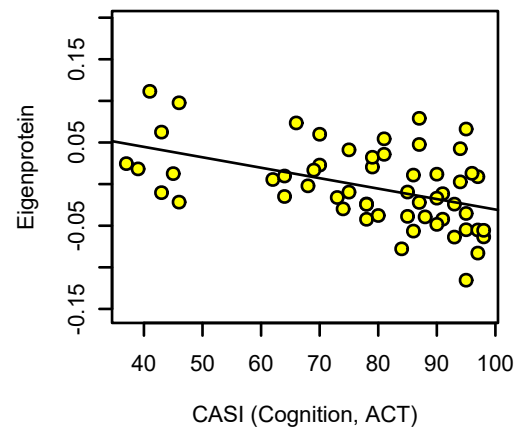
bicor=0.52, $p=2.6e-12$
cor=0.53, $p=6.8e-13$



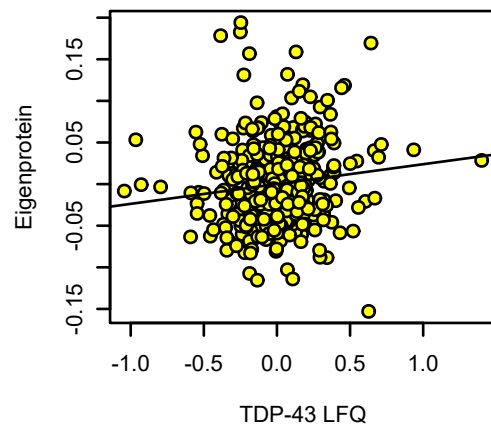
bicor=-0.67, $p=8.5e-23$
cor=-0.67, $p=4.1e-23$



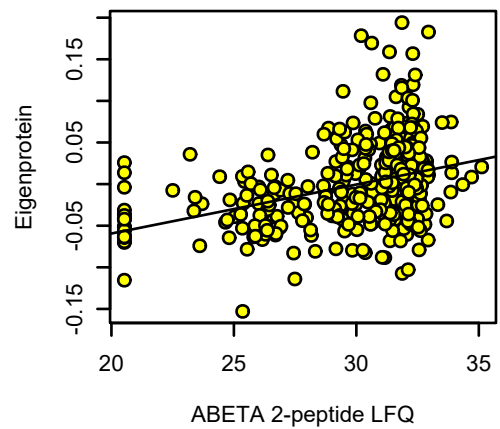
bicor=-0.48, $p=0.00021$
cor=-0.47, $p=0.00026$



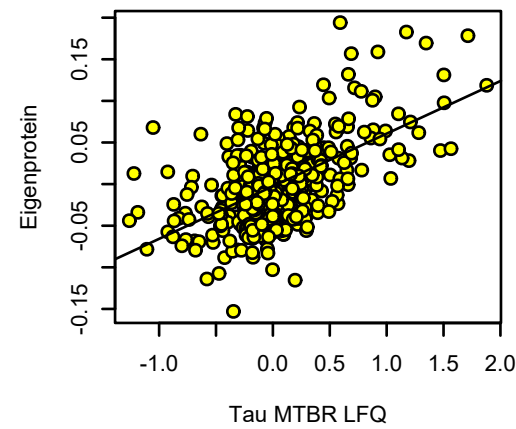
bicor=0.17, $p=0.00047$
cor=0.13, $p=0.0077$



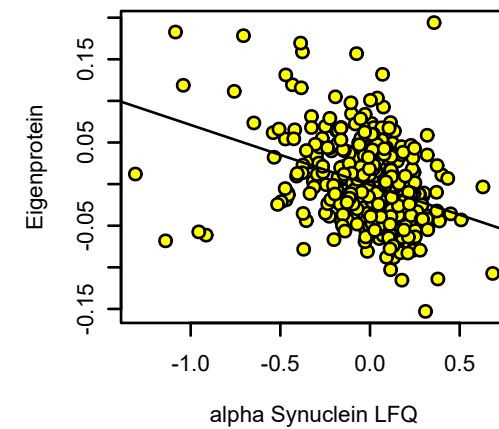
bicor=0.29, $p=2.3e-09$
cor=0.37, $p=4.9e-15$



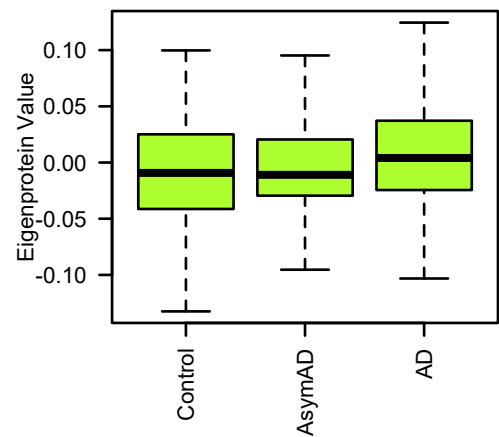
bicor=0.51, $p=3.6e-29$
cor=0.57, $p=1.8e-37$



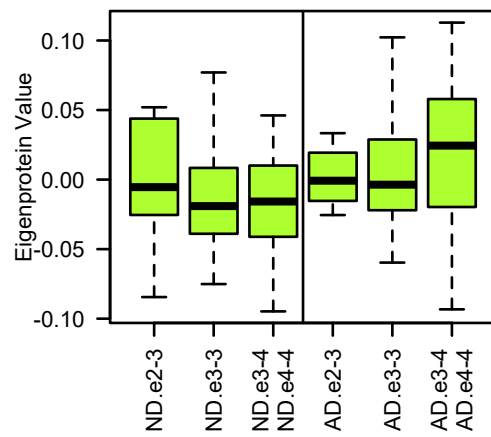
bicor=-0.37, $p=7.3e-15$
cor=-0.35, $p=1.6e-13$



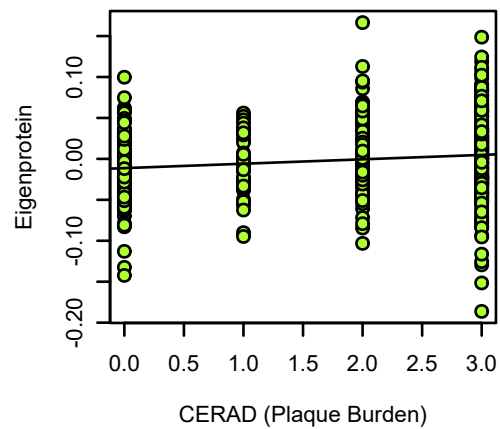
M11 greenyellow
K-W $p = 0.0032$



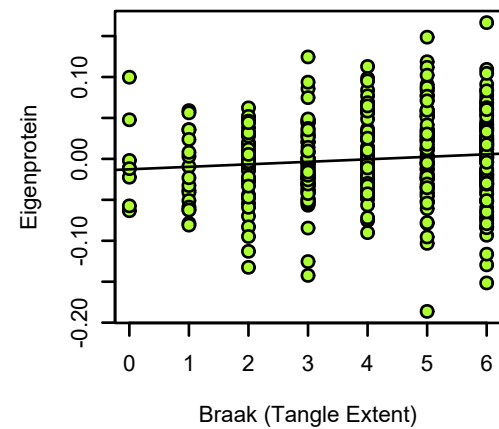
M11 greenyellow
ND K-W $p = 0.46$ | AD K-W $p = 0.13$



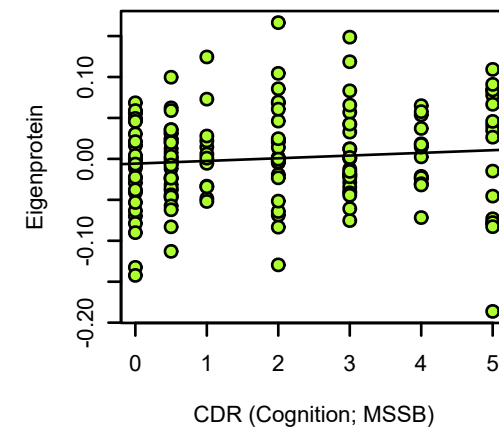
bicor=0.13, $p=0.0064$
cor=0.13, $p=0.0077$



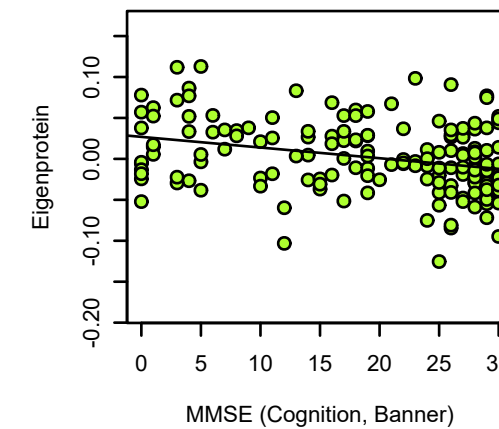
bicor=0.11, $p=0.02$
cor=0.1, $p=0.041$



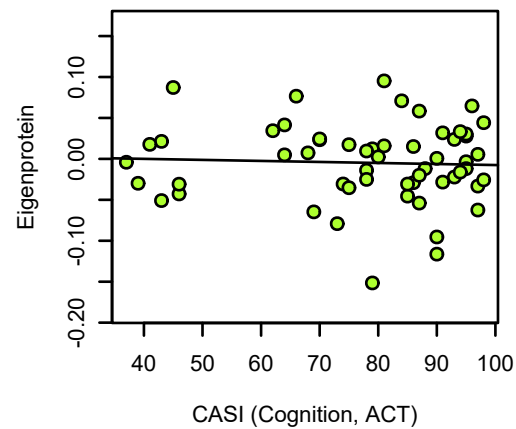
bicor=0.11, $p=0.17$
cor=0.099, $p=0.21$



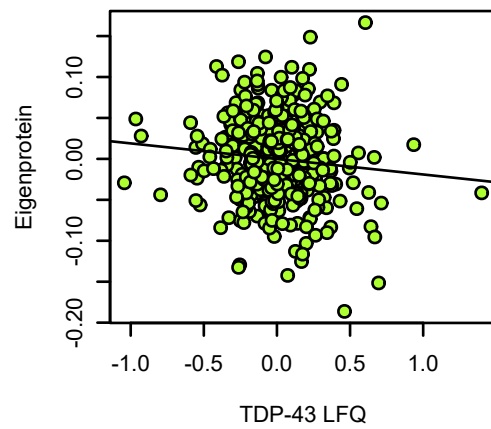
bicor=-0.33, $p=1.1e-05$
cor=-0.3, $p=8.2e-05$



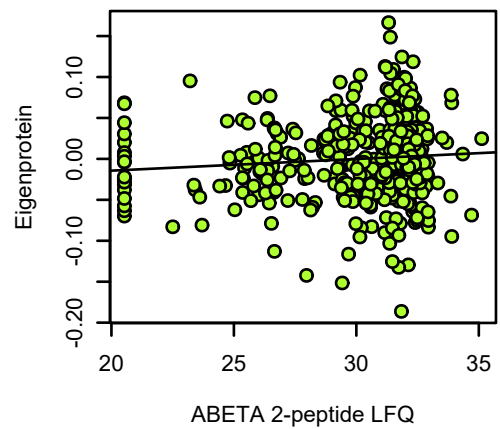
bicor=-0.031, $p=0.82$
cor=-0.046, $p=0.74$



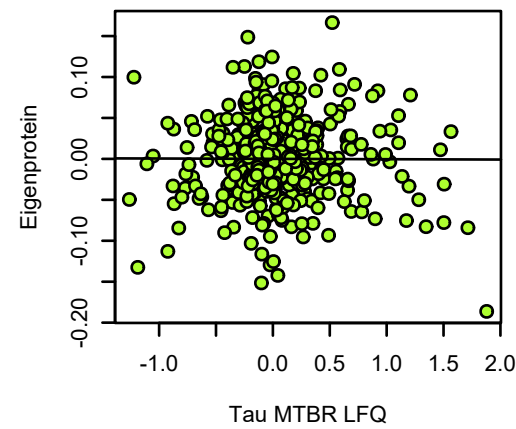
bicor=-0.082, $p=0.096$
cor=-0.1, $p=0.041$



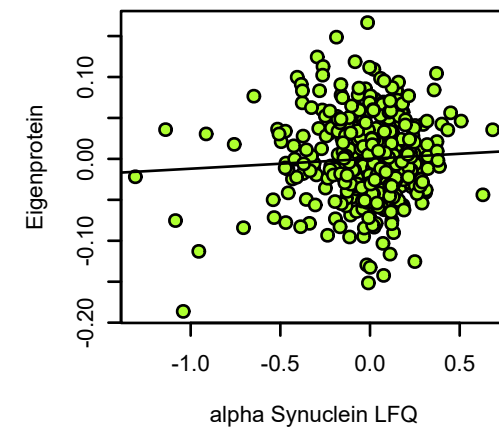
bicor=0.034, $p=0.49$
cor=0.09, $p=0.066$



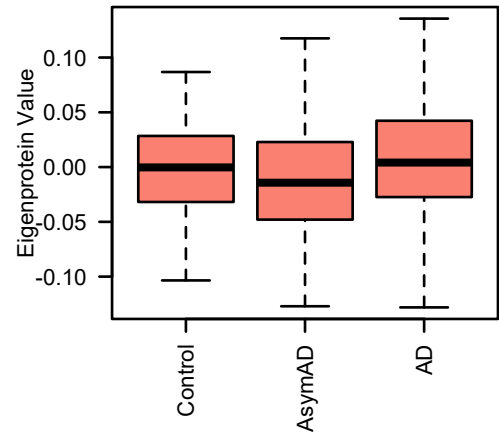
bicor=0.063, $p=0.2$
cor=-0.0038, $p=0.94$



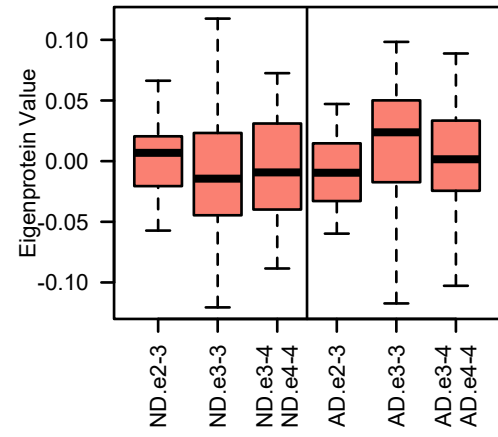
bicor=-0.013, $p=0.8$
cor=0.06, $p=0.22$



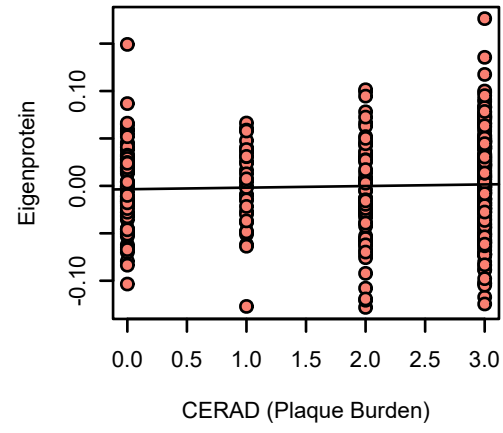
M13 salmon
K-W $p = 0.012$



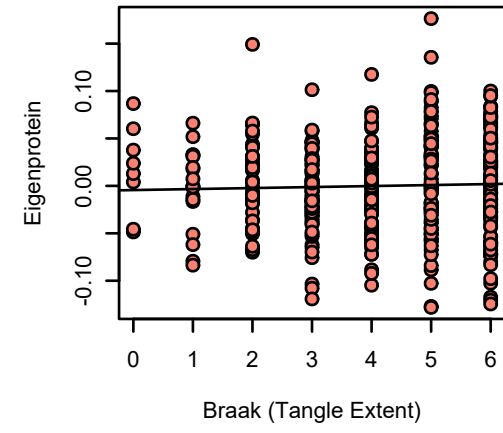
M13 salmon
ND K-W $p = 0.56$ | AD K-W $p = 0.24$



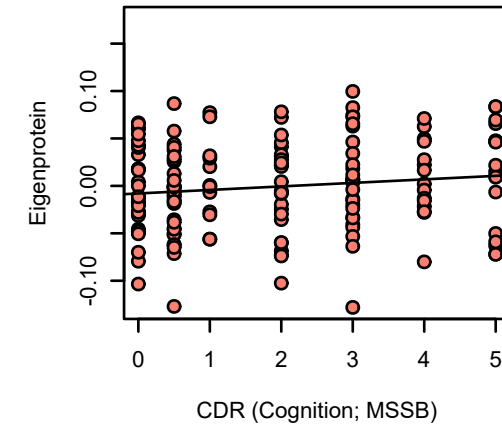
bicor=0.041, $p=0.4$
cor=0.041, $p=0.4$



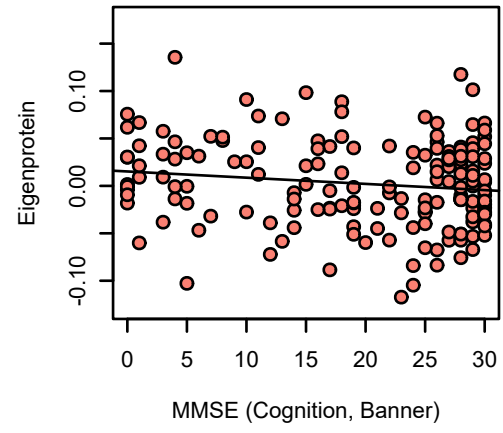
bicor=0.05, $p=0.3$
cor=0.035, $p=0.47$



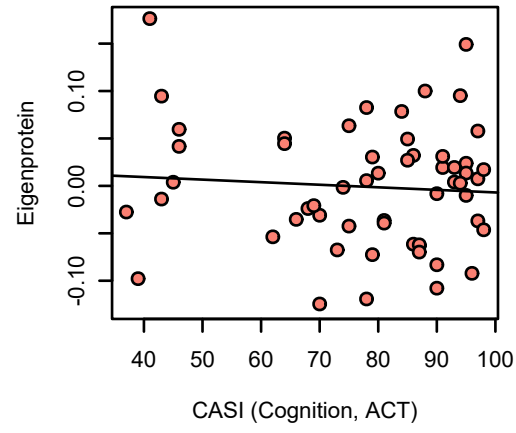
bicor=0.13, $p=0.099$
cor=0.13, $p=0.1$



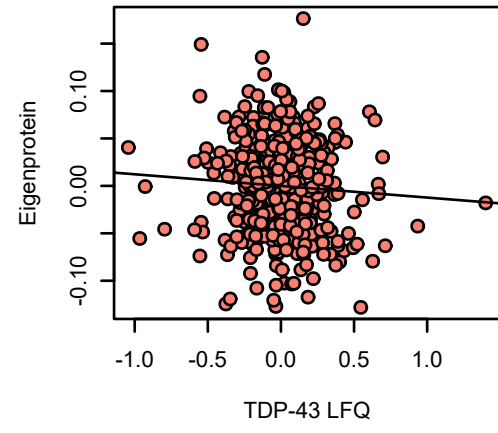
bicor=-0.14, $p=0.08$
cor=-0.14, $p=0.071$



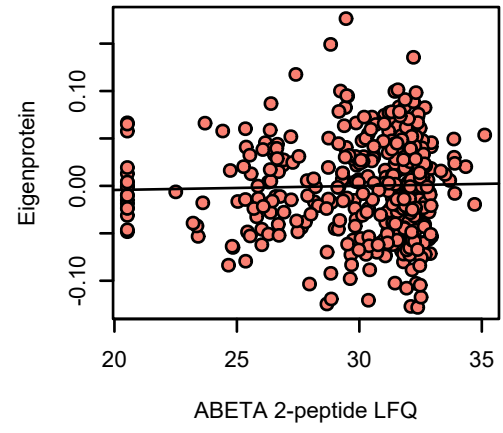
bicor=-0.015, $p=0.91$
cor=-0.074, $p=0.59$



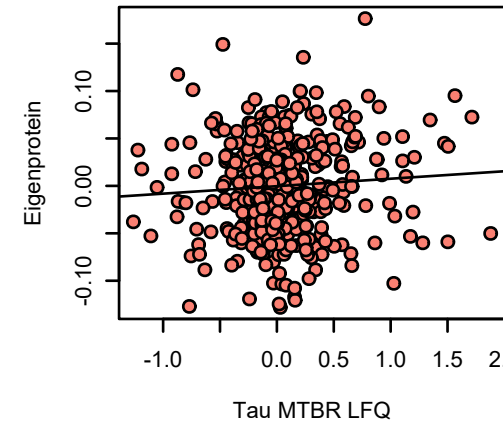
bicor=-0.056, $p=0.25$
cor=-0.064, $p=0.19$



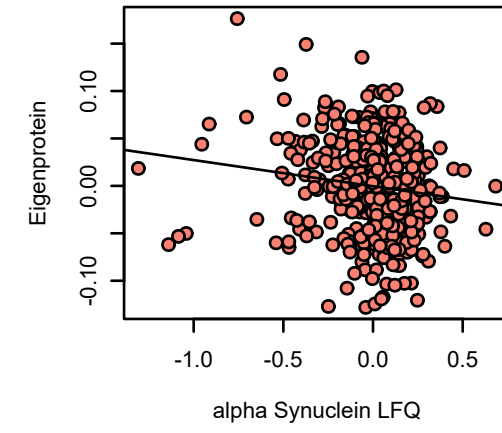
bicor=0.0092, $p=0.85$
cor=0.027, $p=0.58$



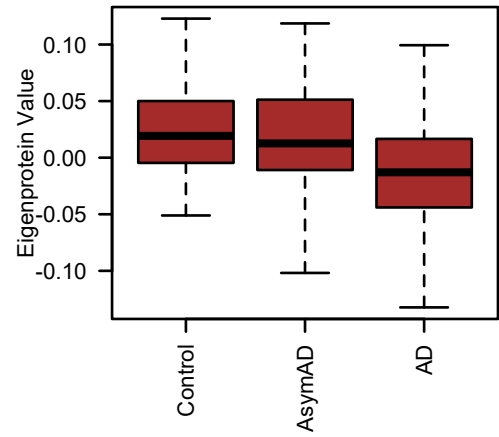
bicor=0.049, $p=0.31$
cor=0.071, $p=0.15$



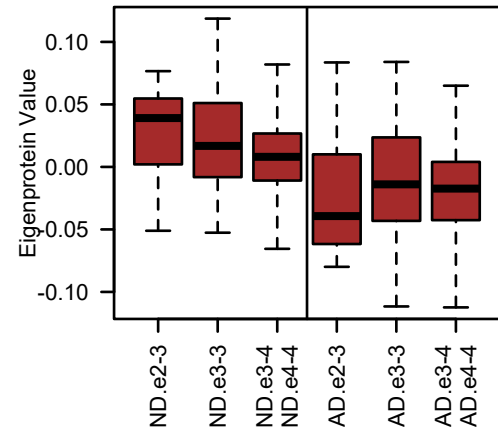
bicor=-0.15, $p=0.0021$
cor=-0.14, $p=0.0041$



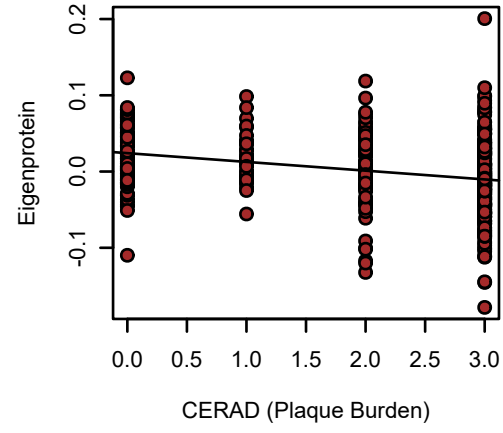
M3 brown
K-W $p = 4.4e-12$



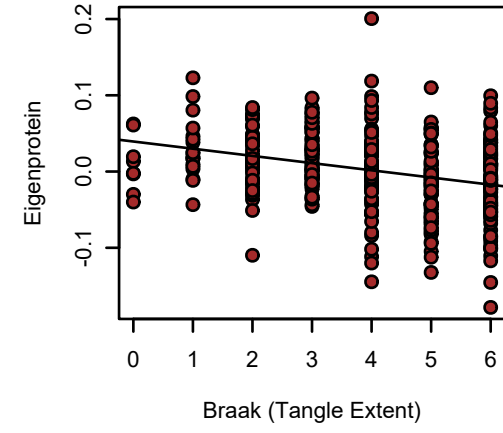
M3 brown
ND K-W $p = 0.44$ | AD K-W $p = 0.58$



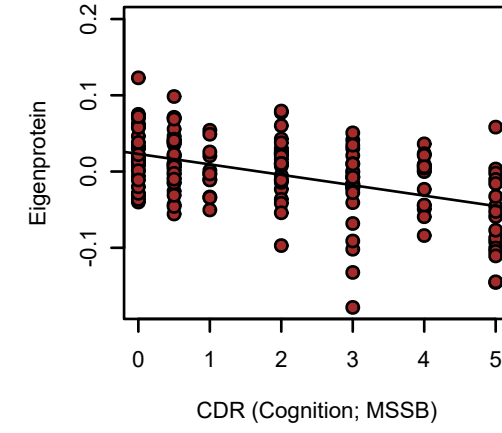
bicor=-0.3, $p=5.4e-10$
cor=-0.28, $p=5.5e-09$



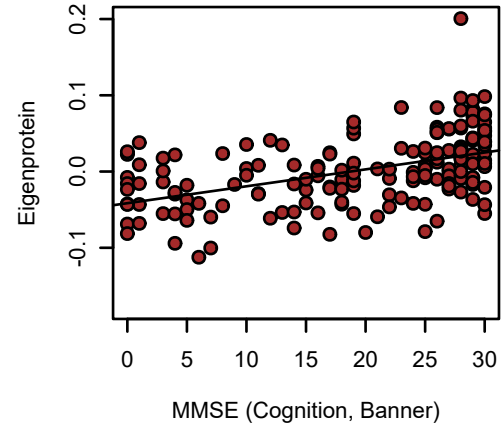
bicor=-0.33, $p=6.5e-12$
cor=-0.31, $p=8.8e-11$



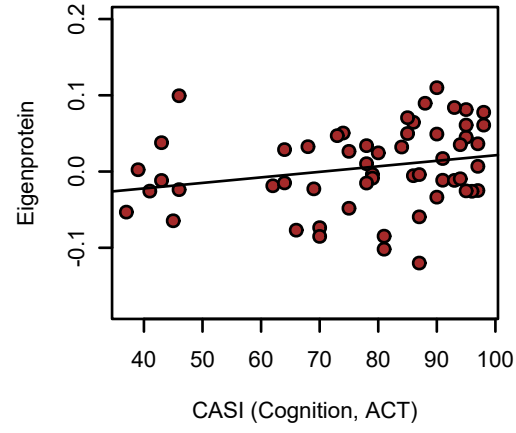
bicor=-0.44, $p=5.1e-09$
cor=-0.47, $p=4.1e-10$



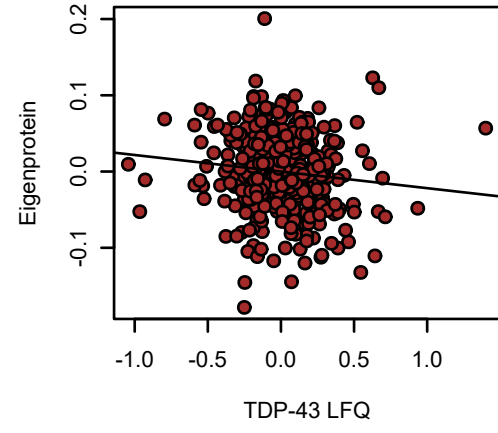
bicor=0.47, $p=1.8e-10$
cor=0.47, $p=1.5e-10$



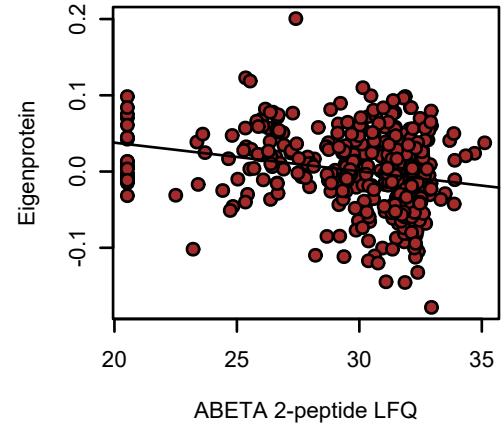
bicor=0.24, $p=0.069$
cor=0.24, $p=0.075$



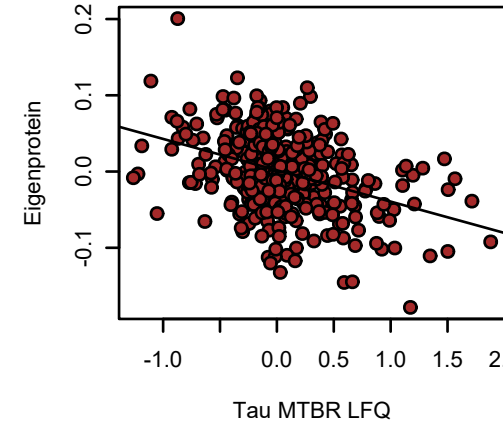
bicor=-0.15, $p=0.0018$
cor=-0.11, $p=0.024$



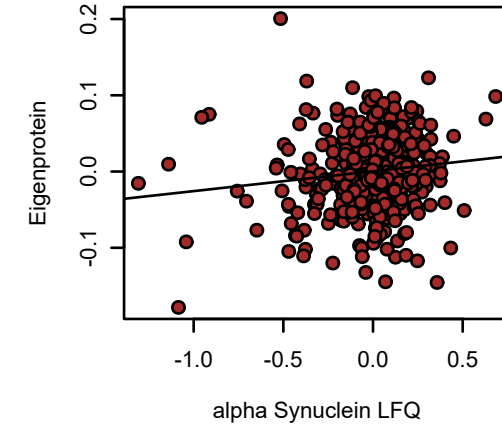
bicor=-0.22, $p=7.9e-06$
cor=-0.24, $p=6.7e-07$



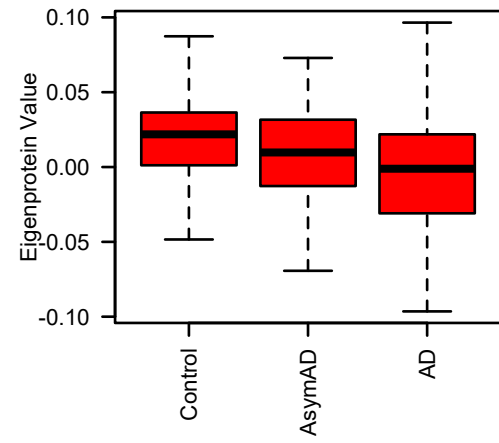
bicor=-0.33, $p=4e-12$
cor=-0.37, $p=4.9e-15$



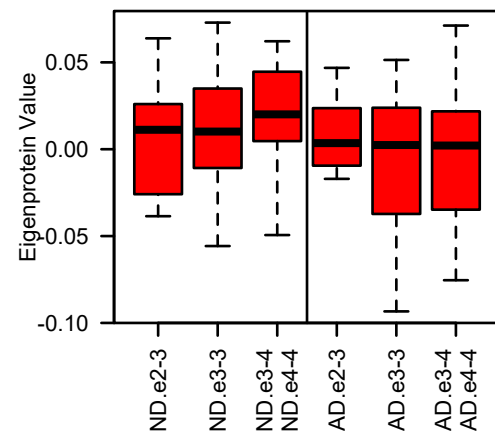
bicor=0.12, $p=0.011$
cor=0.13, $p=0.0077$



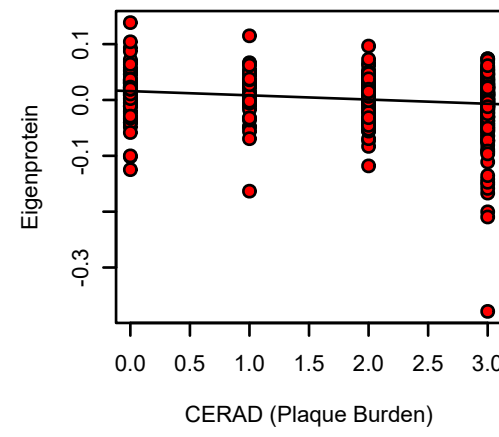
M6 red
K-W $p = 2.2e-05$



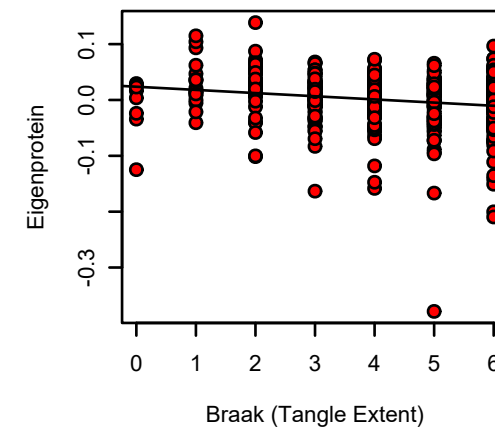
M6 red
ND K-W $p = 0.48$ | **AD K-W $p = 0.57$**



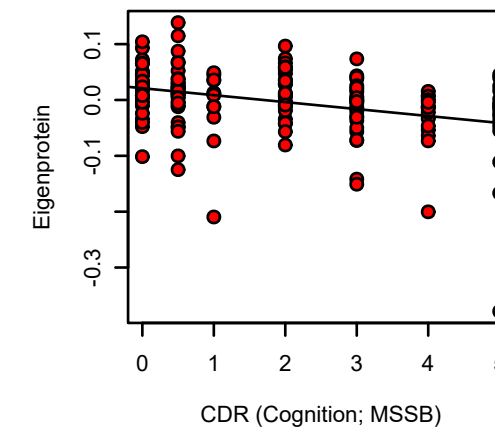
bicor=-0.18, $p=3e-04$
cor=-0.18, $p=0.00021$



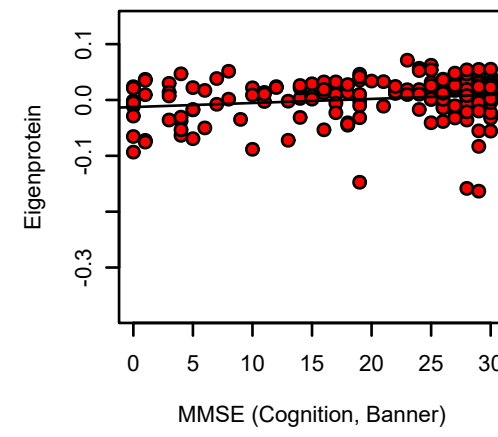
bicor=-0.2, $p=3.1e-05$
cor=-0.19, $p=9.1e-05$



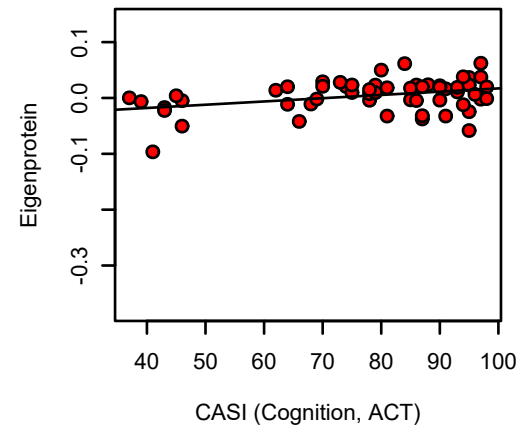
bicor=-0.33, $p=2.5e-05$
cor=-0.34, $p=1.2e-05$



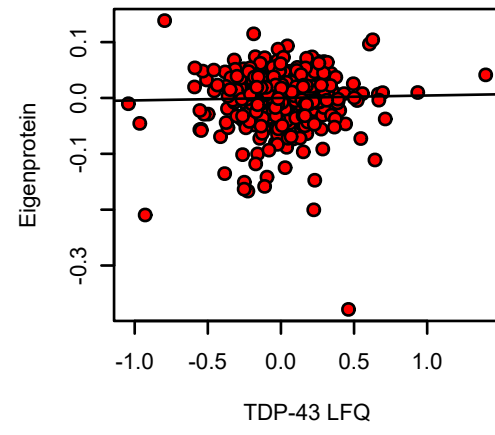
bicor=0.25, $p=0.0013$
cor=0.18, $p=0.02$



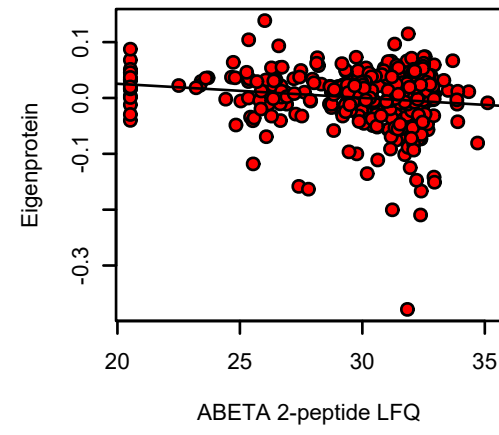
bicor=0.28, $p=0.034$
cor=0.35, $p=0.0082$



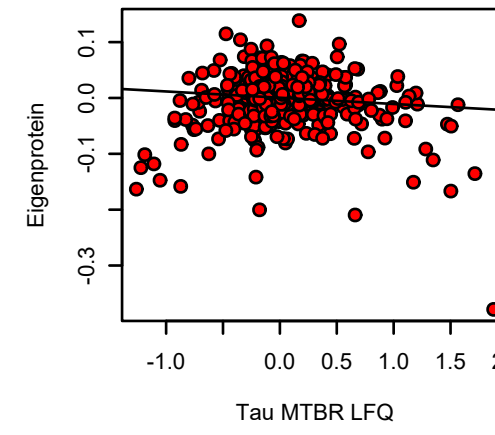
bicor=-0.01, $p=0.83$
cor=0.023, $p=0.64$



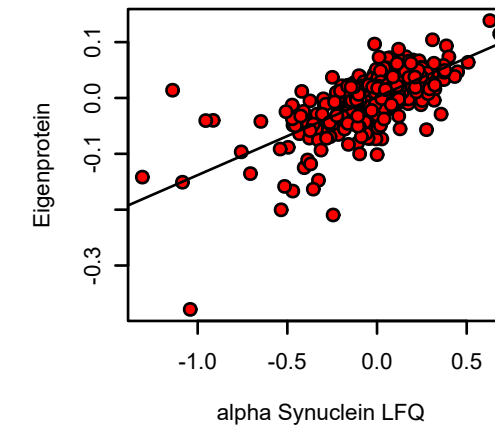
bicor=-0.057, $p=0.25$
cor=-0.16, $p=0.001$



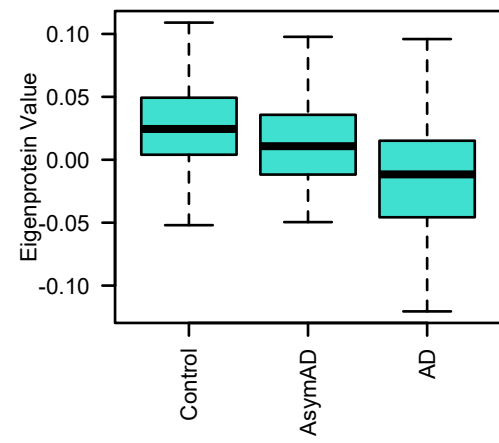
bicor=0.006, $p=0.9$
cor=-0.1, $p=0.041$



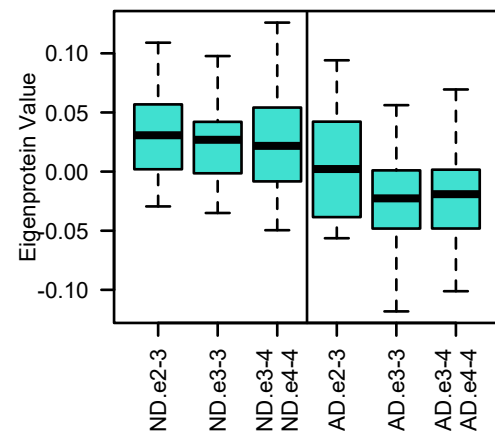
bicor=0.64, $p=4e-50$
cor=0.69, $p=1.6e-60$



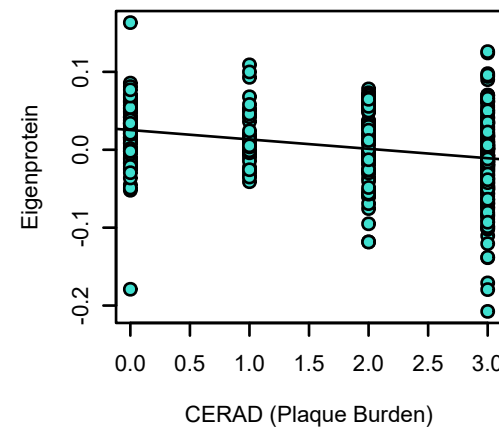
M1 turquoise
K-W $p = 2.8e-11$



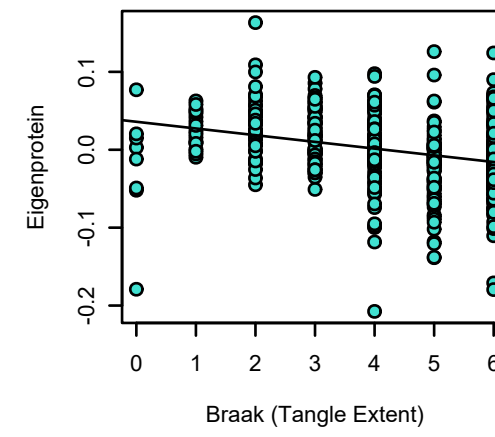
M1 turquoise
ND K-W $p = 0.32$ | **AD K-W $p = 0.17$**



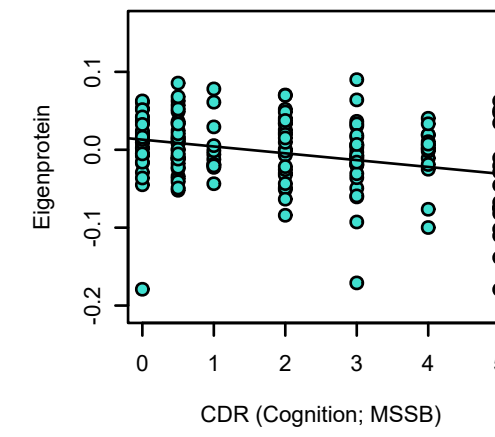
bicor=-0.31, $p=5e-11$
cor=-0.29, $p=1.5e-09$



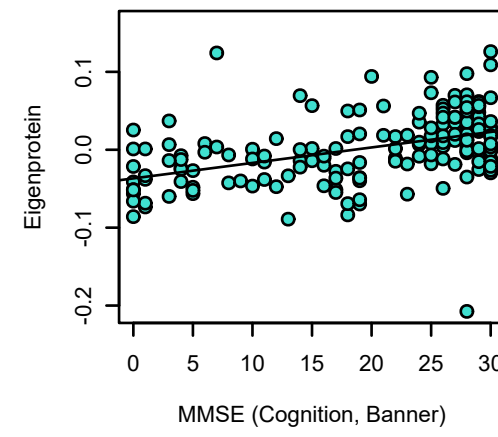
bicor=-0.33, $p=3.1e-12$
cor=-0.28, $p=5.5e-09$



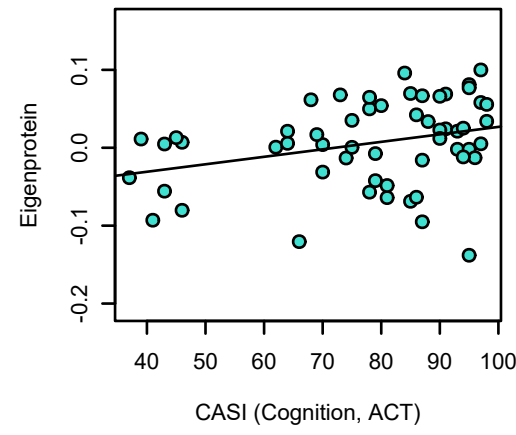
bicor=-0.28, $p=0.00029$
cor=-0.31, $p=7e-05$



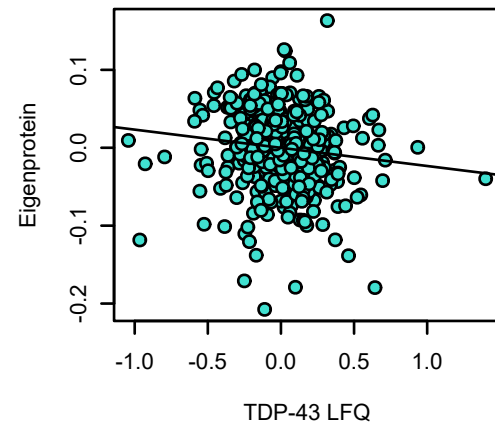
bicor=0.47, $p=9.8e-11$
cor=0.44, $p=2.7e-09$



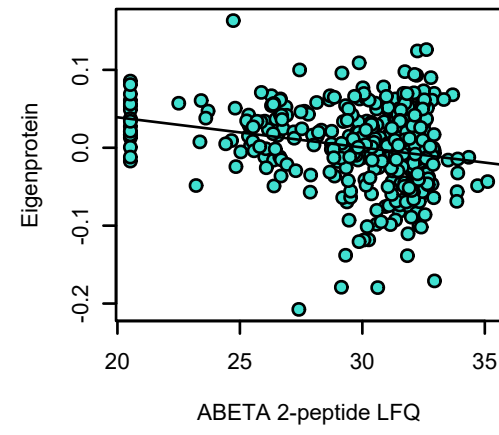
bicor=0.32, $p=0.015$
cor=0.31, $p=0.02$



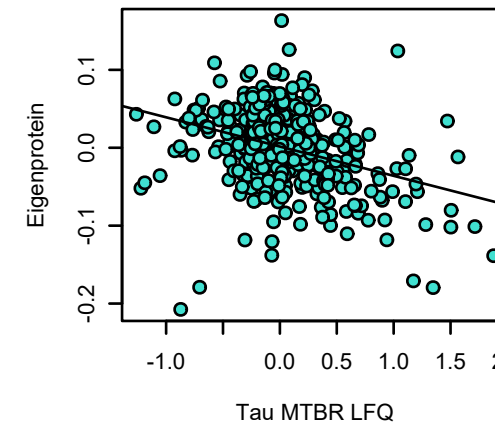
bicor=-0.17, $p=0.00046$
cor=-0.12, $p=0.014$



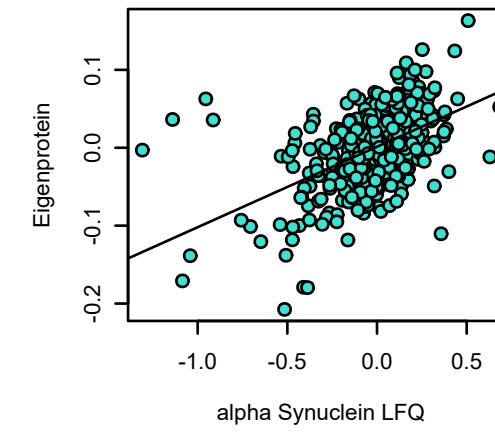
bicor=-0.18, $p=0.00023$
cor=-0.24, $p=6.7e-07$



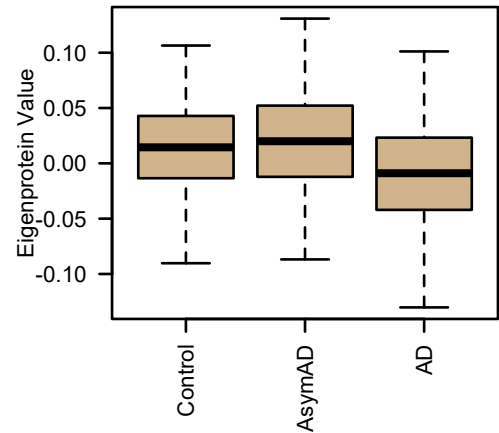
bicor=-0.33, $p=5.8e-12$
cor=-0.34, $p=8.5e-13$



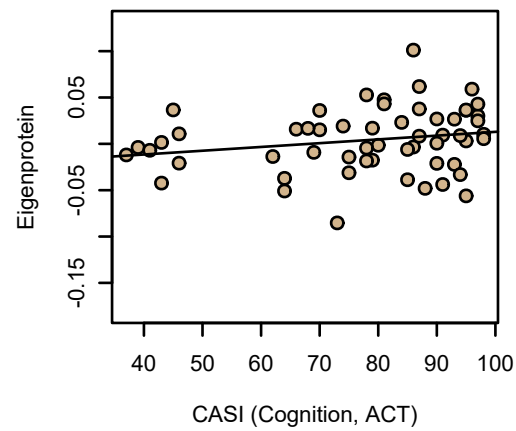
bicor=0.53, $p=1.5e-31$
cor=0.51, $p=4e-29$



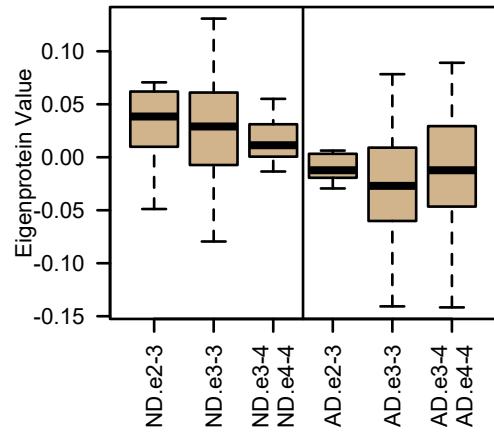
M12 tan
K-W $p = 1.3e-06$



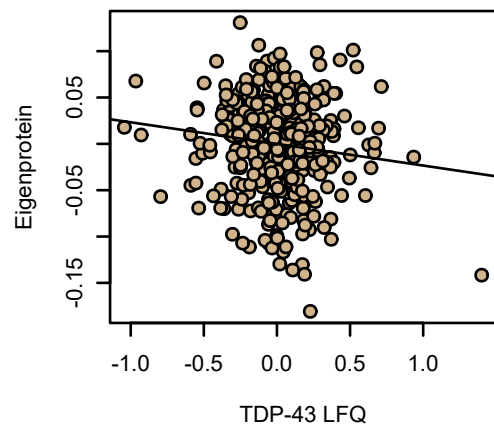
bicor=0.23, $p=0.089$
cor=0.21, $p=0.12$



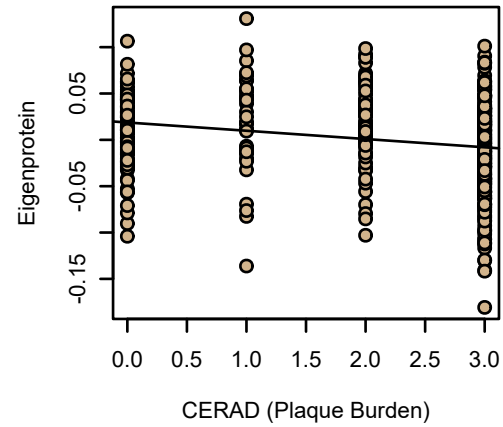
M12 tan
ND K-W $p = 0.27$ | AD K-W $p = 0.21$



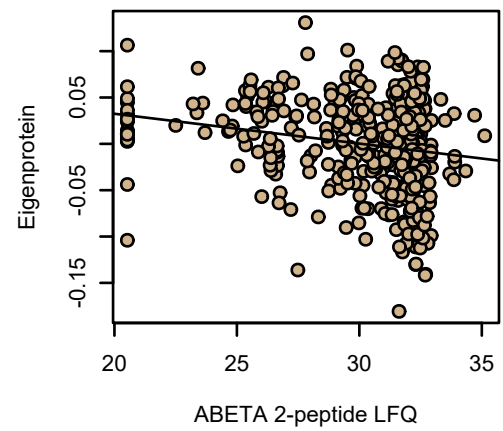
bicor=-0.11, $p=0.029$
cor=-0.12, $p=0.014$



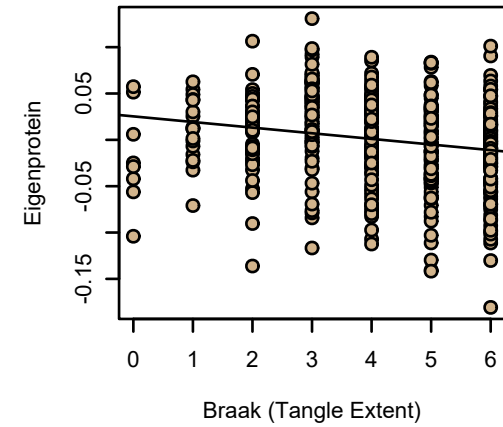
bicor=-0.22, $p=8.7e-06$
cor=-0.21, $p=1.5e-05$



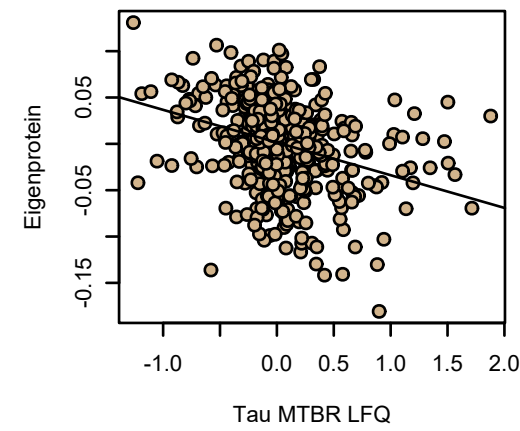
bicor=-0.13, $p=0.0065$
cor=-0.2, $p=3.7e-05$



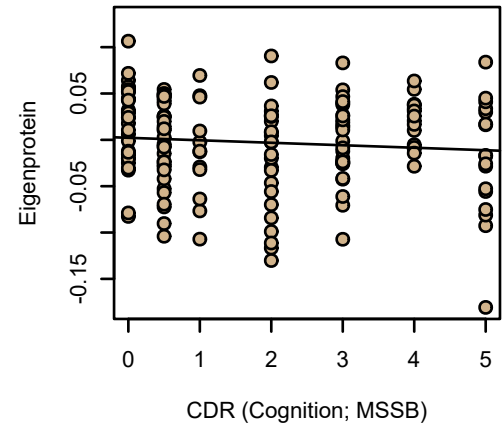
bicor=-0.23, $p=1.7e-06$
cor=-0.2, $p=3.7e-05$



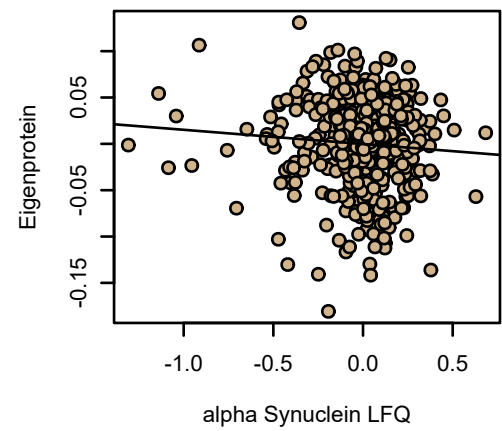
bicor=-0.35, $p=6.9e-14$
cor=-0.32, $p=2e-11$



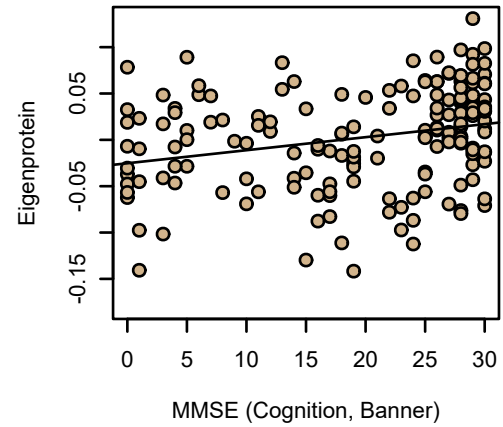
bicor=-0.061, $p=0.45$
cor=-0.092, $p=0.25$



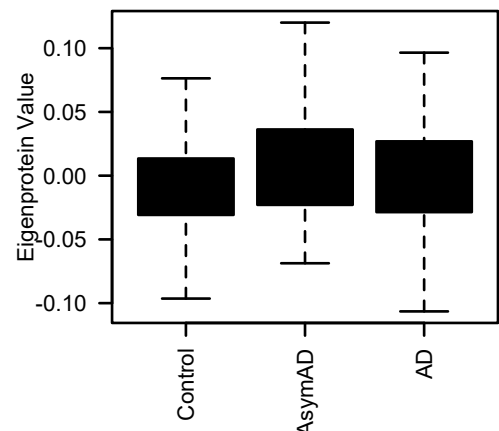
bicor=-0.083, $p=0.091$
cor=-0.075, $p=0.13$



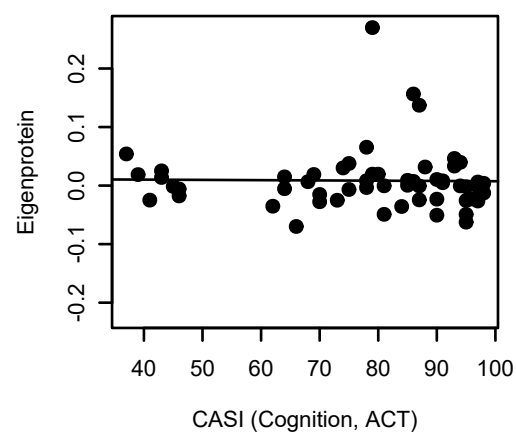
bicor=0.3, $p=9.1e-05$
cor=0.26, $p=0.00069$



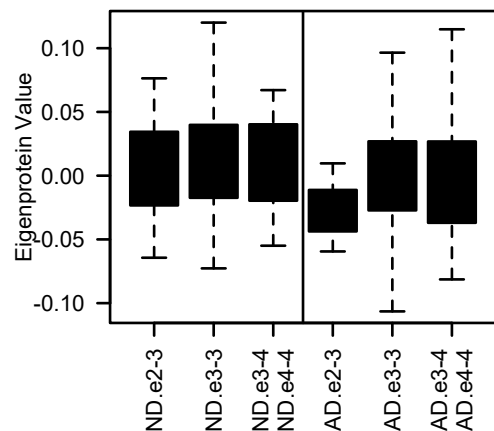
M7 black
K-W $p = 0.18$



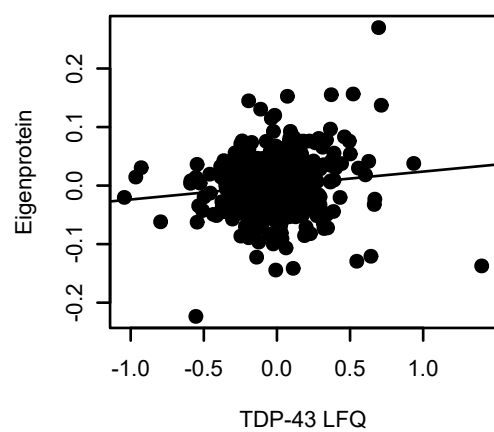
bicor=-0.091, $p=0.5$
cor=-0.015, $p=0.91$



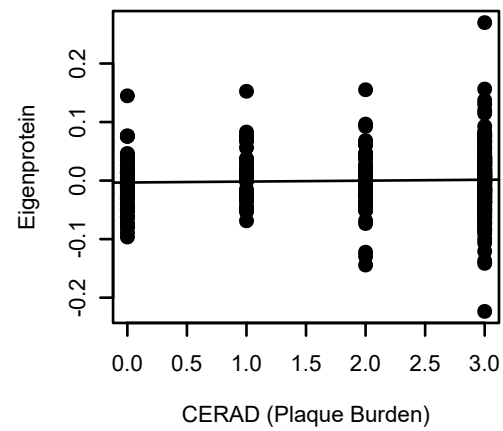
M7 black
ND K-W $p = 0.59$ | AD K-W $p = 0.47$



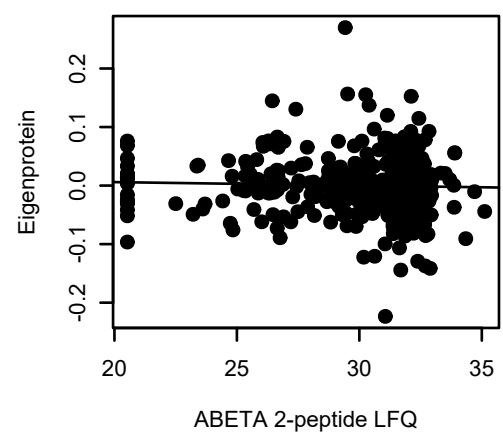
bicor=0.11, $p=0.024$
cor=0.13, $p=0.0077$



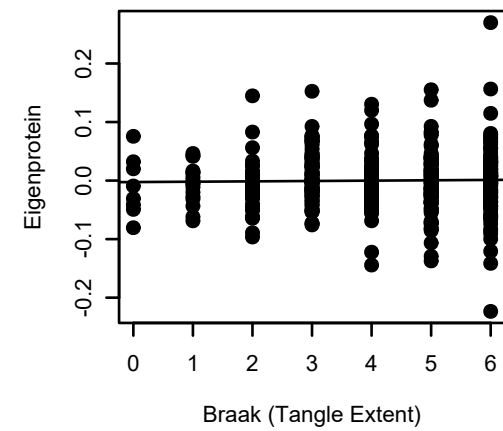
bicor=0.055, $p=0.26$
cor=0.038, $p=0.44$



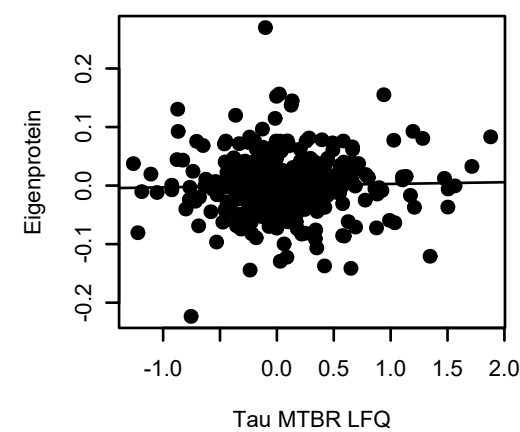
bicor=-0.044, $p=0.37$
cor=-0.037, $p=0.45$



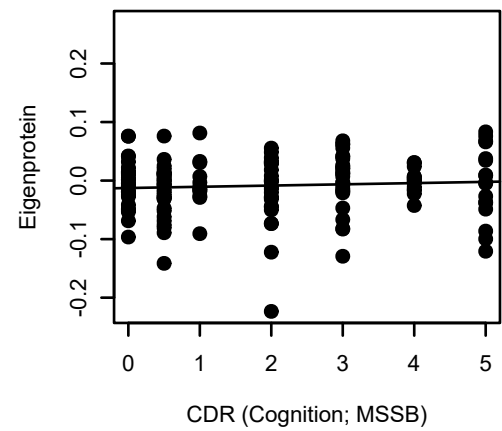
bicor=0.027, $p=0.58$
cor=0.02, $p=0.68$



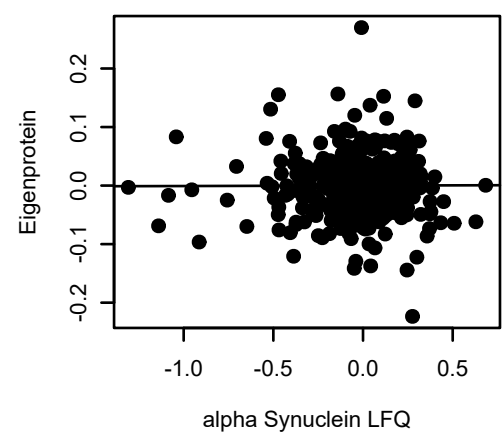
bicor=0.0037, $p=0.94$
cor=0.026, $p=0.6$



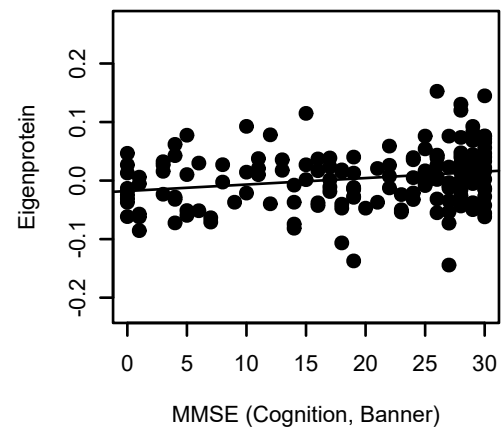
bicor=0.11, $p=0.18$
cor=0.075, $p=0.35$



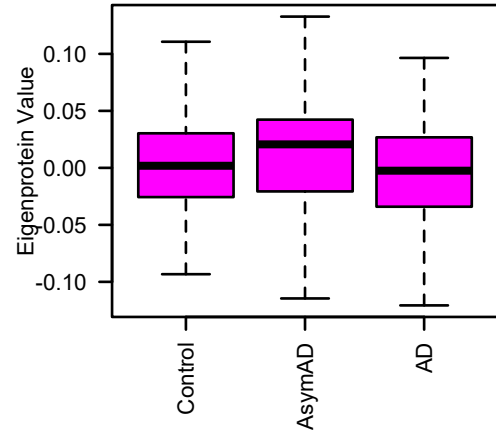
bicor=0.025, $p=0.61$
cor=0.0038, $p=0.94$



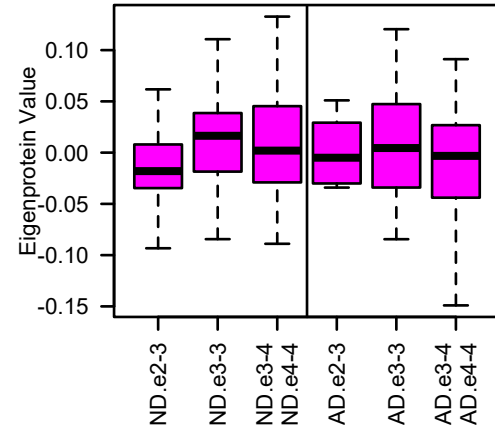
bicor=0.24, $p=0.0022$
cor=0.23, $p=0.0028$



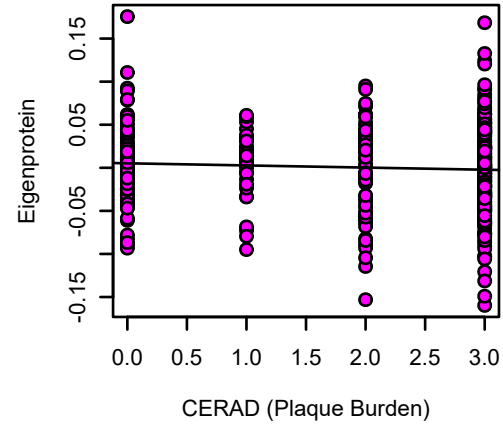
M9 magenta
K-W $p = 0.05$



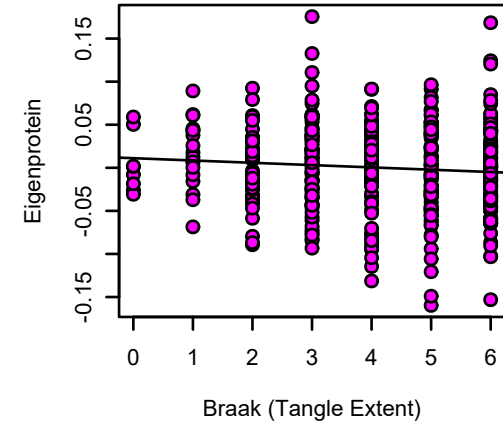
M9 magenta
ND K-W $p = 0.35$ | AD K-W $p = 0.41$



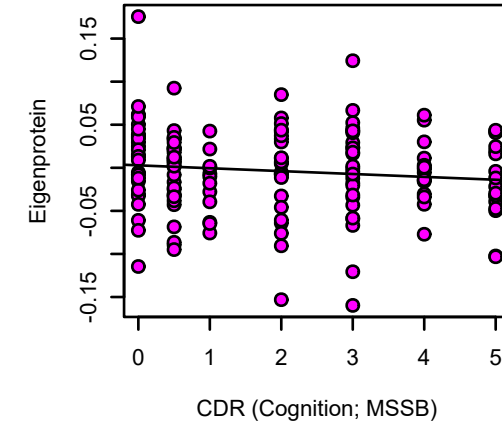
bicor=-0.055, p=0.26
cor=-0.06, p=0.22



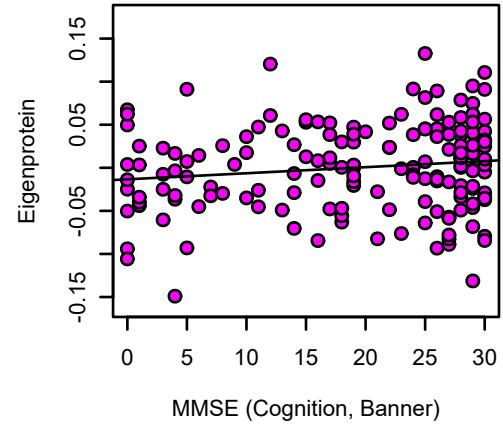
bicor=-0.094, p=0.054
cor=-0.087, p=0.075



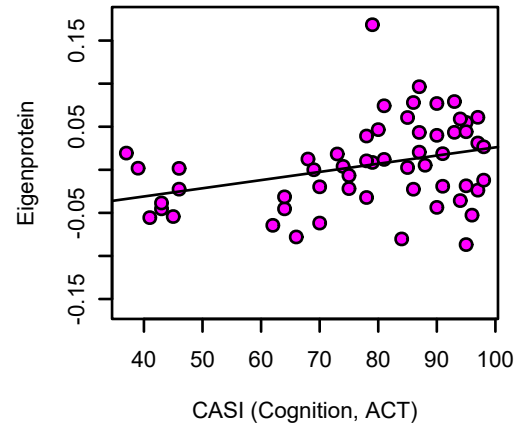
bicor=-0.1, p=0.2
cor=-0.12, p=0.13



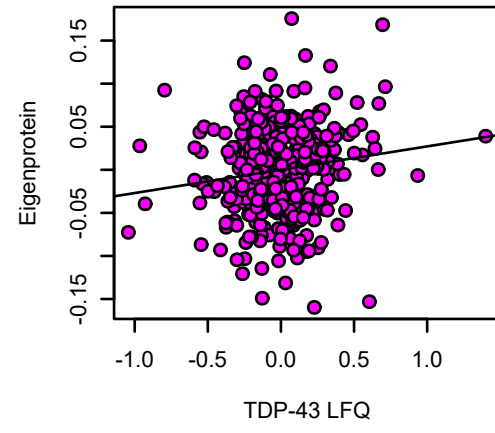
bicor=0.13, p=0.095
cor=0.14, p=0.071



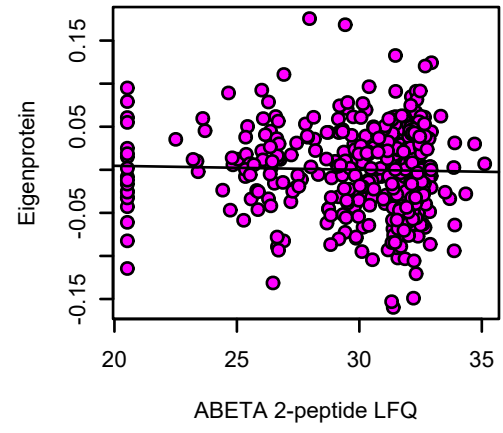
bicor=0.37, p=0.0055
cor=0.33, p=0.013



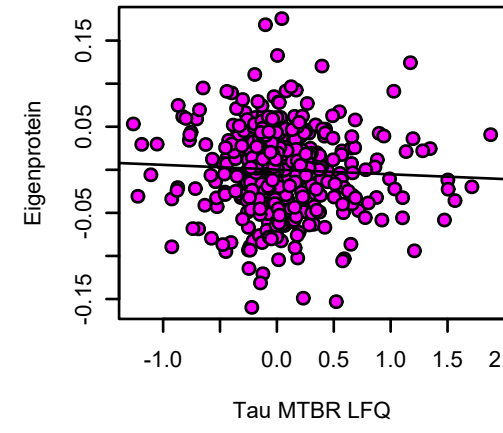
bicor=0.13, p=0.0057
cor=0.14, p=0.0041



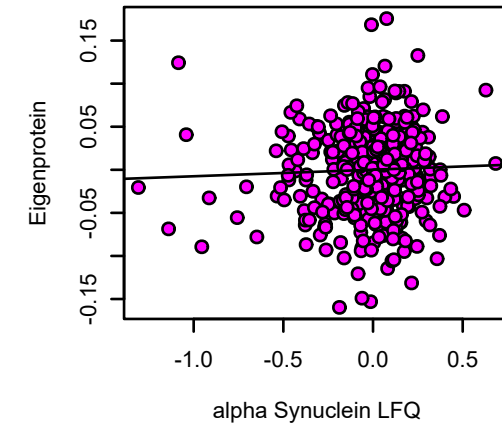
bicor=-0.023, p=0.64
cor=-0.029, p=0.55



bicor=-0.052, p=0.28
cor=-0.05, p=0.31

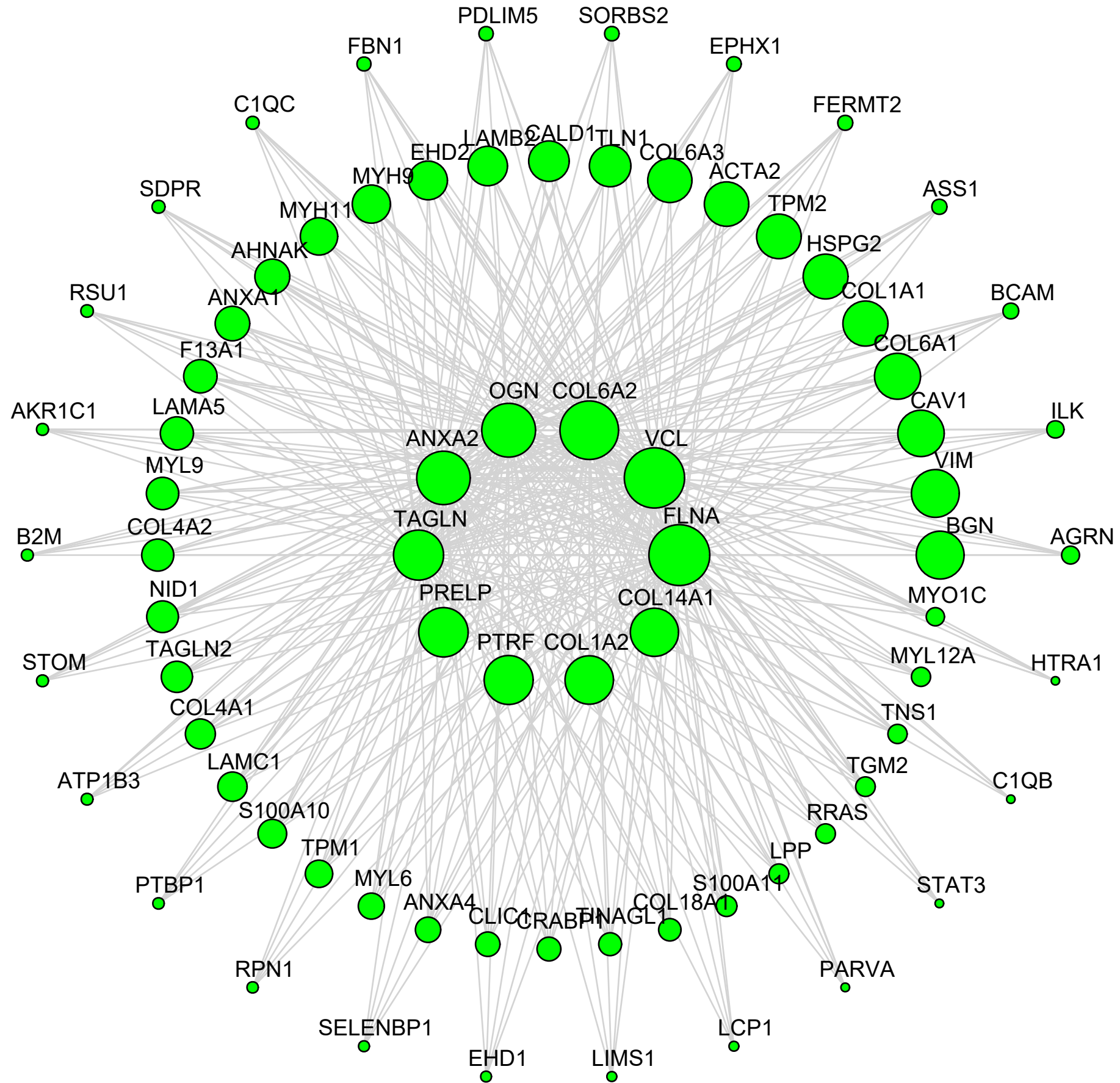


bicor=0.01, p=0.84
cor=0.037, p=0.45

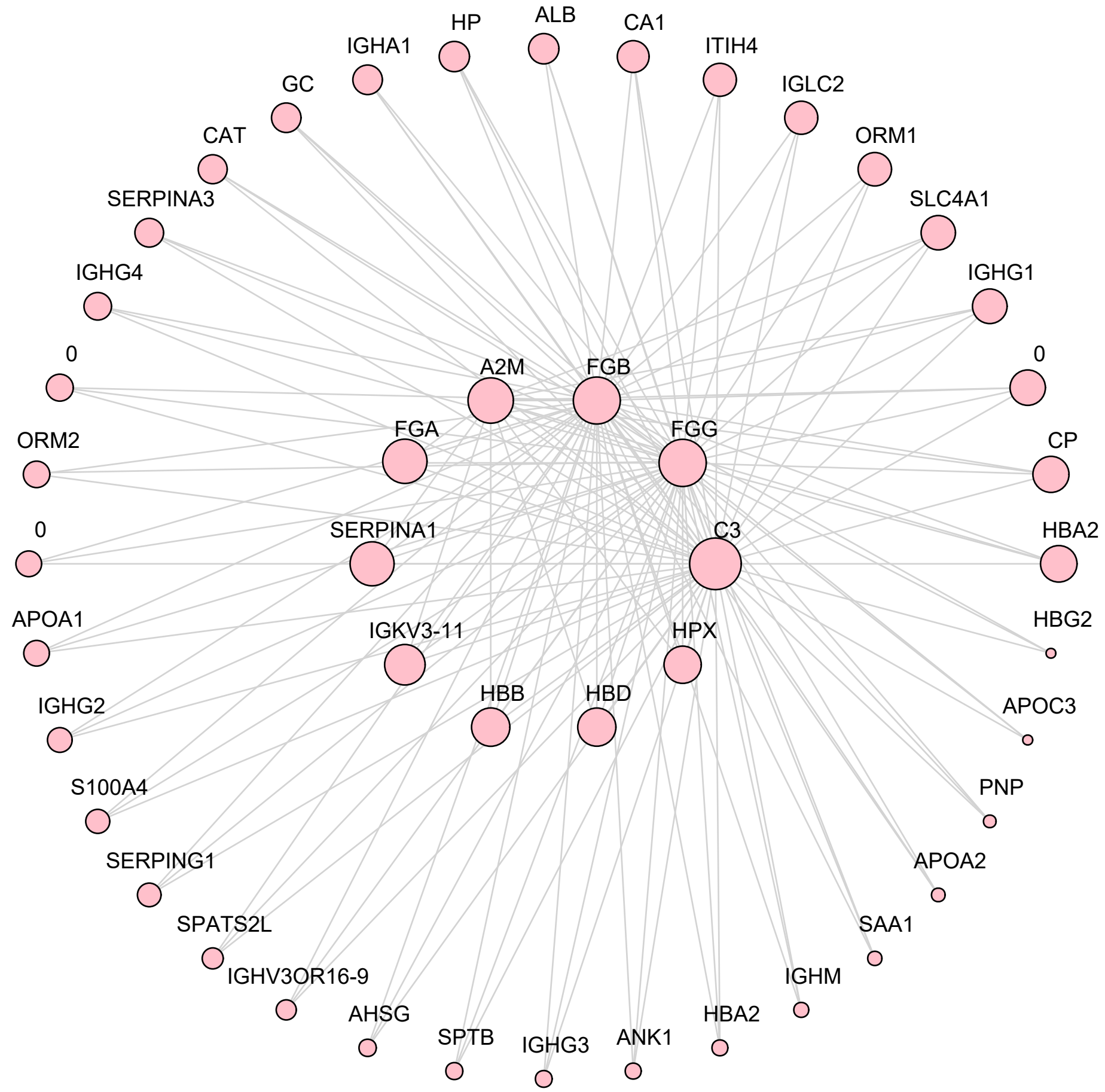


Supplementary Figure 1. AD Network Module Phenotype Correlations. Each module eigenprotein was assessed for group differences by case status and *APOE* genotype, and correlated to genetic, neuropathological, cognitive/functional, and molecular traits ($n=419$ independent case sample traits after network connectivity outlier removal except for cognitive measures, where $n=167$ MMSE, $n=159$ CDR, and $n=56$ CASI). *APOE* genotype information is from the Banner and BLSA cohorts. Control ($n=91$) and AsymAD ($n=98$) cases were grouped into non-demented (ND) in the *APOE* analysis for sufficient statistical power (ND: $n=16$ E2/3, $n=68$ E3/3, $n=22$ E3/4 and E4/4; AD: $n=8$ E2/3, $n=38$ E3/3, $n=54$ E3/4 and E4/4). E2/2 ($n=1$ AsymAD) and E2/4 ($n=1$ AsymAD) were excluded from the analysis. Eigenprotein differences by case status or *APOE* genotype were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Statistical significance at $p < 0.05$ for case status is highlighted in red. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

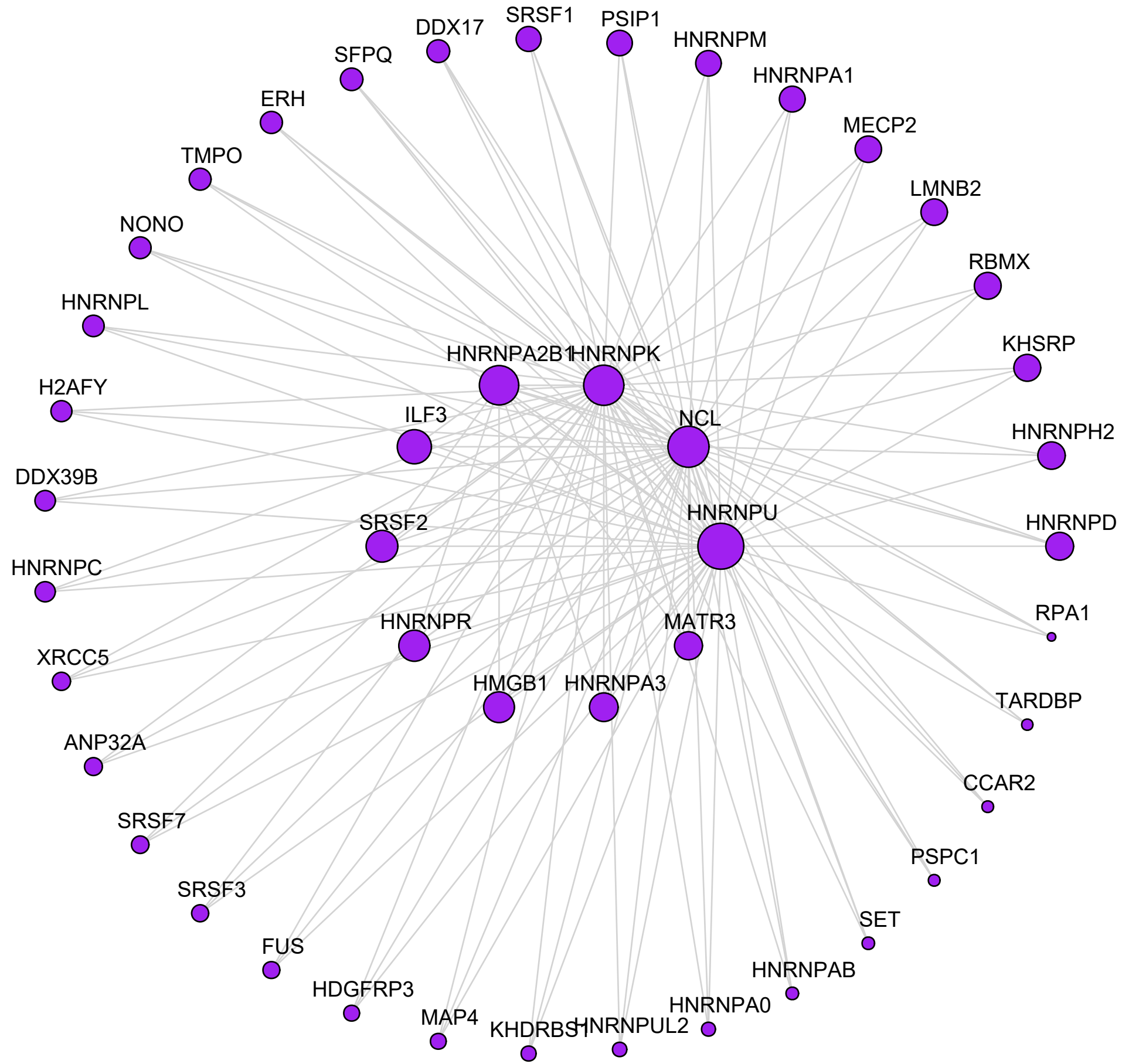
M5 Extracellular Matrix



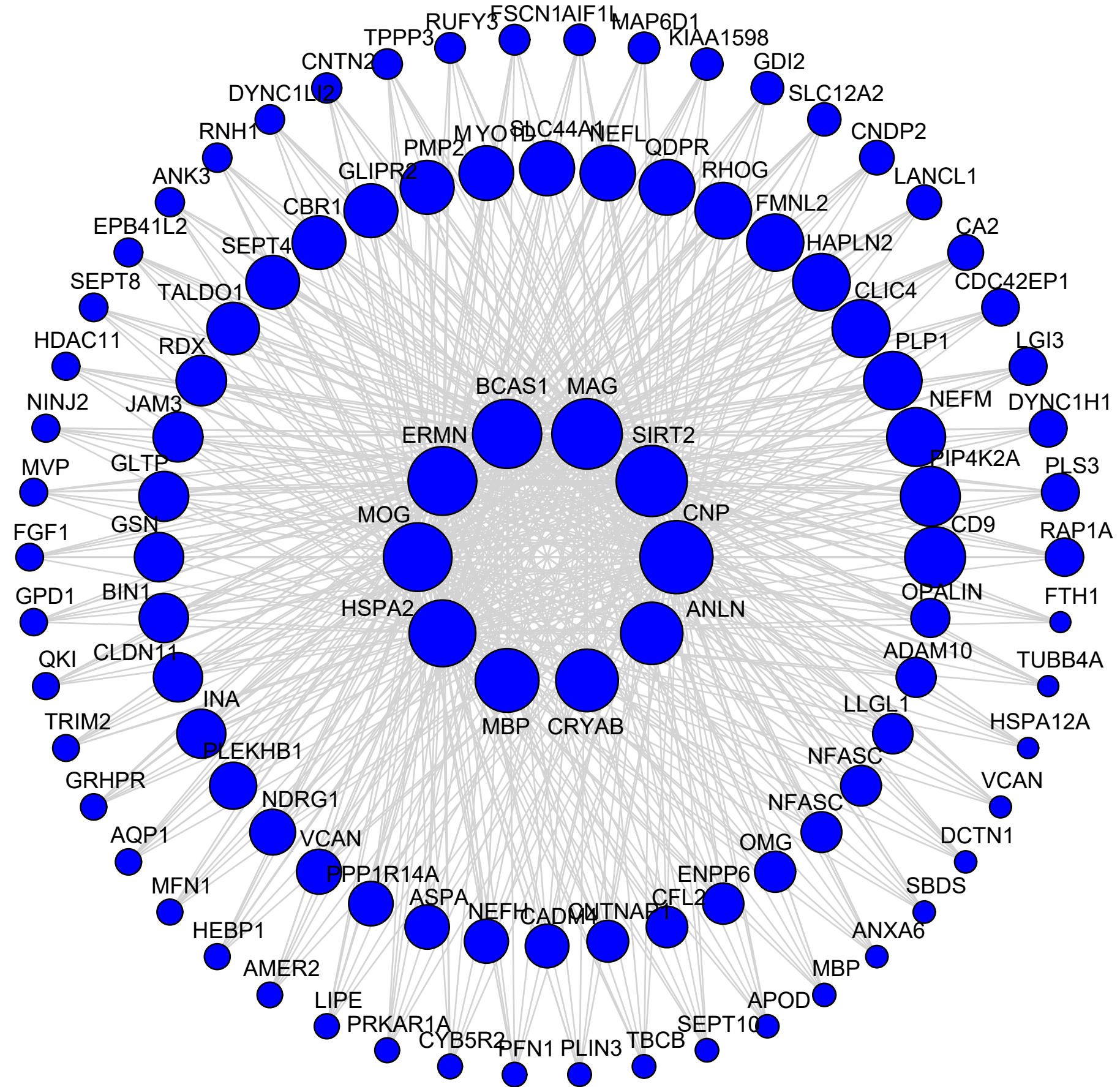
M8 Blood



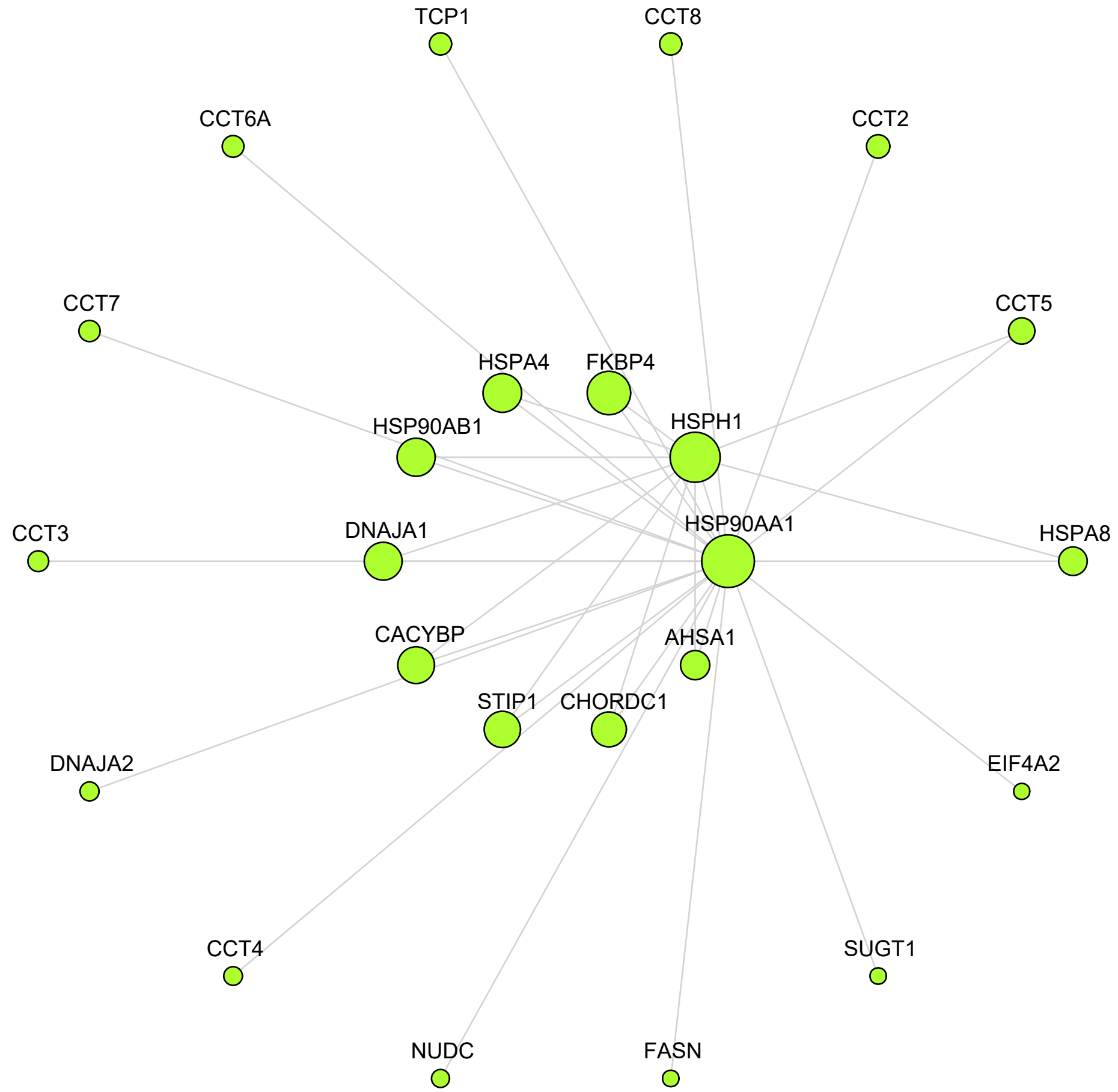
M10 RNA Binding/Splicing



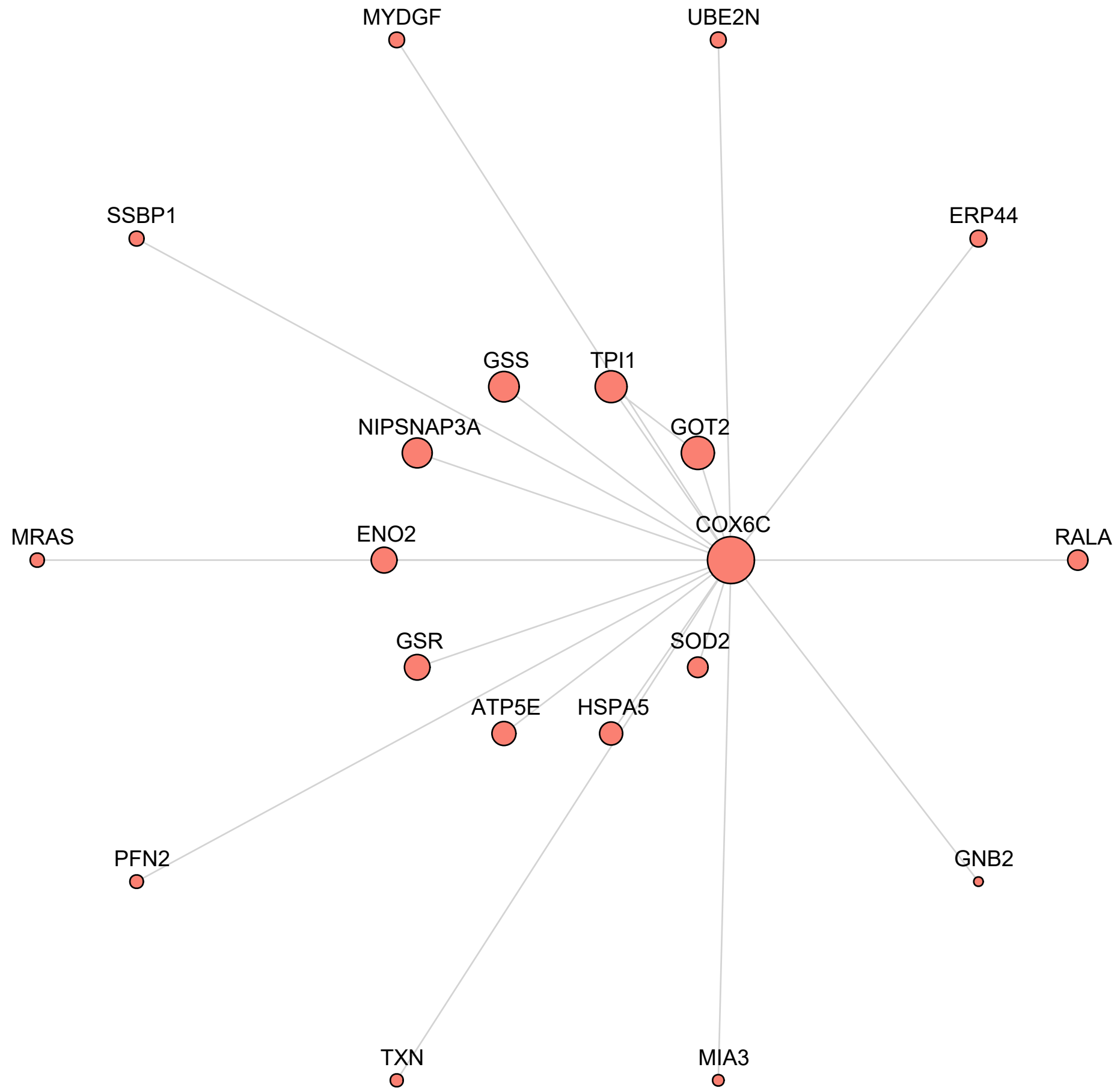
M2 Myelin/Oligodendrocyte



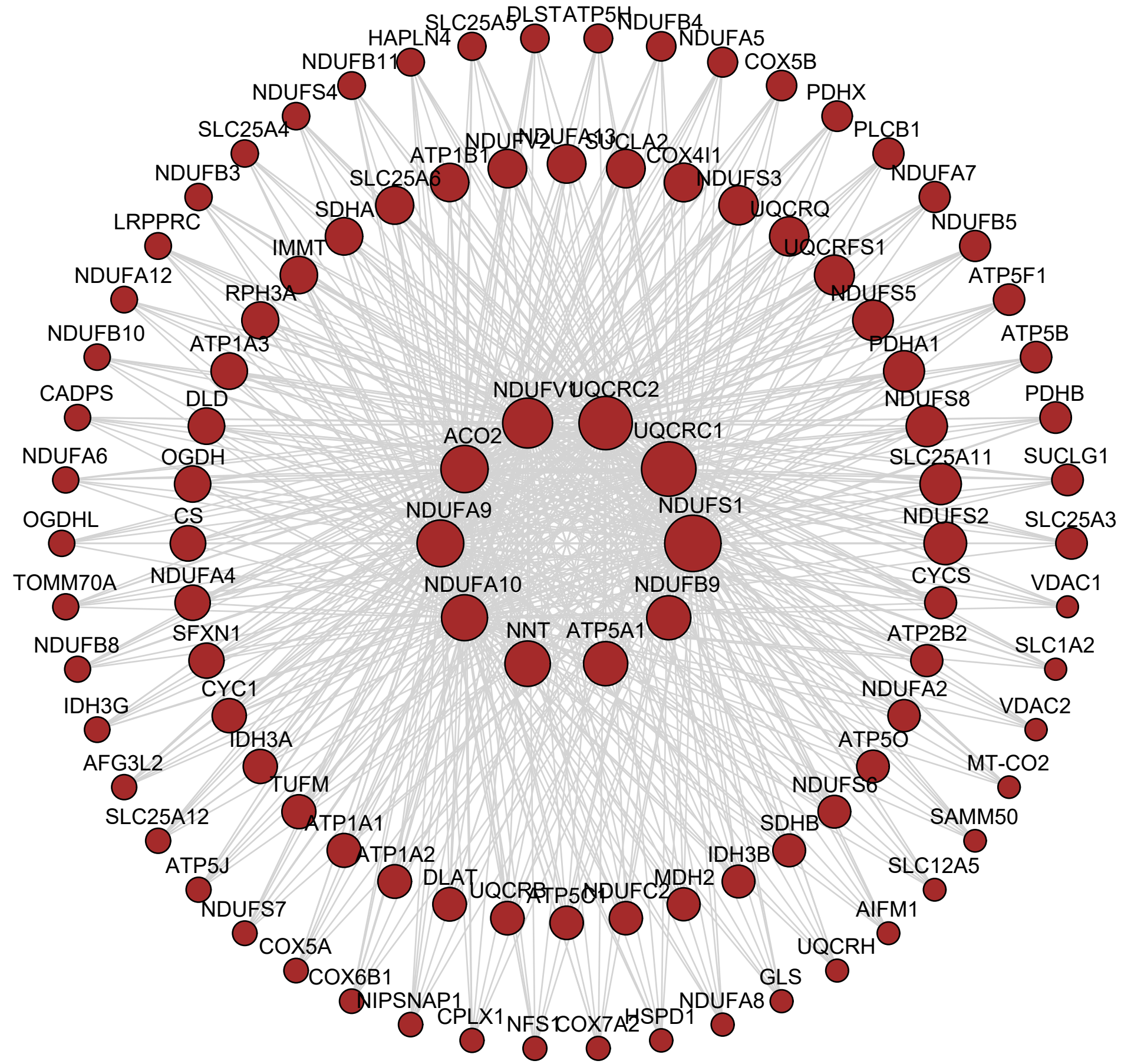
M11 Chaperone/Protein Folding



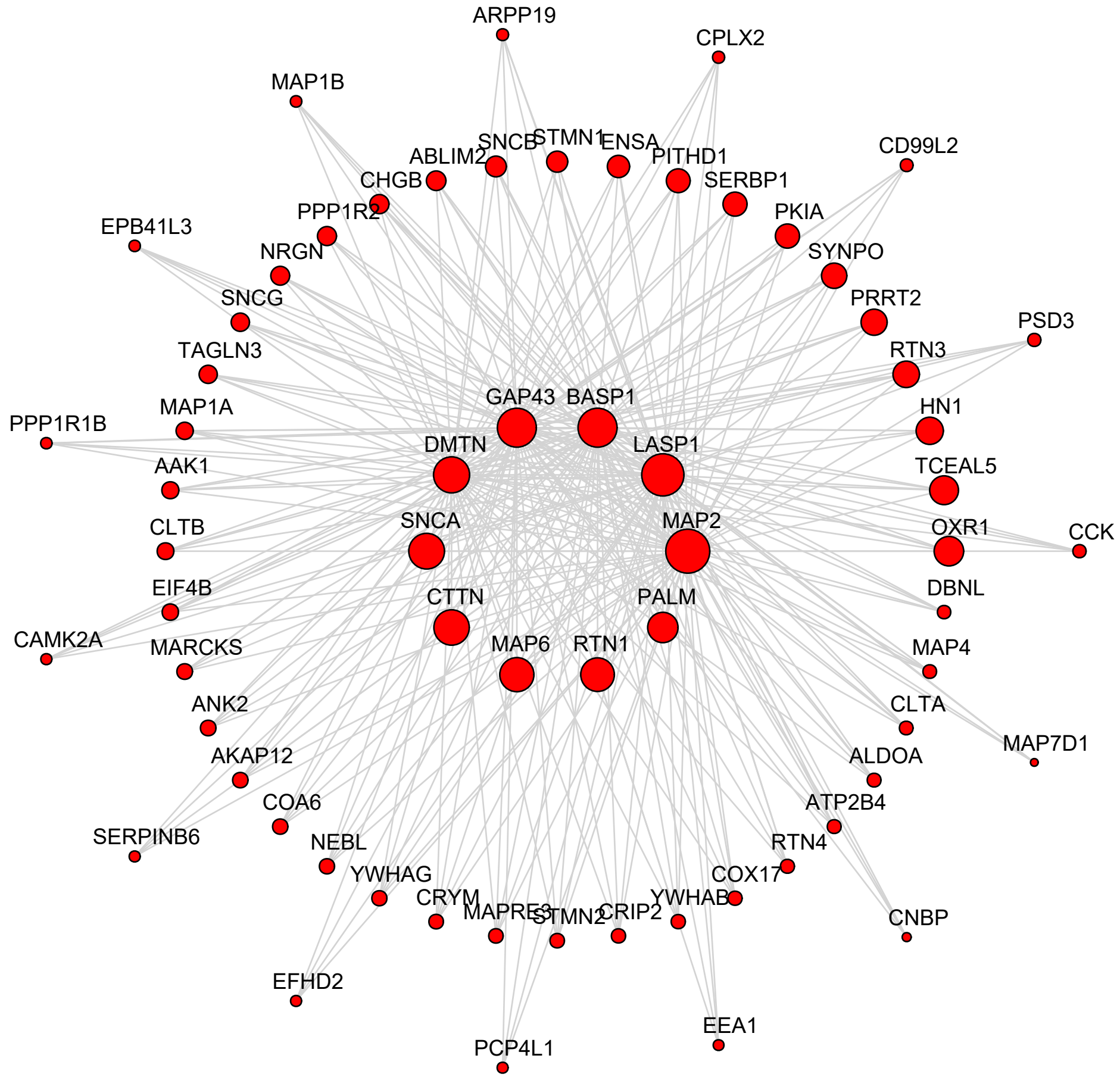
M13 Unknown



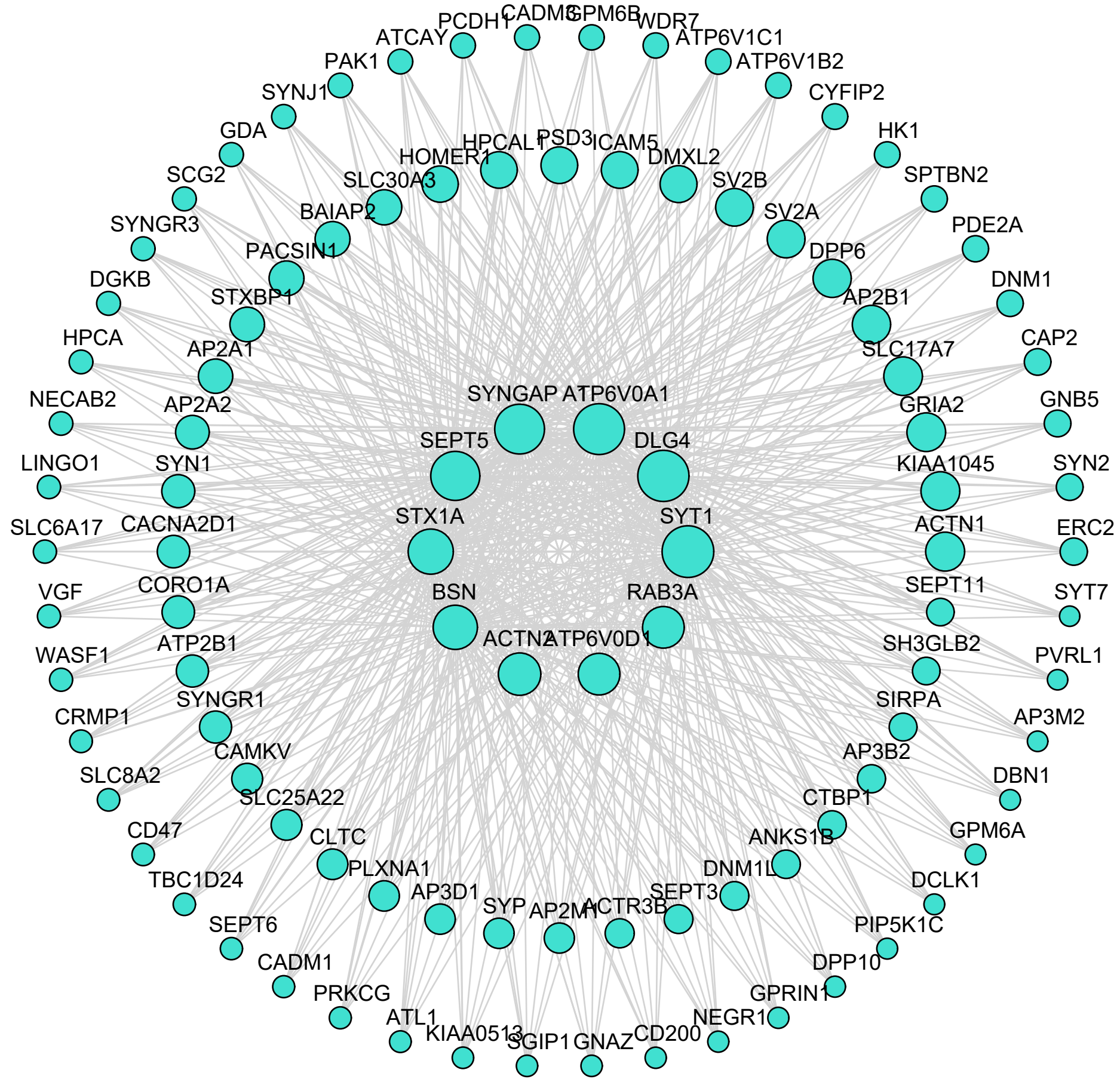
M3 Mitochondrial



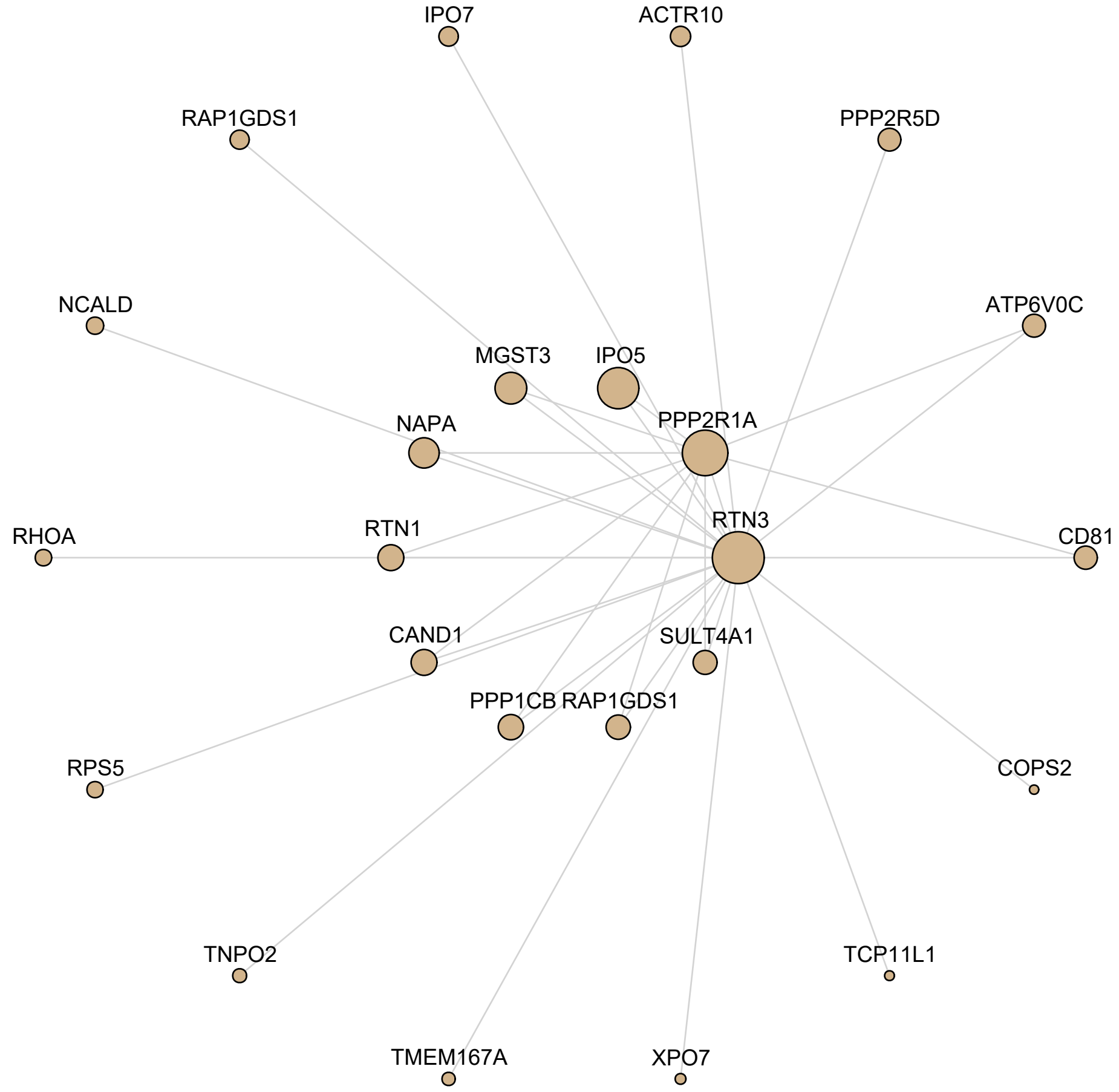
M6 Cytoskeleton



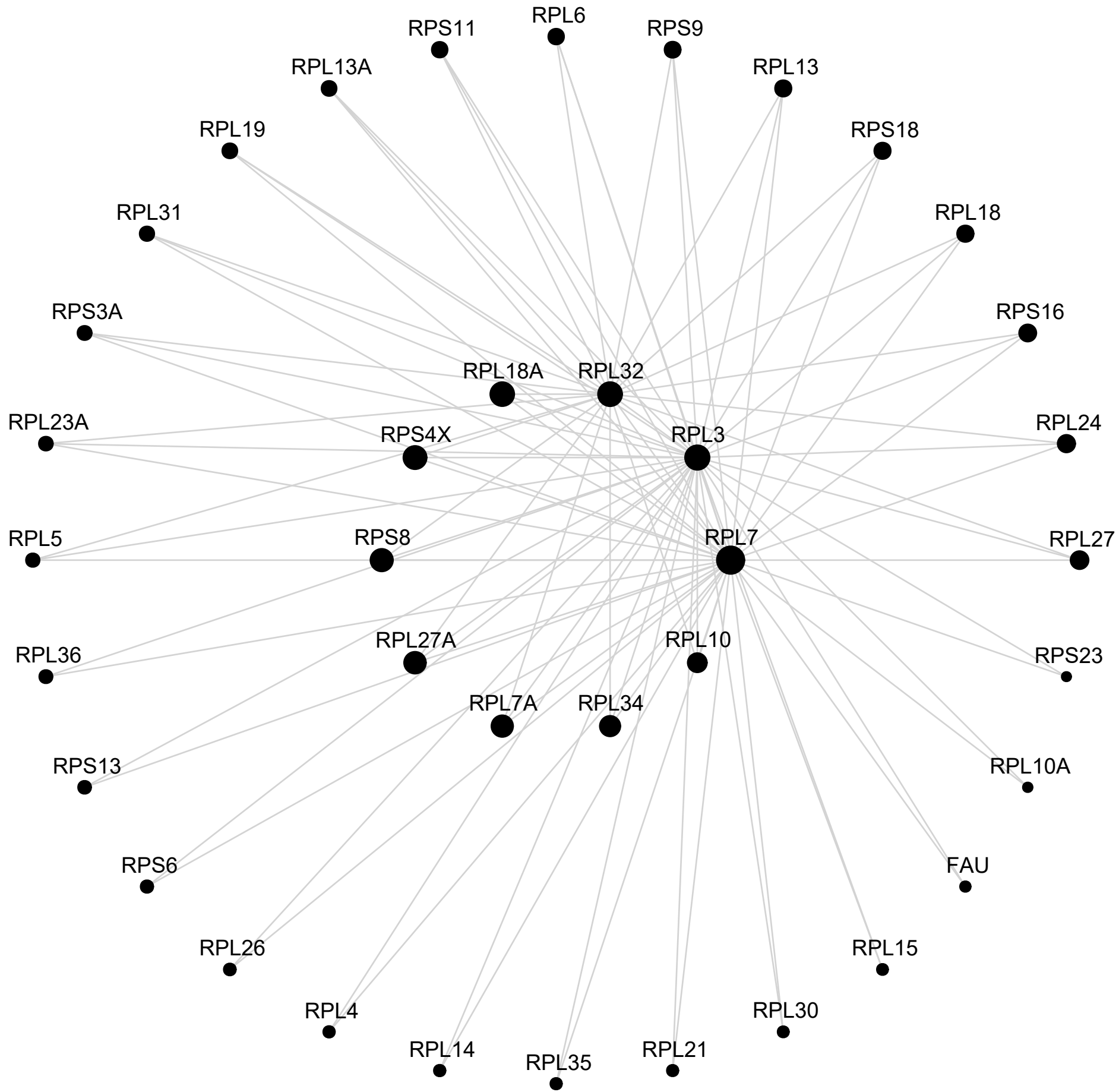
M1 Synapse



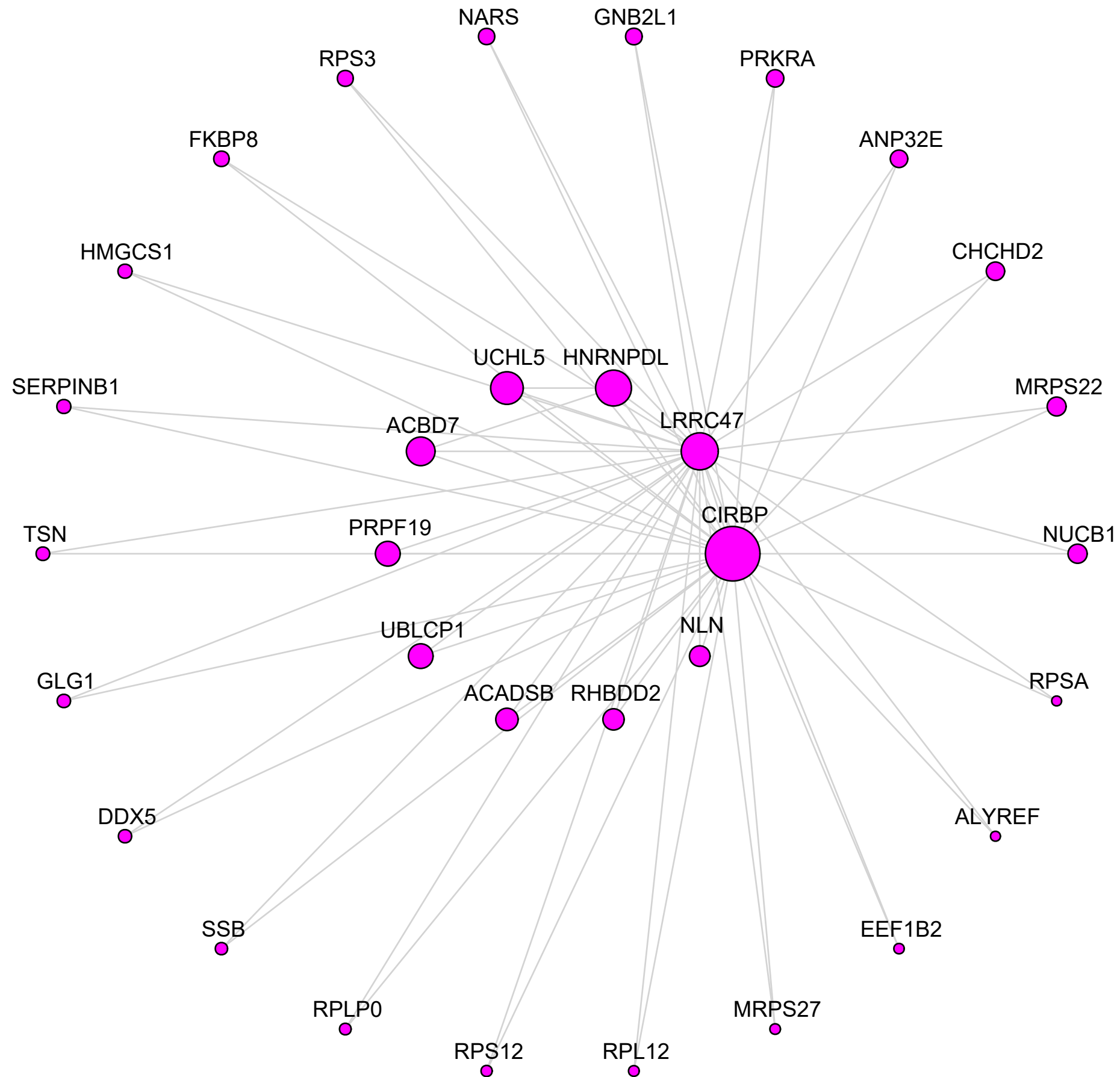
M12 Unknown



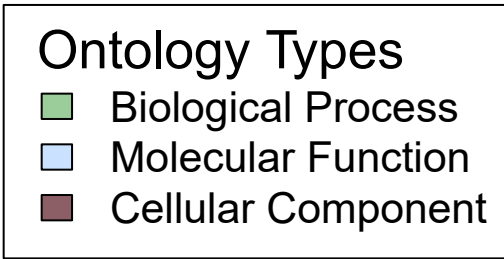
M7 Translation/Ribosome



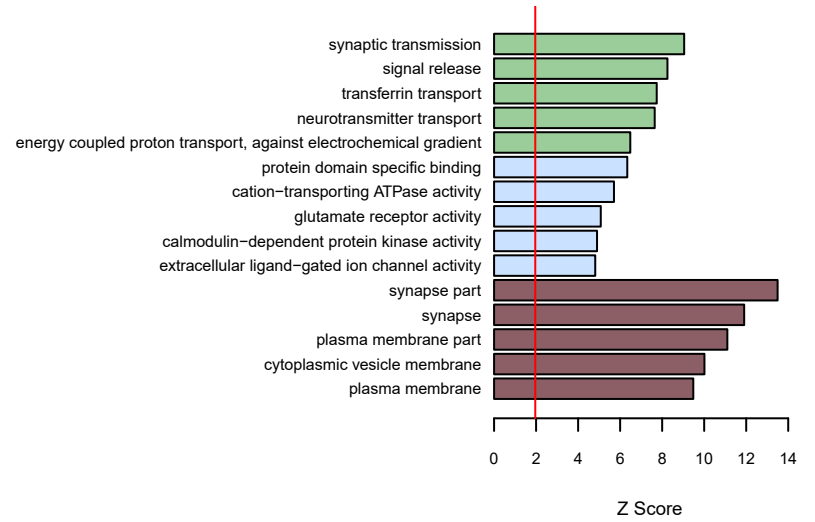
M9 Translation/Ribosome



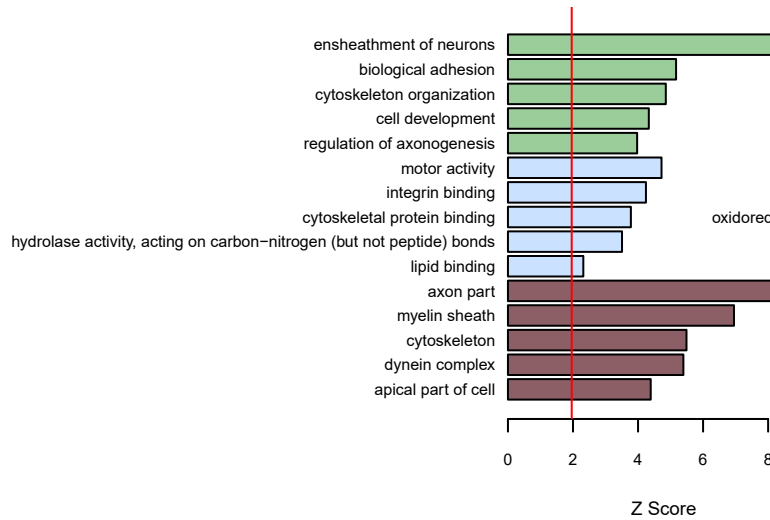
Supplementary Figure 2. AD Network Module Protein Memberships. The top 100 proteins by module eigenprotein correlation value (kME) in each AD protein network module. The size of each circle indicates the relative kME. Those proteins with the largest kME are considered “hub” proteins within the module, and explain the largest variance in module expression.



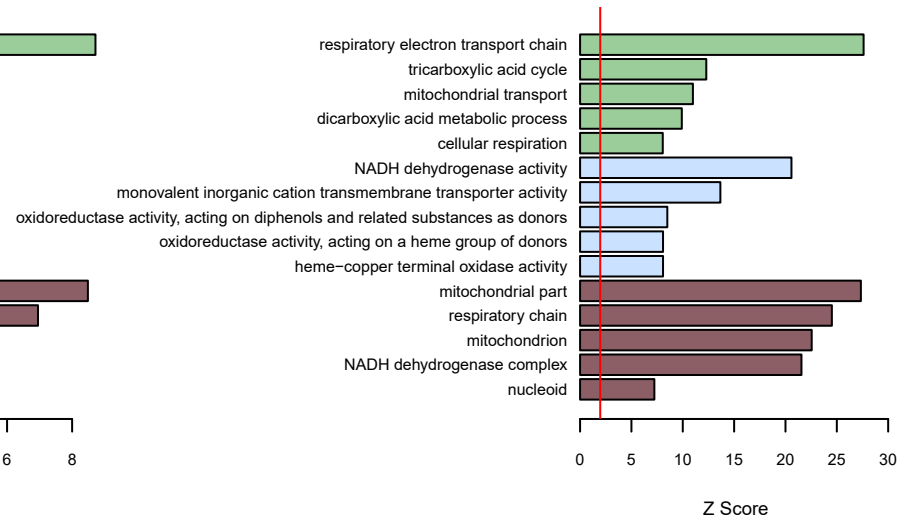
M1 turquoise



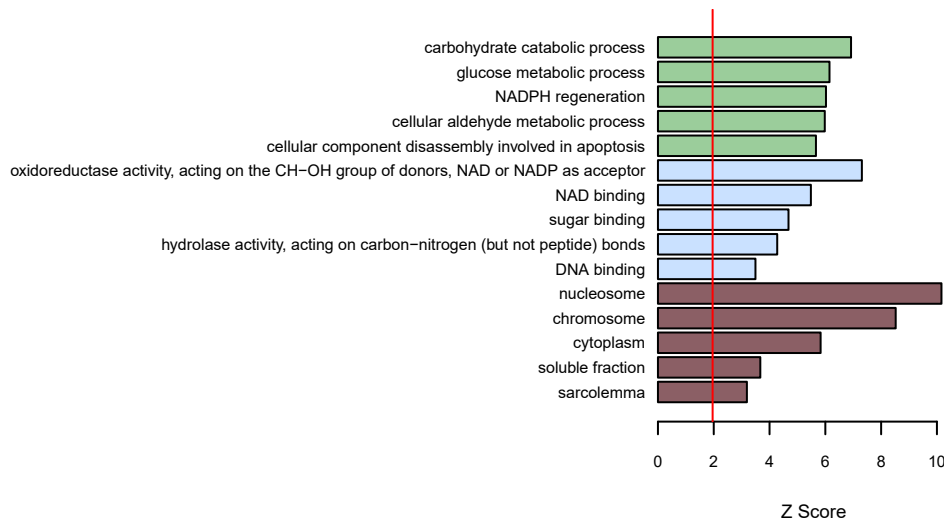
M2 blue



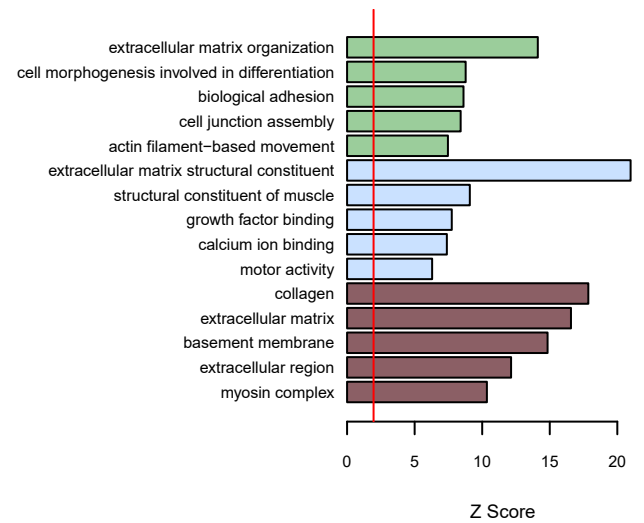
M3 brown

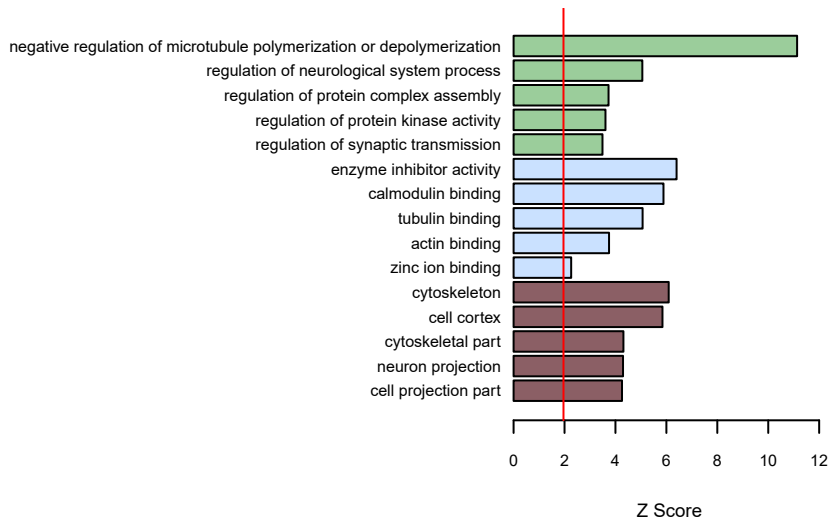
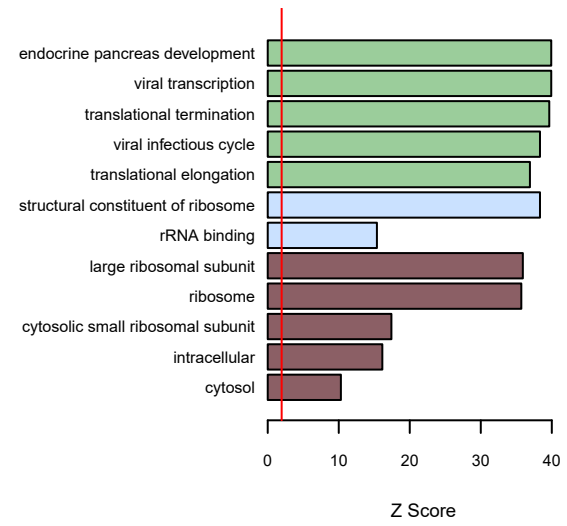
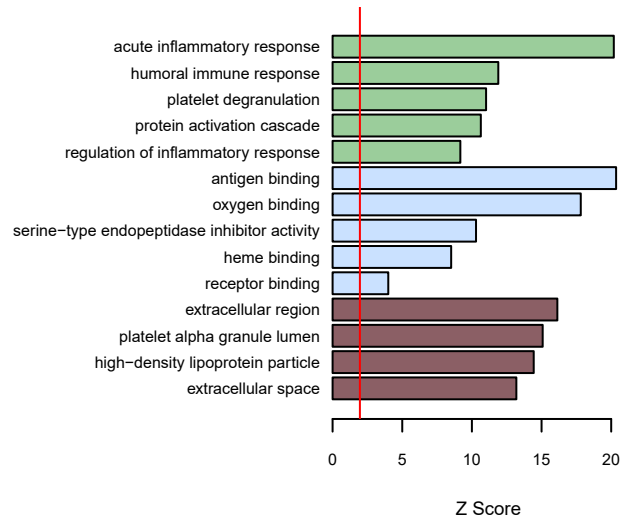
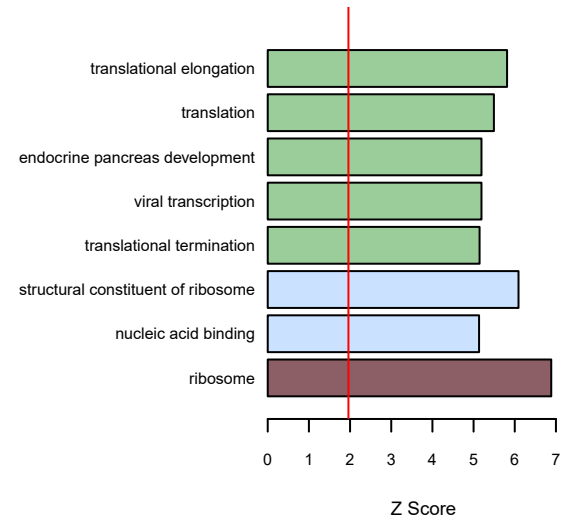
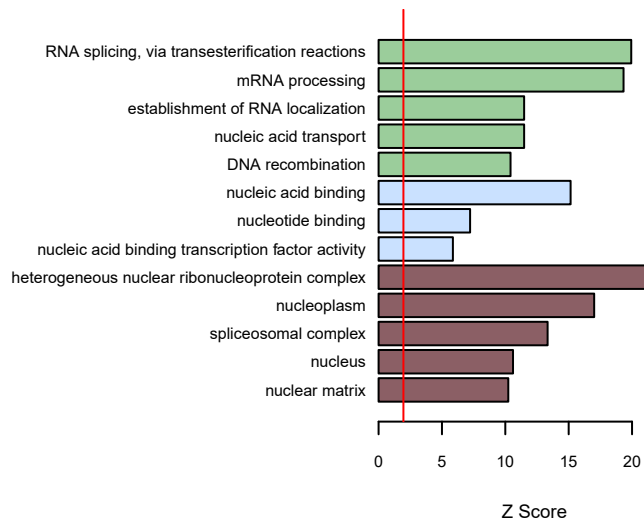
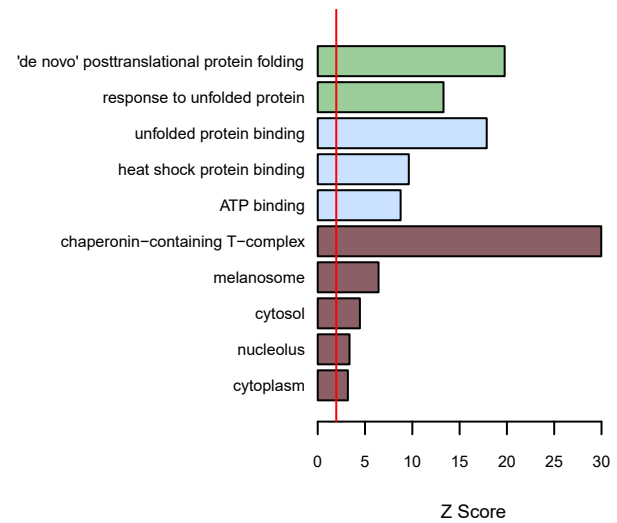


M4 yellow

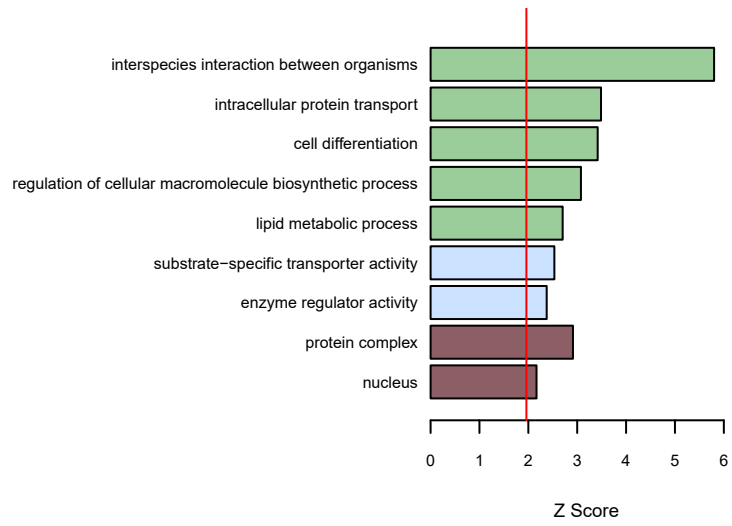


M5 green

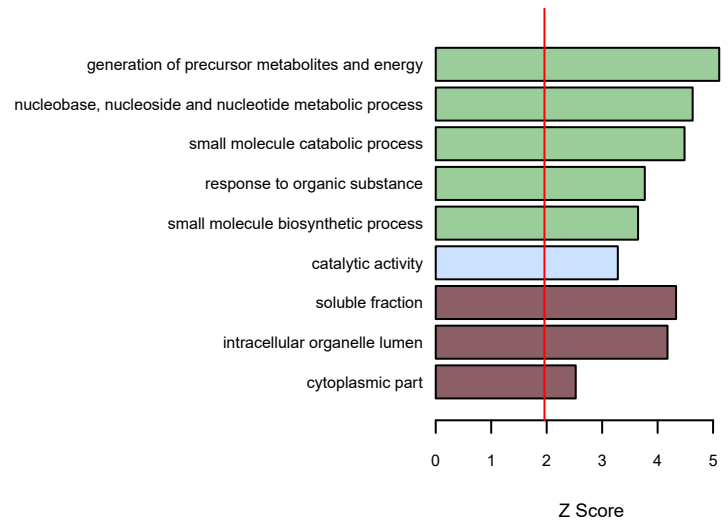


M6 red**M7 black****M8 pink****M9 magenta****M10 purple****M11 greenyellow**

M12 tan

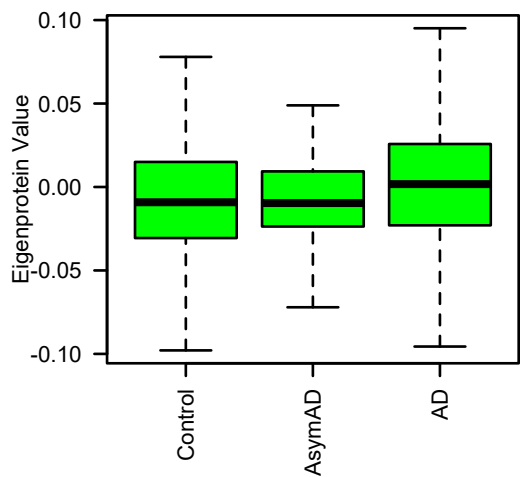


M13 salmon

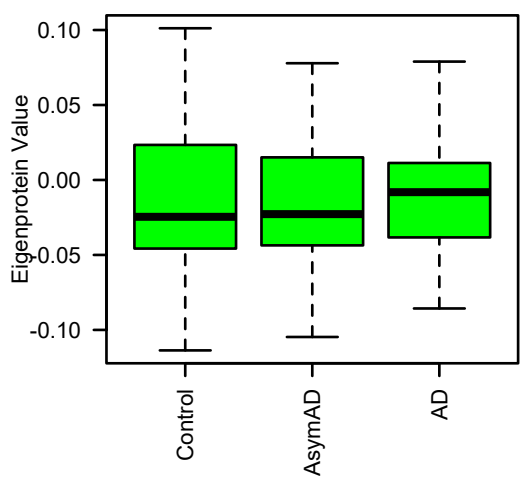


Supplementary Figure 3. GO Analysis on AD Network Modules. Gene ontology (GO) analysis was performed to gain insight into the biological meaning of each AD protein network module. Enrichment for a given ontology is shown by z score.

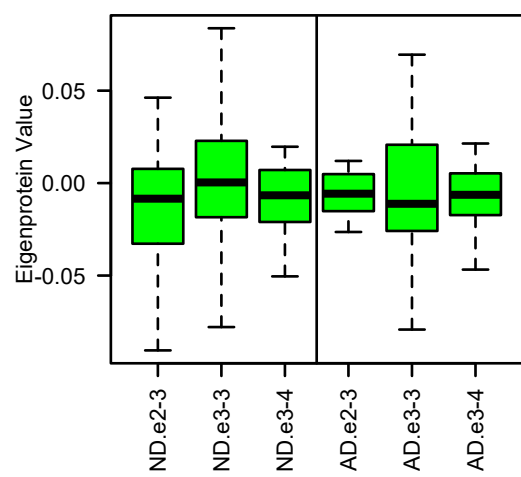
M5 green.Consensus



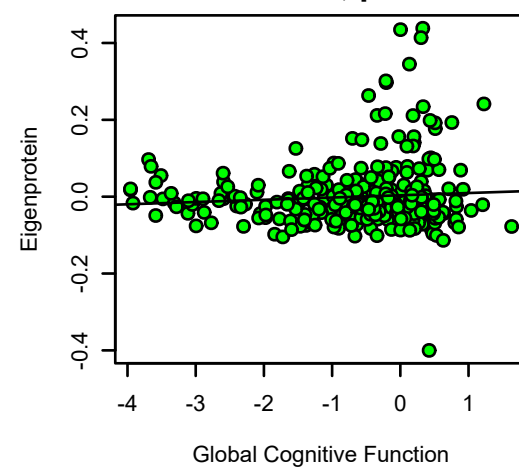
M5 green.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.74



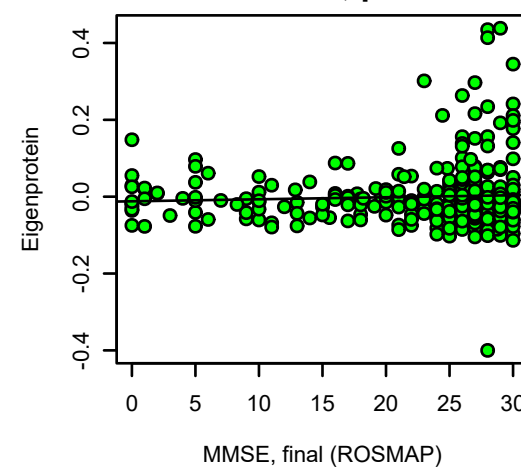
M5 green
ND K-W p = 0.023 | AD K-W p = 0.94



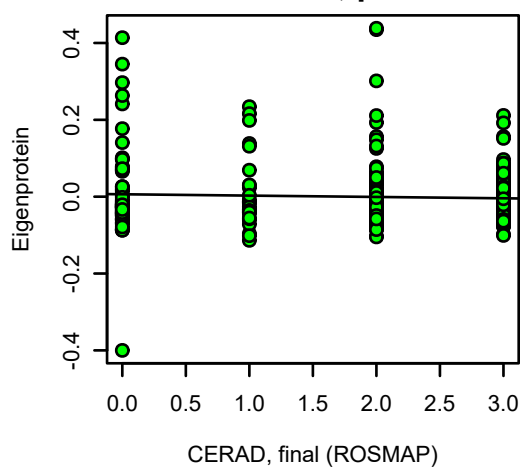
bicor=-0.078, p=0.16
cor=0.075, p=0.18



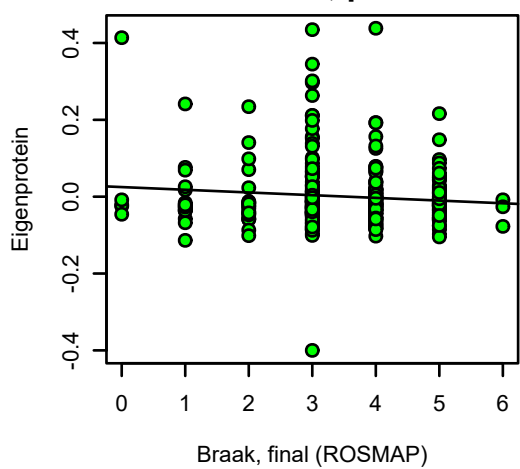
bicor=-0.074, p=0.18
cor=0.051, p=0.36



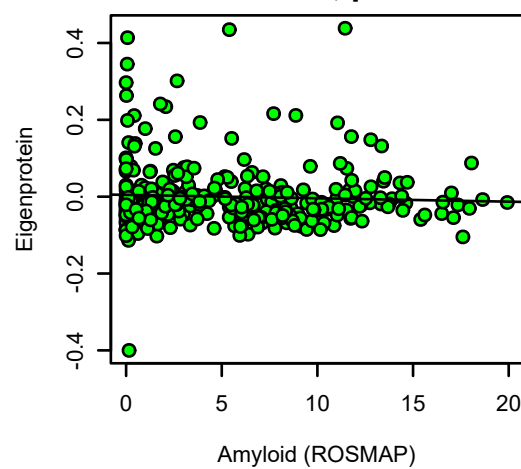
bicor=0.071, p=0.21
cor=-0.046, p=0.41



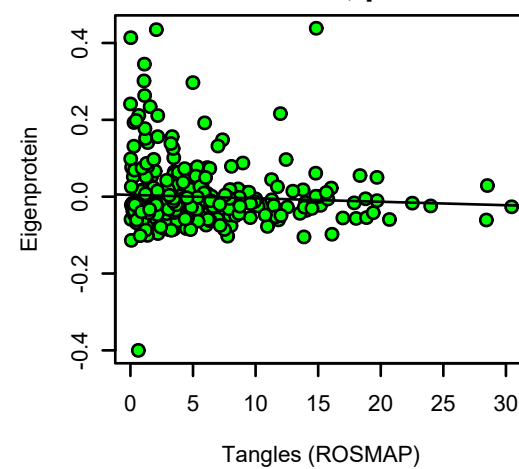
bicor=-0.011, p=0.84
cor=-0.097, p=0.082



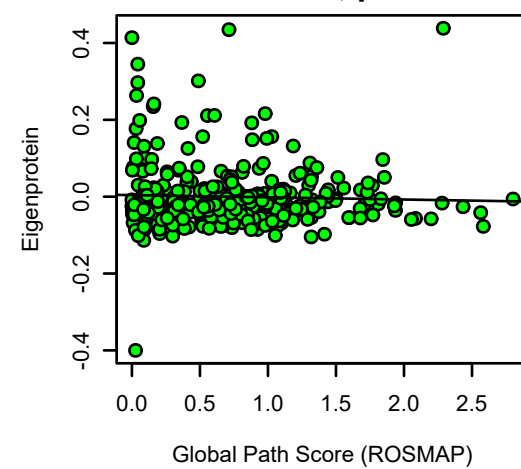
bicor=-0.0011, p=0.98
cor=-0.05, p=0.37



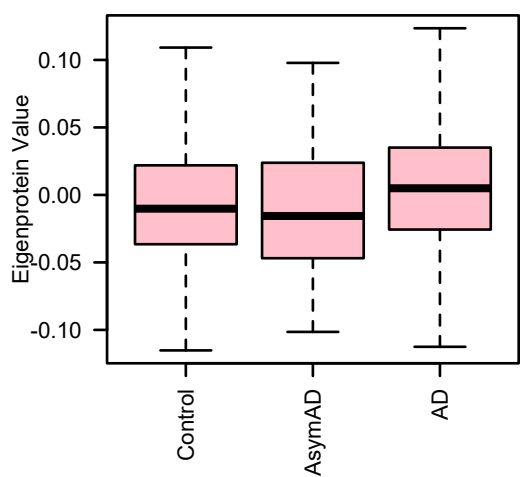
bicor=0.047, p=0.4
cor=-0.056, p=0.32



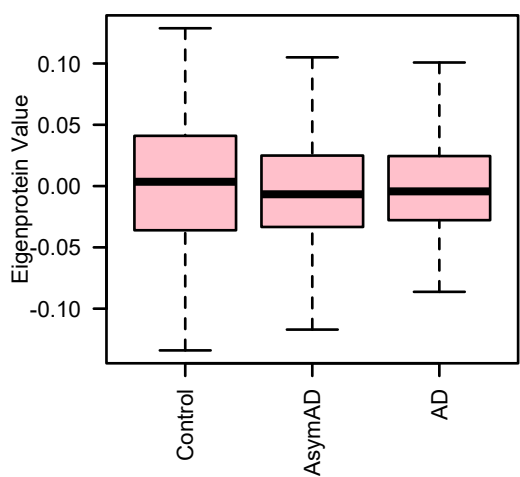
bicor=0.036, p=0.51
cor=-0.04, p=0.47



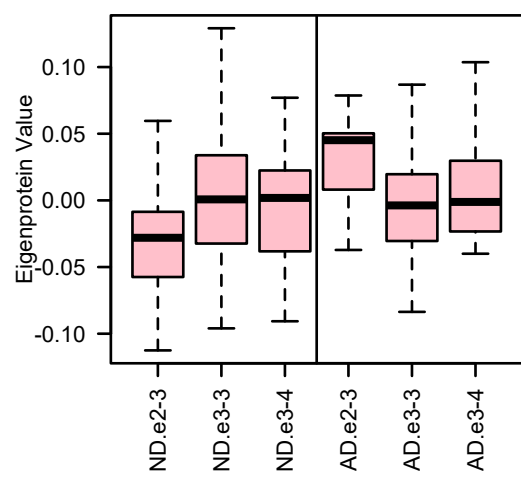
M8 pink.Consensus



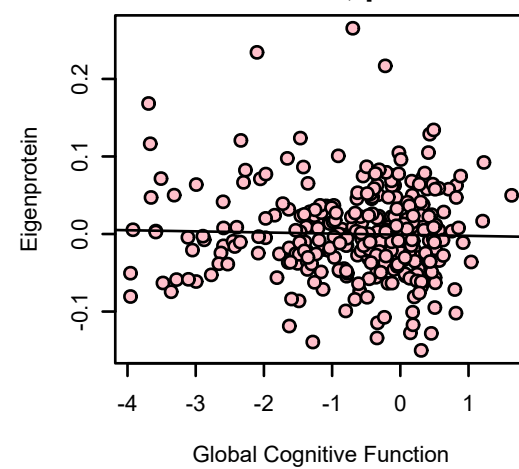
M8 pink.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.96



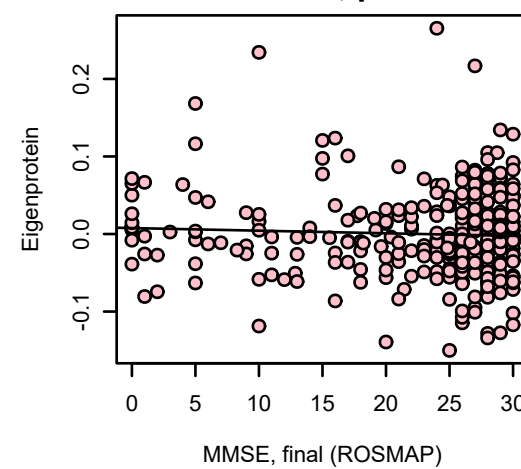
M8 pink
ND K-W p = 0.0024 | AD K-W p = 0.18



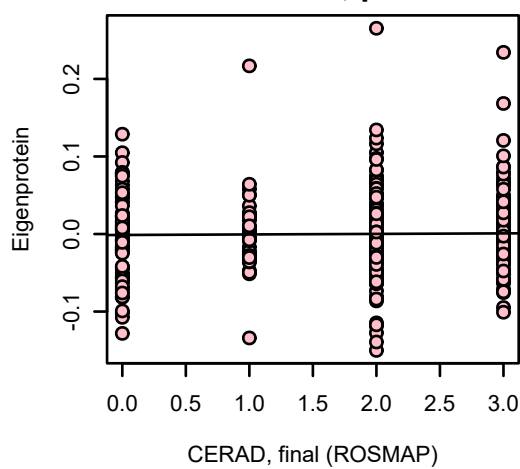
bicor=0.0079, p=0.89
cor=-0.028, p=0.62



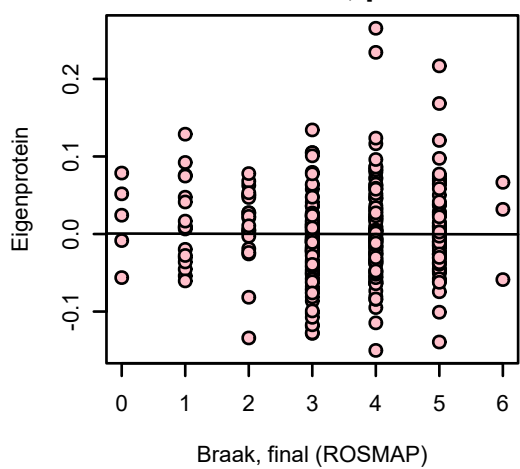
bicor=0.037, p=0.51
cor=-0.05, p=0.37



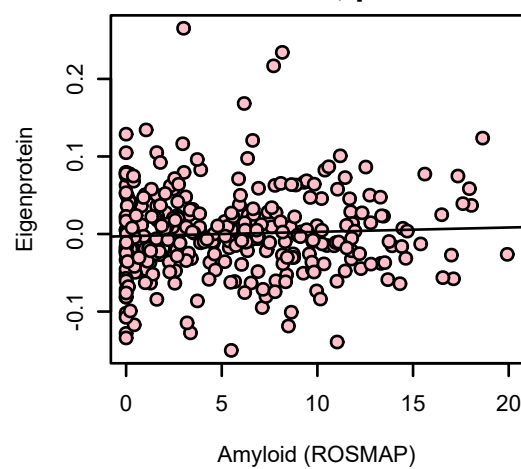
bicor=-0.011, p=0.84
cor=0.014, p=0.8



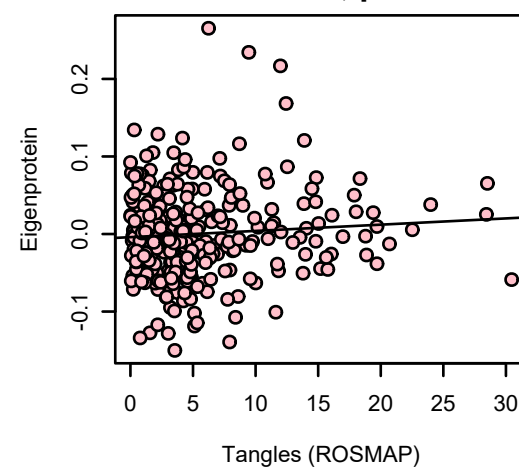
bicor=-0.04, p=0.47
cor=-0.0034, p=0.95



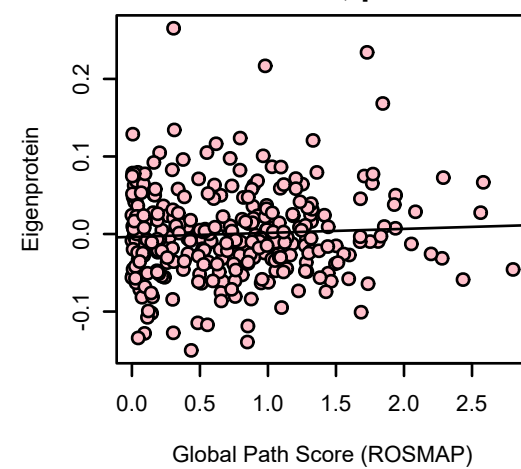
bicor=0.043, p=0.45
cor=0.048, p=0.39



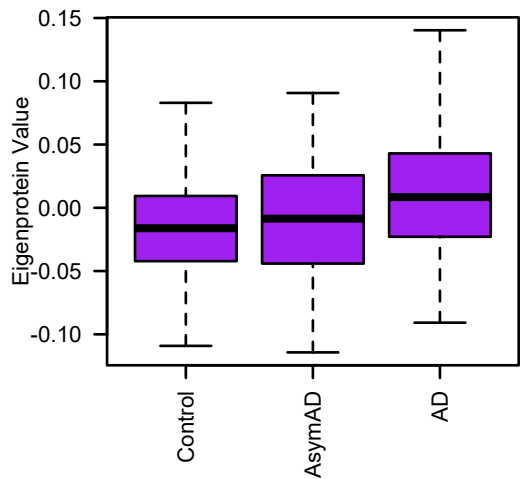
bicor=0.0035, p=0.95
cor=0.076, p=0.17



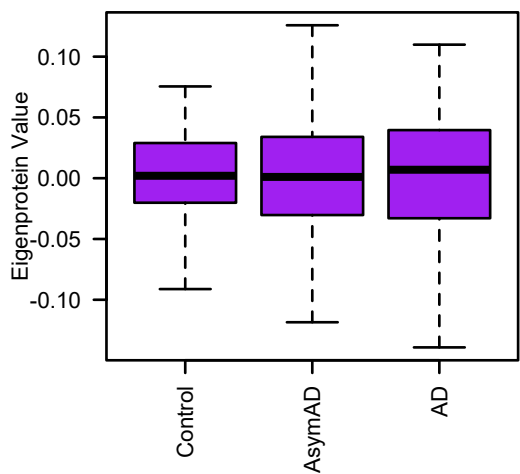
bicor=0.026, p=0.64
cor=0.054, p=0.33



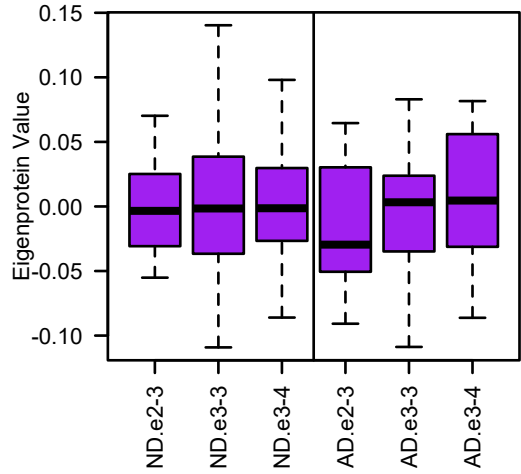
M10 purple.Consensus



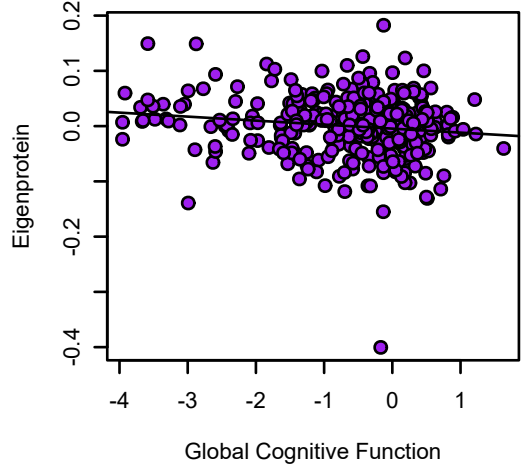
M10 purple.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.51



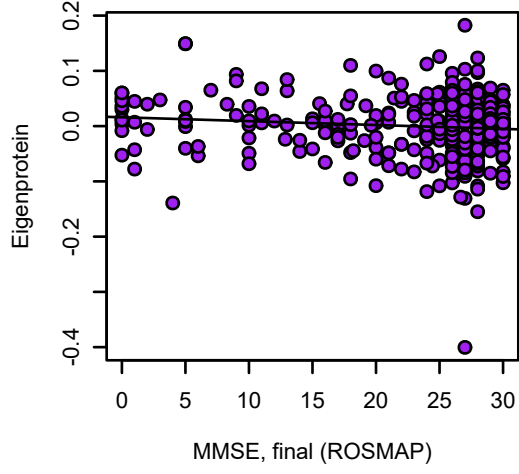
M10 purple
ND K-W p = 0.95 | AD K-W p = 0.37



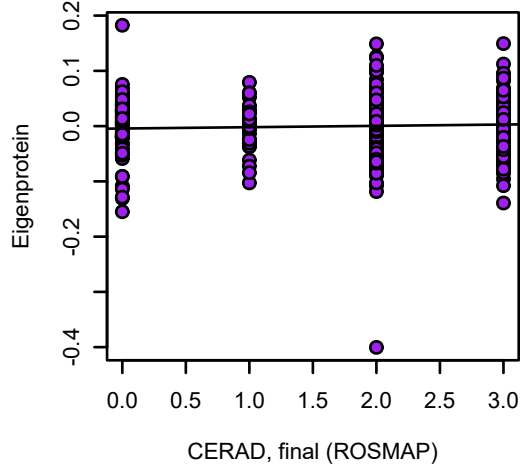
bicor=-0.11, p=0.046
cor=-0.14, p=0.012



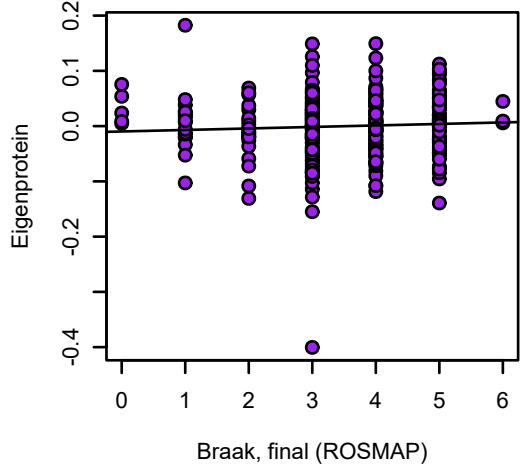
bicor=-0.037, p=0.51
cor=-0.1, p=0.073



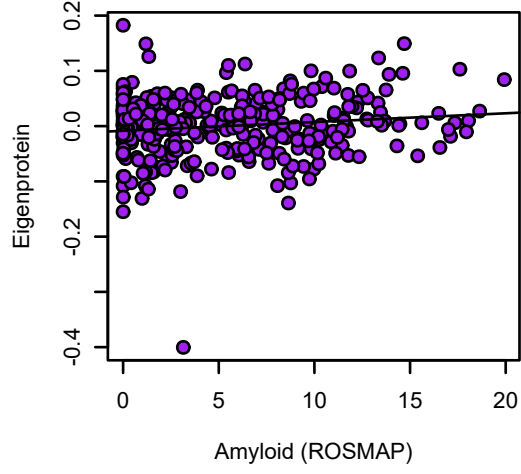
bicor=0.056, p=0.32
cor=0.048, p=0.39



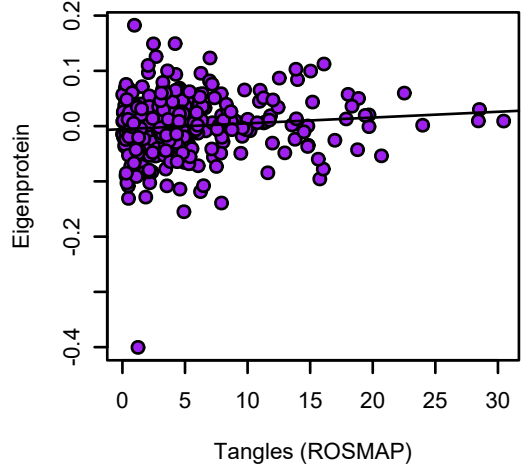
bicor=0.092, p=0.098
cor=0.057, p=0.31



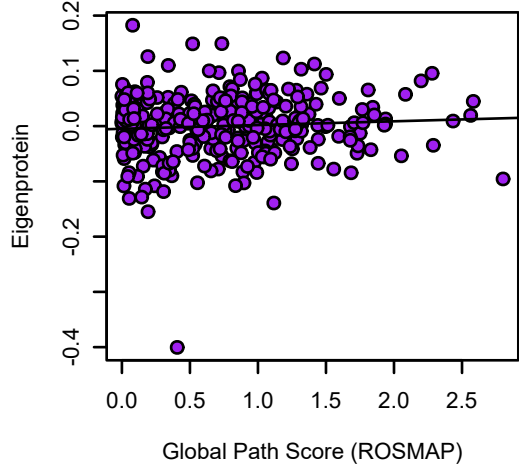
bicor=0.11, p=0.047
cor=0.14, p=0.012



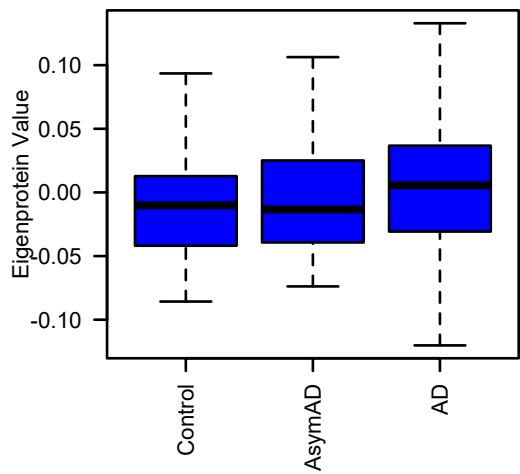
bicor=0.093, p=0.096
cor=0.099, p=0.076



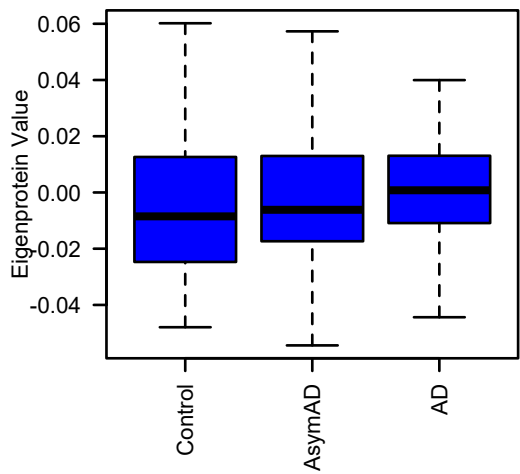
bicor=0.063, p=0.26
cor=0.071, p=0.2



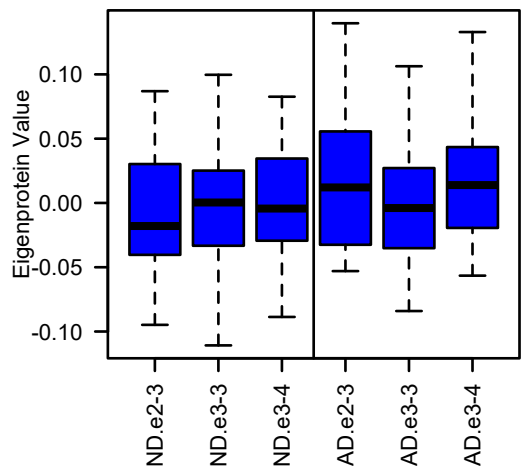
M2 blue.Consensus



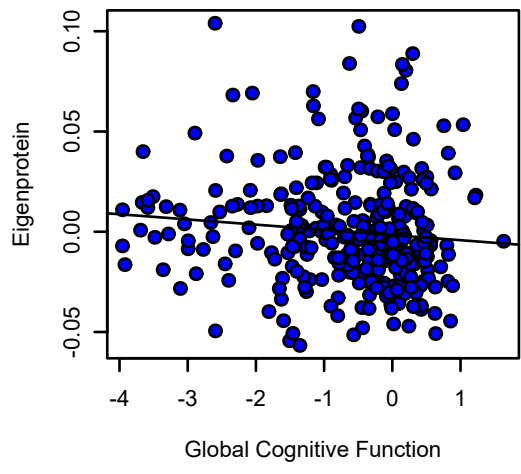
M2 blue.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.26



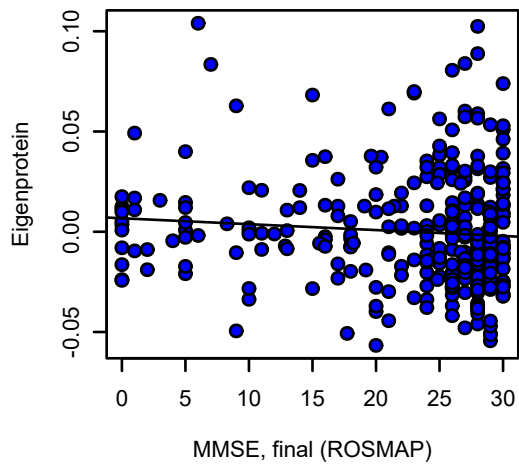
M2 blue
ND K-W p = 0.64 | AD K-W p = 0.17



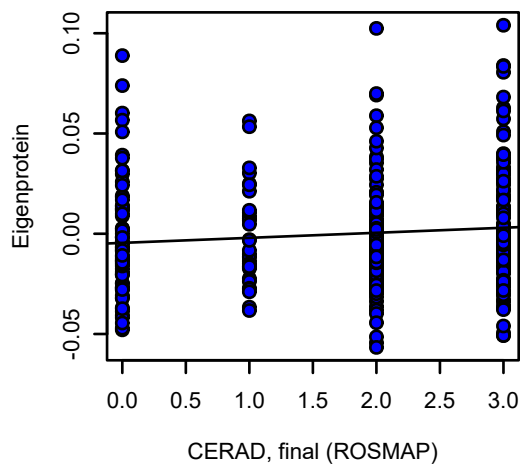
bicor=-0.13, p=0.016
cor=-0.1, p=0.073



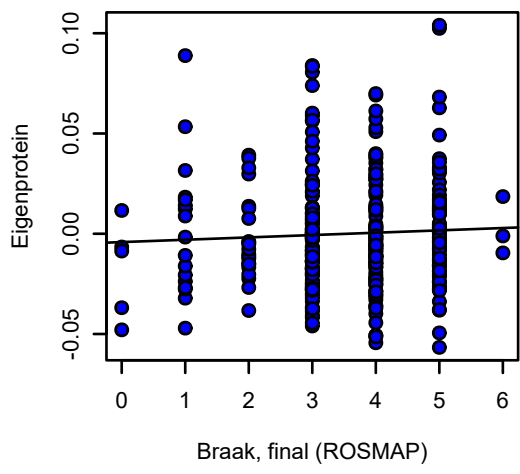
bicor=-0.085, p=0.13
cor=-0.087, p=0.12



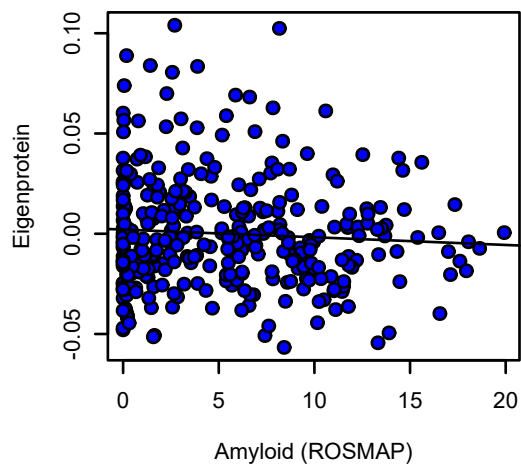
bicor=0.092, p=0.097
cor=0.1, p=0.073



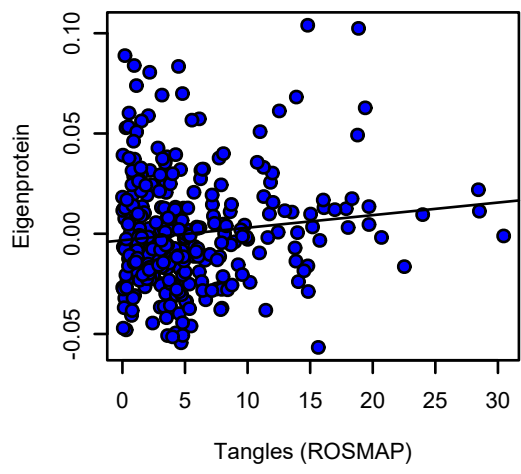
bicor=0.018, p=0.74
cor=0.049, p=0.38



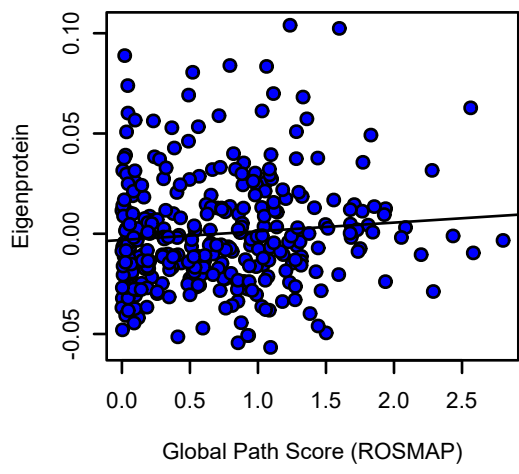
bicor=-0.031, p=0.58
cor=-0.066, p=0.24



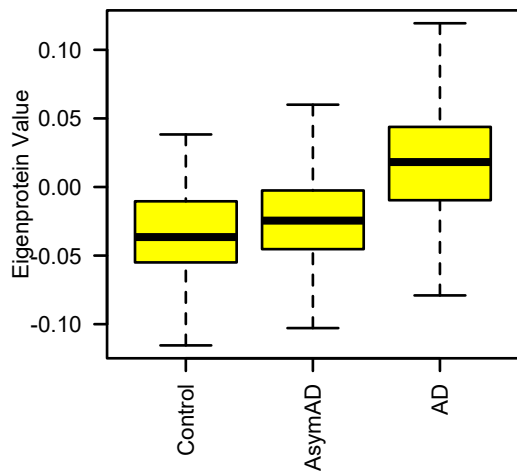
bicor=0.049, p=0.38
cor=0.12, p=0.031



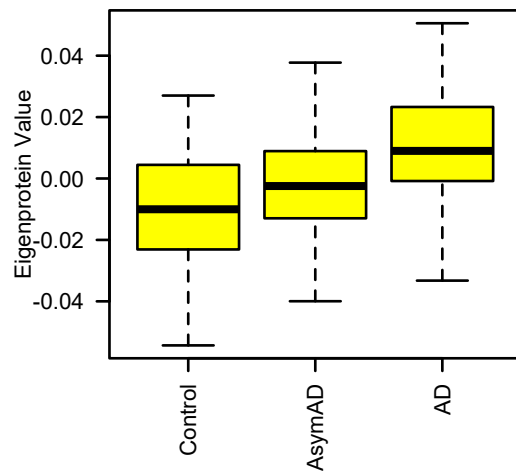
bicor=0.091, p=0.1
cor=0.091, p=0.1



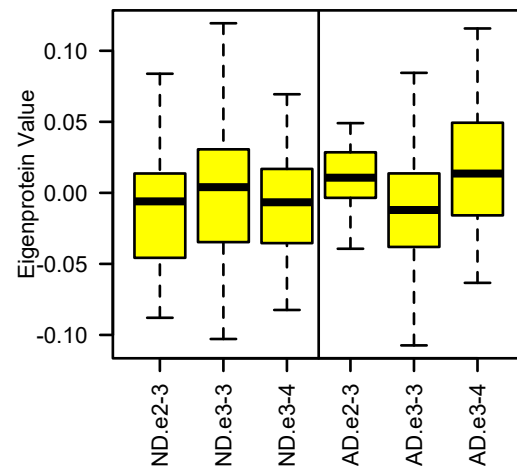
M4 yellow.Consensus



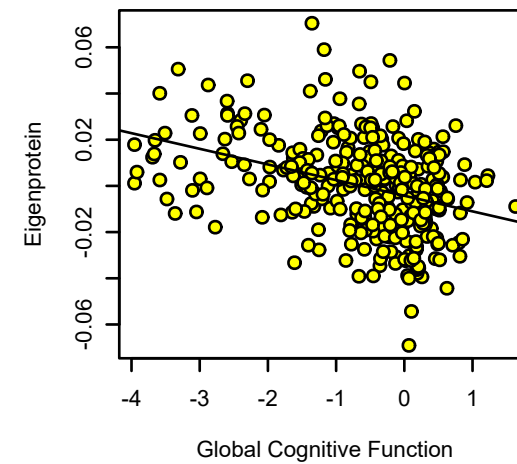
M4 yellow.ROSMAP TMT (Synthetic)
K-W ANOVA p: 7.7e-11



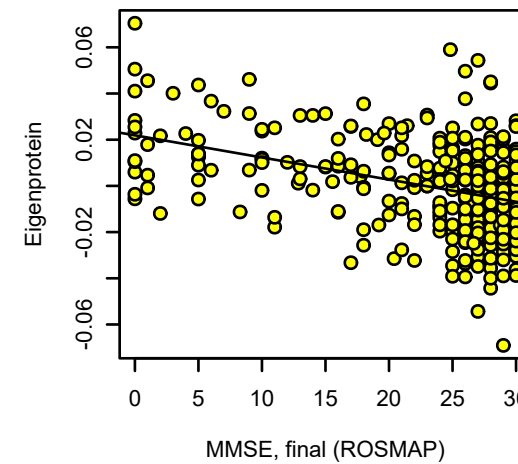
M4 yellow
ND K-W p = 0.09 | AD K-W p = 0.21



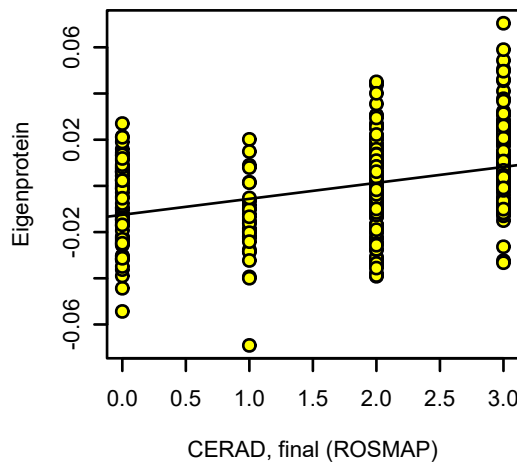
bicor=-0.36, p=3.2e-11
cor=-0.36, p=2.6e-11



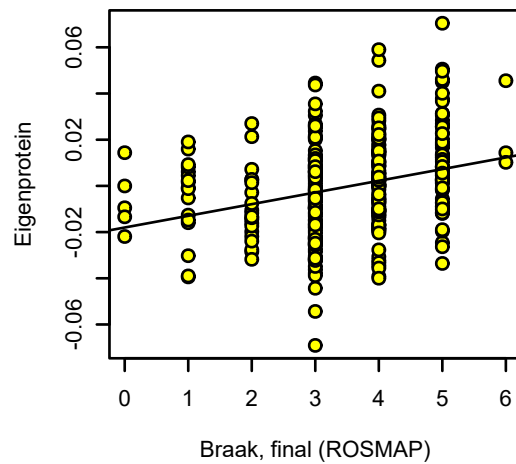
bicor=-0.26, p=3.2e-06
cor=-0.39, p=3.5e-13



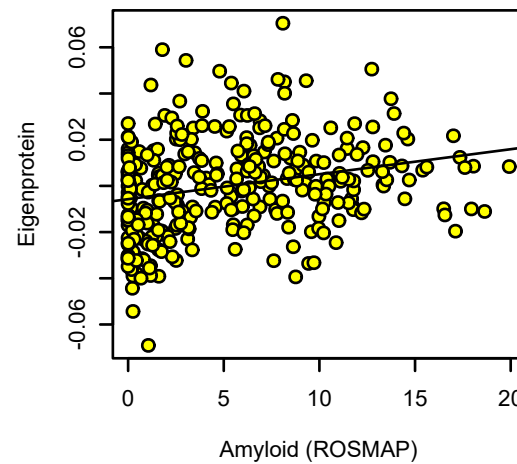
bicor=0.38, p=9.2e-13
cor=0.38, p=1.6e-12



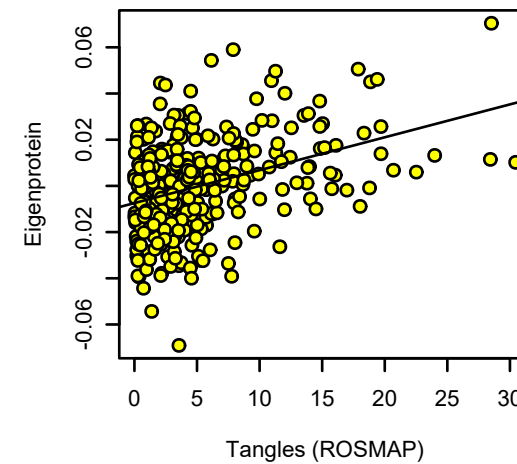
bicor=0.31, p=1.8e-08
cor=0.29, p=1.1e-07



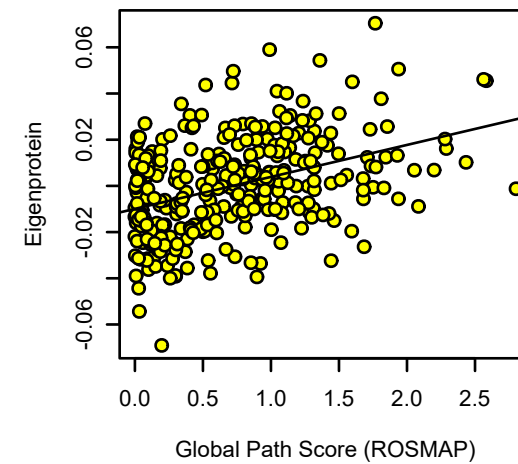
bicor=0.26, p=3.5e-06
cor=0.25, p=5.6e-06



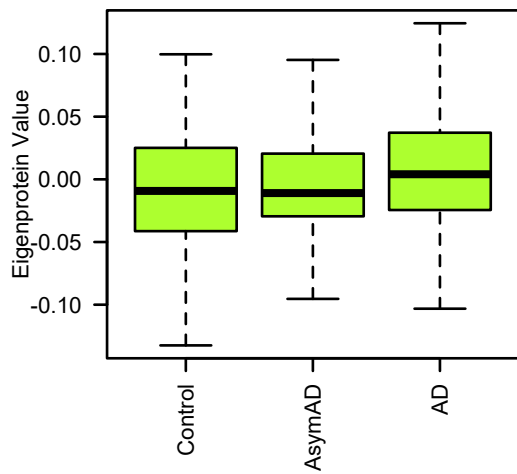
bicor=0.3, p=4.2e-08
cor=0.37, p=7e-12



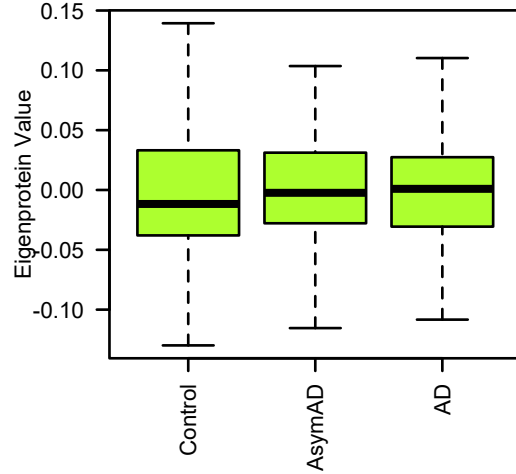
bicor=0.38, p=8.3e-13
cor=0.39, p=3.5e-13



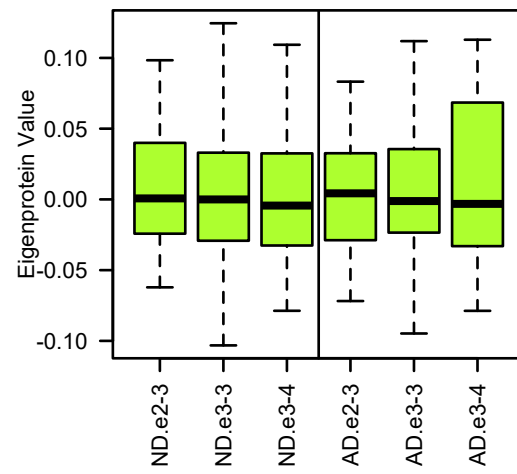
M11 greenyellow.Consensus



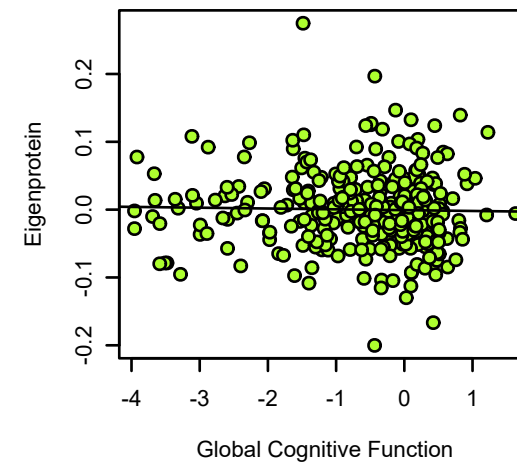
M11 greenyellow.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.89



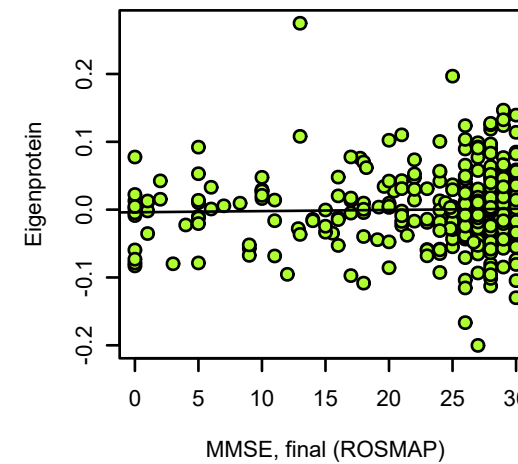
M11 greenyellow
ND K-W p = 0.68 | AD K-W p = 0.61



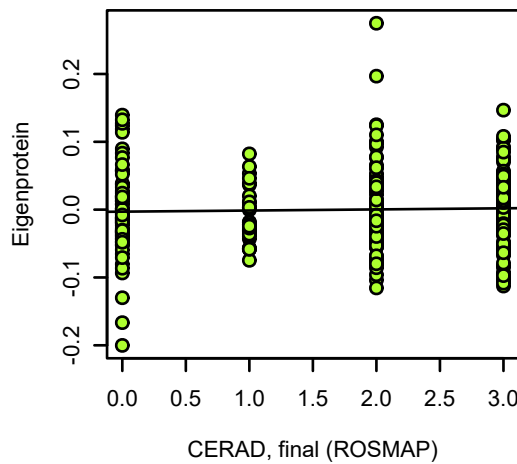
bicor=-0.036, p=0.52
cor=-0.023, p=0.68



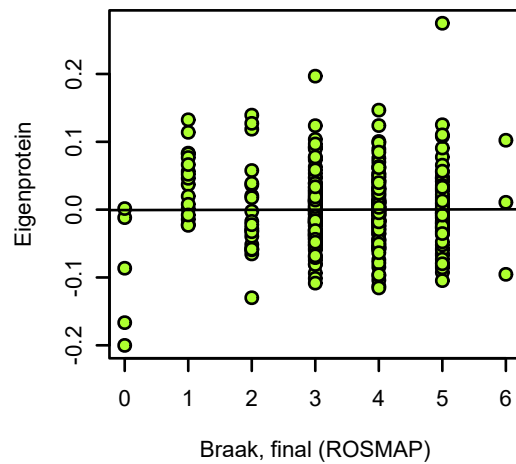
bicor=0.011, p=0.84
cor=0.025, p=0.65



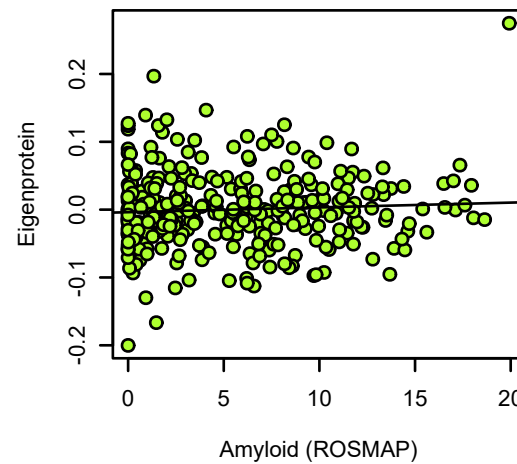
bicor=0.031, p=0.58
cor=0.033, p=0.55



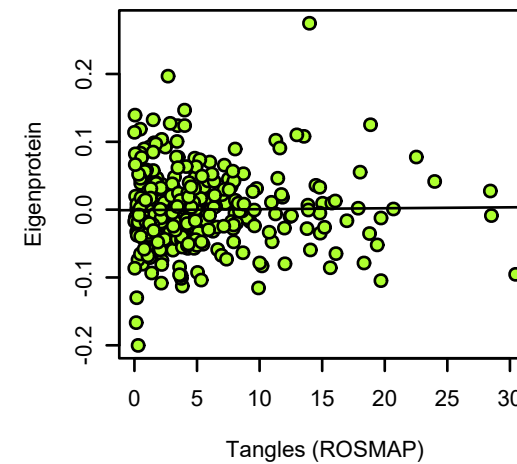
bicor=-0.047, p=0.4
cor=0.0039, p=0.94



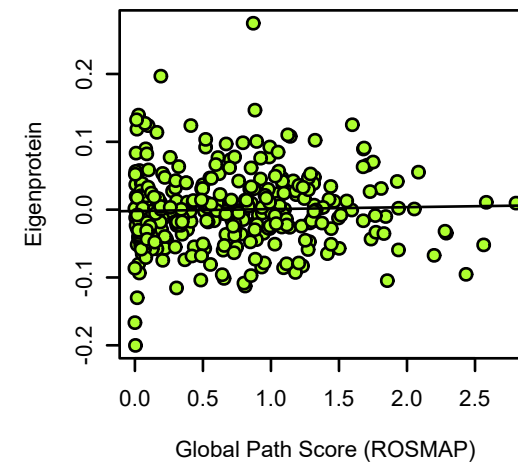
bicor=0.027, p=0.63
cor=0.061, p=0.28



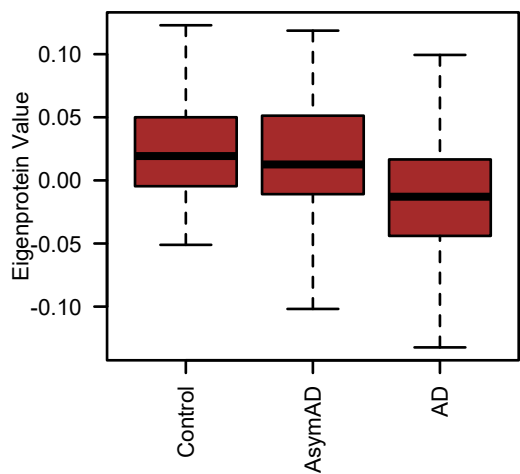
bicor=0.0072, p=0.9
cor=0.013, p=0.82



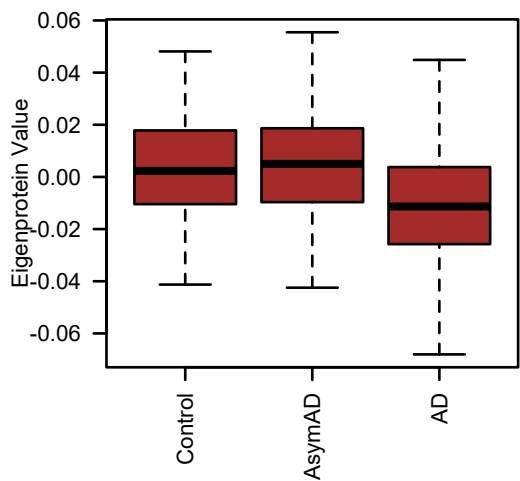
bicor=0.048, p=0.39
cor=0.029, p=0.6



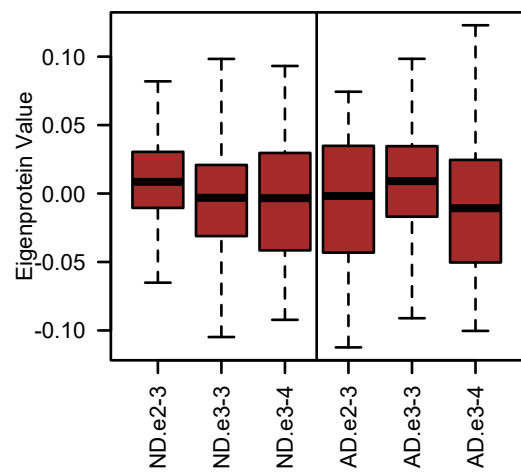
M3 brown.Consensus



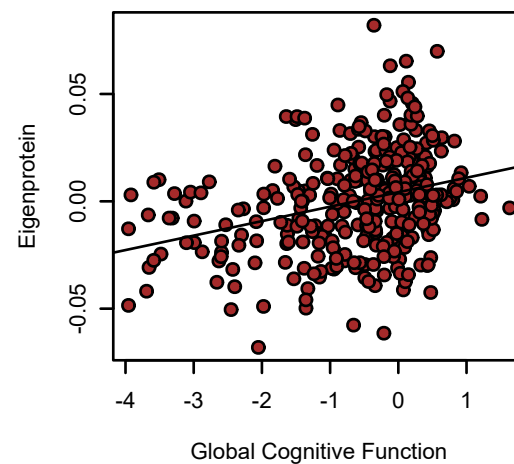
M3 brown.ROSMAP TMT (Synthetic)
K-W ANOVA p: 2e-06



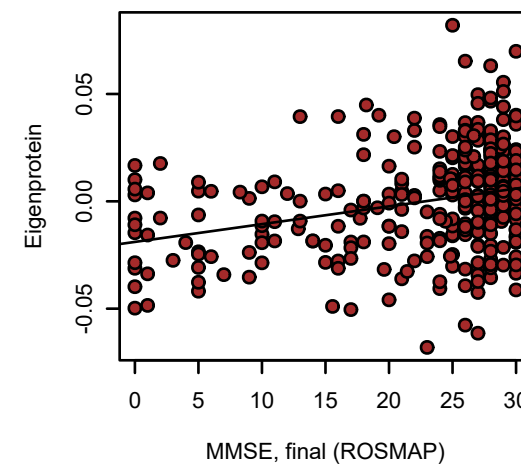
M3 brown
ND K-W p = 0.32 | AD K-W p = 0.27



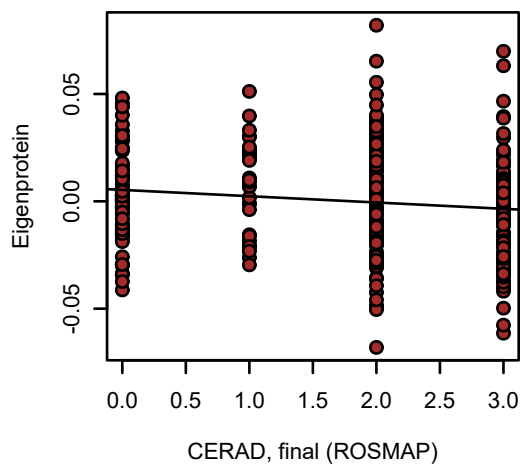
bicor=0.32, p=4.9e-09
cor=0.31, p=1.3e-08



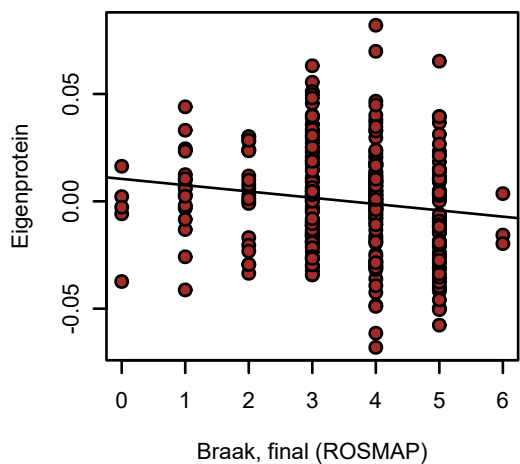
bicor=0.23, p=3.1e-05
cor=0.29, p=1.1e-07



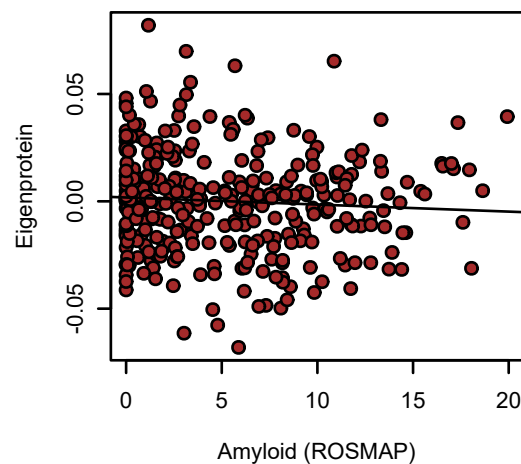
bicor=-0.14, p=0.012
cor=-0.14, p=0.012



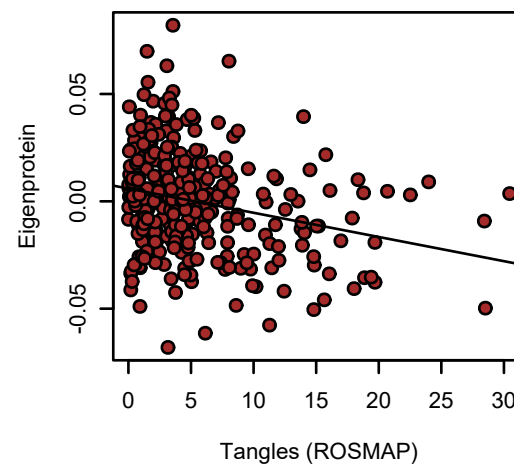
bicor=-0.14, p=0.013
cor=-0.15, p=0.0069



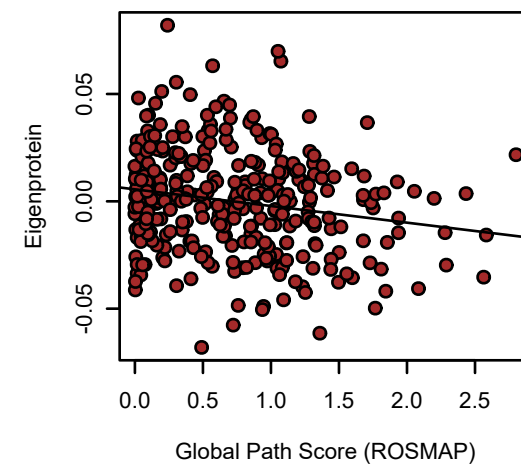
bicor=-0.088, p=0.11
cor=-0.066, p=0.24



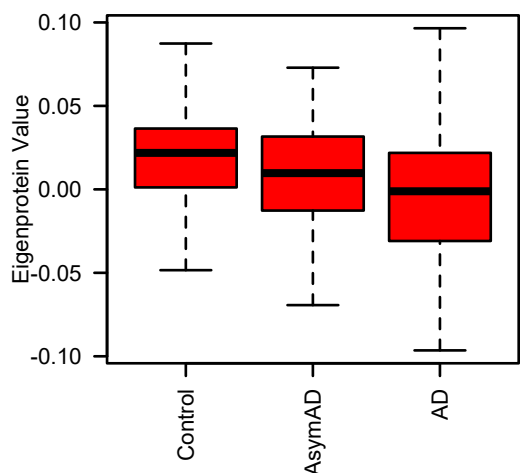
bicor=-0.24, p=9.6e-06
cor=-0.25, p=5.6e-06



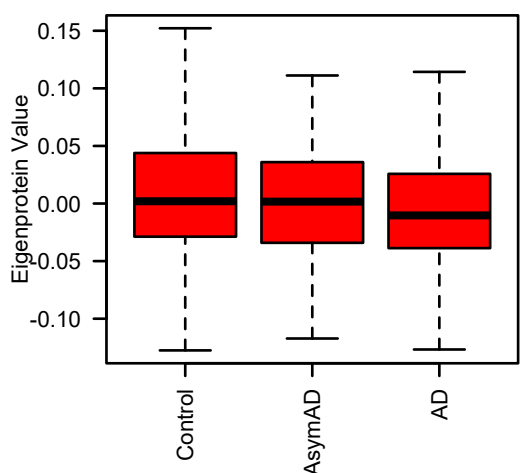
bicor=-0.2, p=0.00033
cor=-0.19, p=6e-04



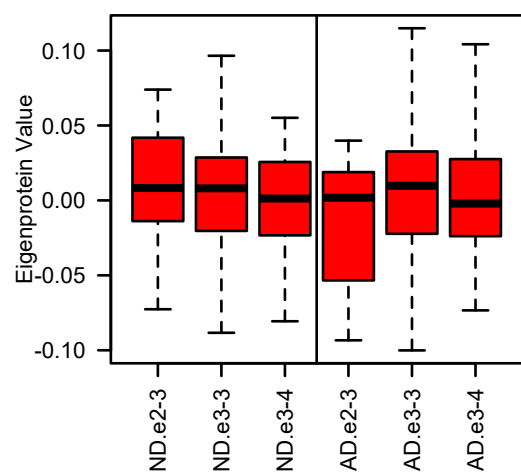
M6 red.Consensus



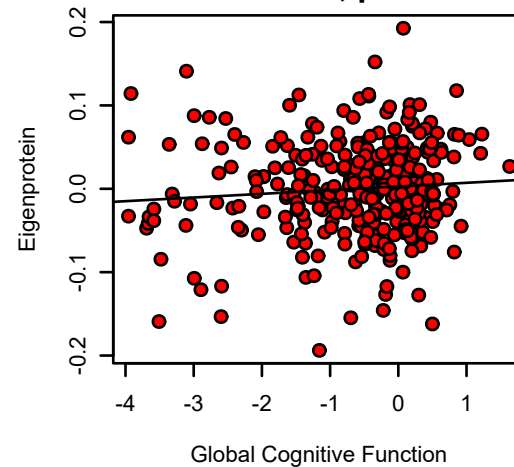
M6 red.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.19



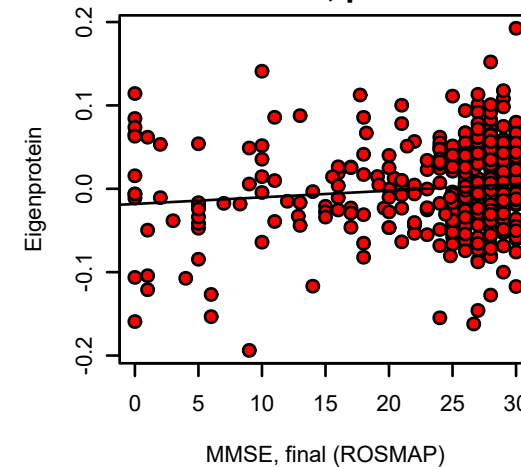
M6 red
ND K-W p = 0.51 | AD K-W p = 0.56



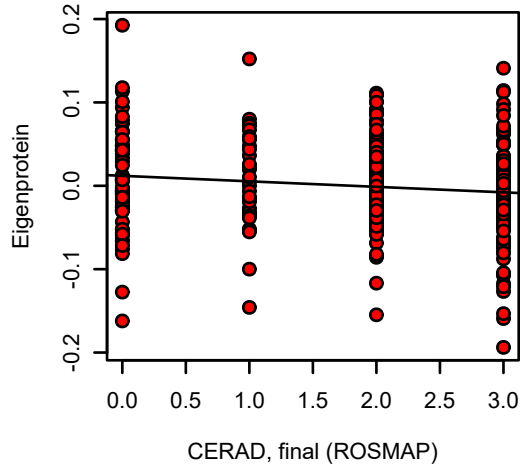
bicor=0.068, p=0.23
cor=0.086, p=0.12



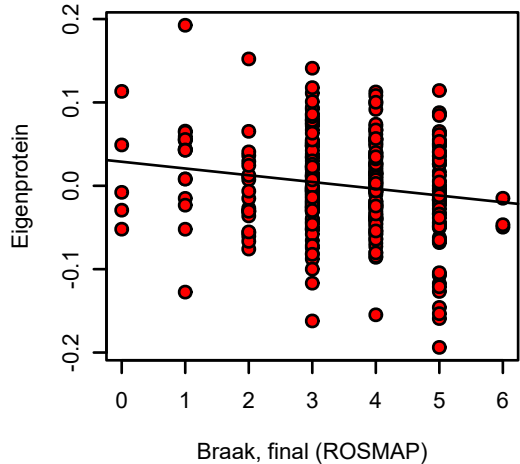
bicor=0.055, p=0.32
cor=0.12, p=0.031



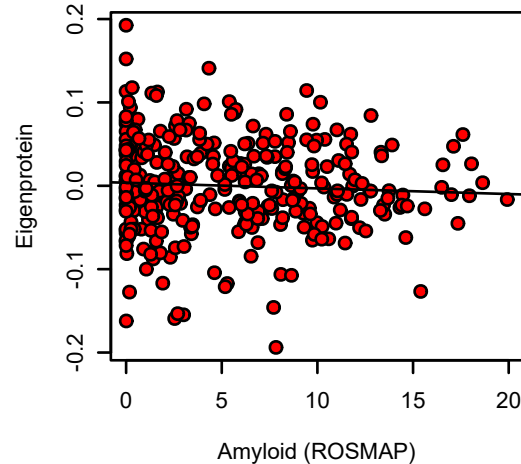
bicor=-0.14, p=0.013
cor=-0.13, p=0.019



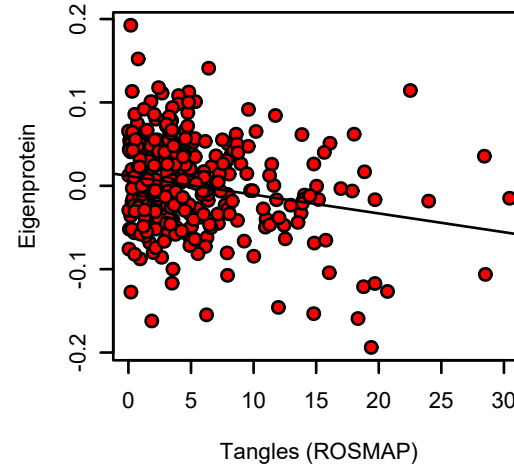
bicor=-0.16, p=0.0034
cor=-0.17, p=0.0022



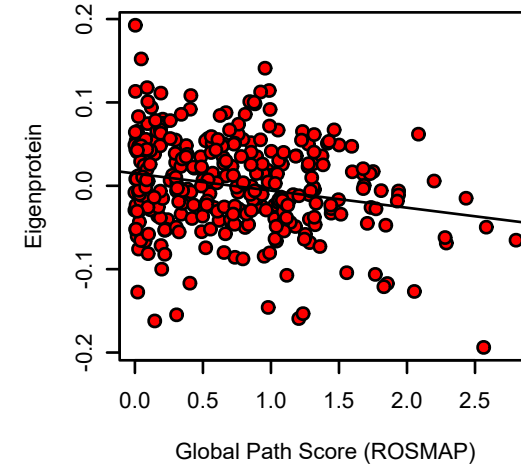
bicor=-0.042, p=0.46
cor=-0.058, p=0.3



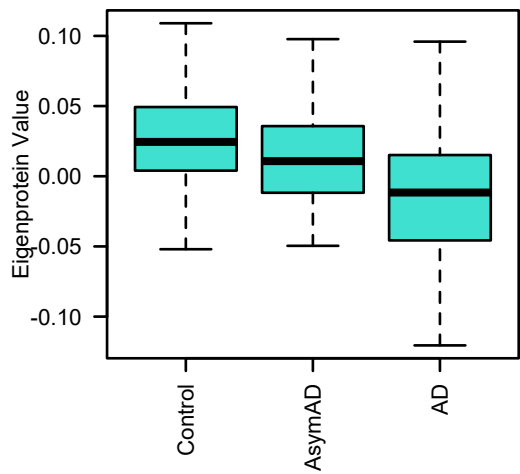
bicor=-0.13, p=0.022
cor=-0.21, p=0.00015



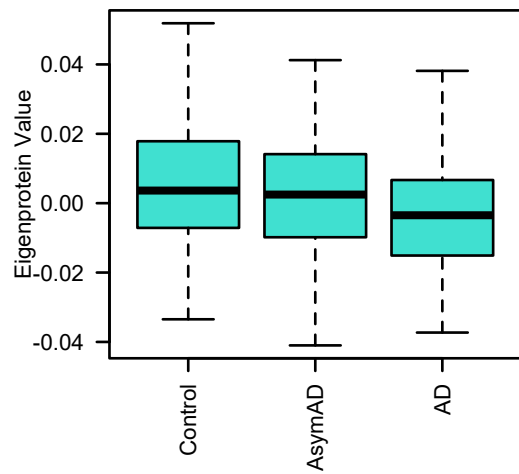
bicor=-0.17, p=0.0017
cor=-0.21, p=0.00014



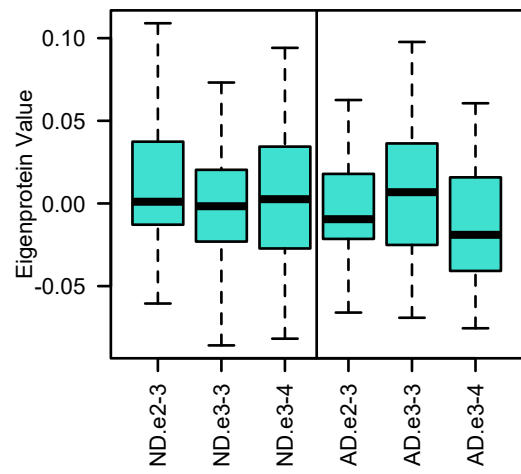
M1 turquoise.Consensus



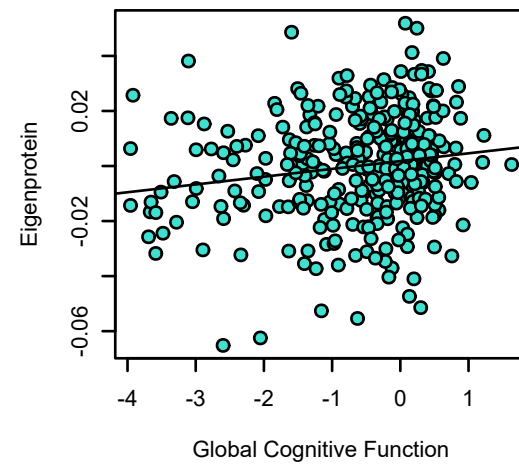
M1 turquoise.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.0044



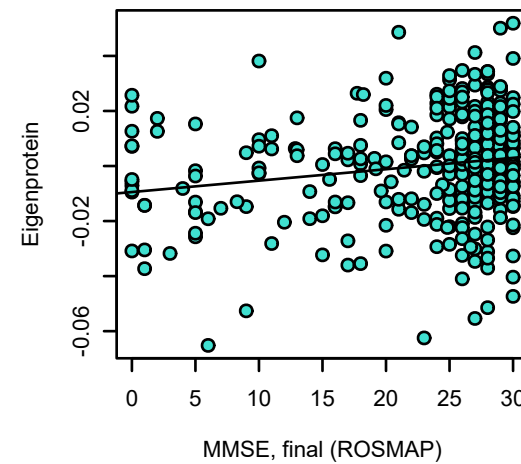
M1 turquoise
ND K-W p = 0.22 | AD K-W p = 0.23



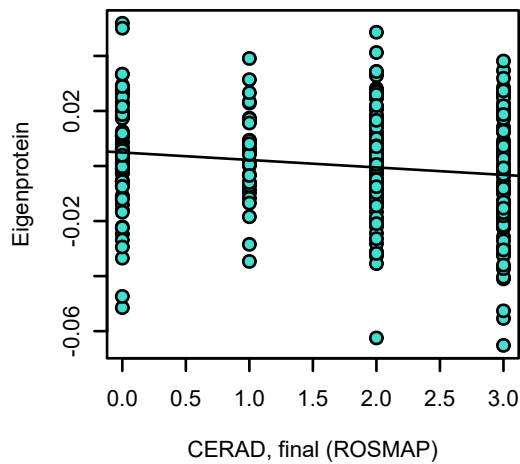
bicor=0.15, p=0.0062
cor=0.16, p=0.0039



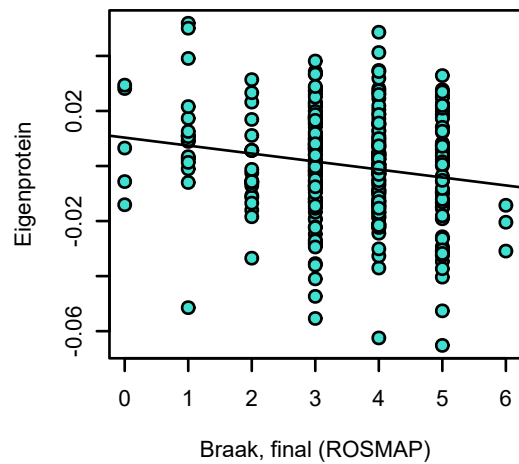
bicor=0.13, p=0.018
cor=0.18, p=0.0012



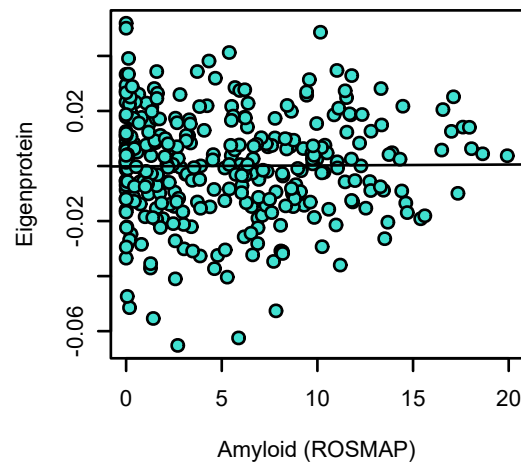
bicor=-0.15, p=0.0062
cor=-0.16, p=0.0039



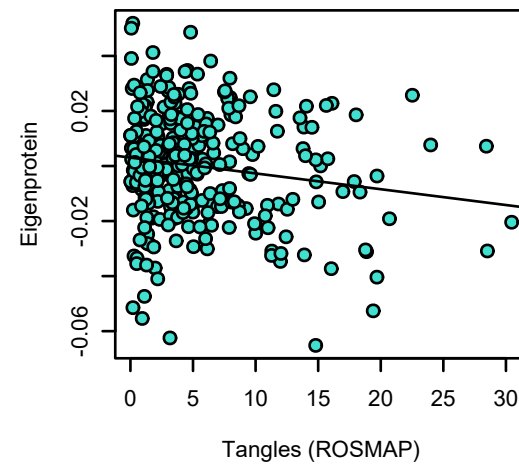
bicor=-0.15, p=0.0059
cor=-0.18, p=0.0012



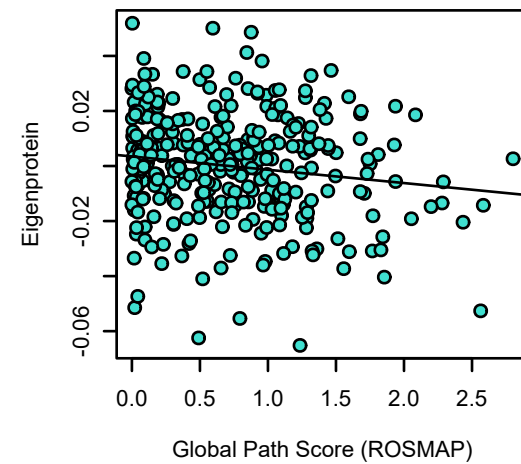
bicor=-0.01, p=0.86
cor=0.0082, p=0.88



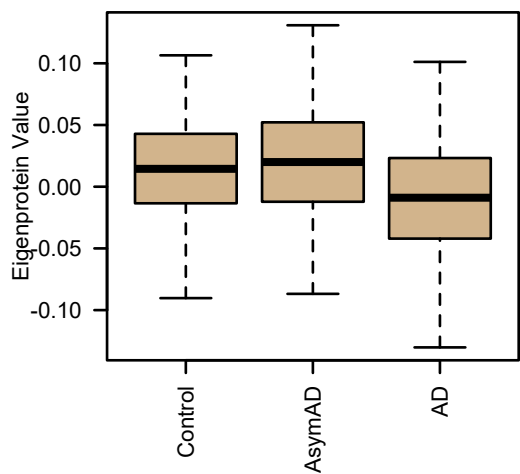
bicor=-0.091, p=0.1
cor=-0.16, p=0.004



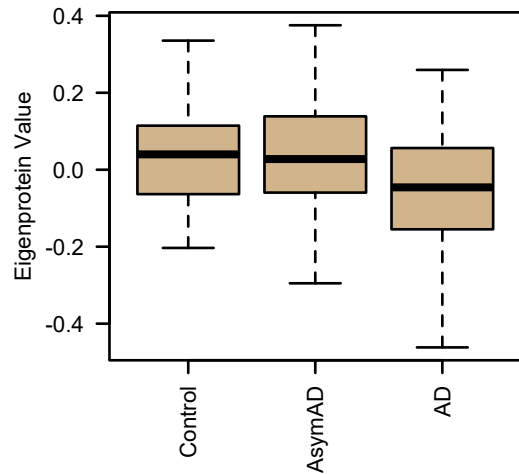
bicor=-0.14, p=0.015
cor=-0.15, p=0.0069



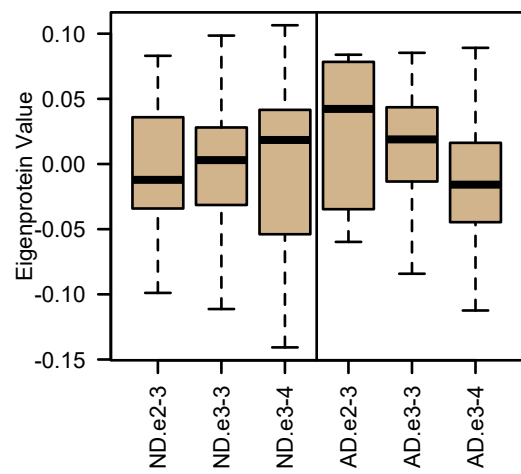
M12 tan.Consensus



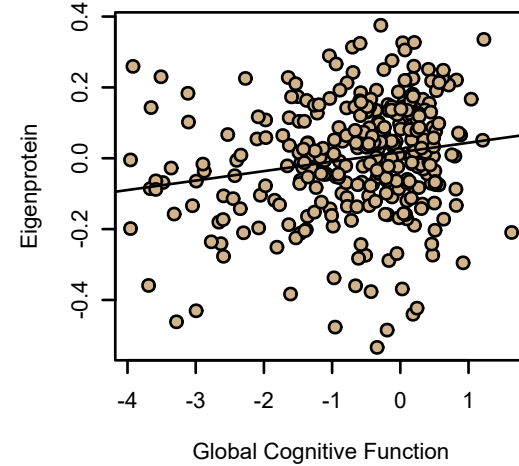
M12 tan.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.00047



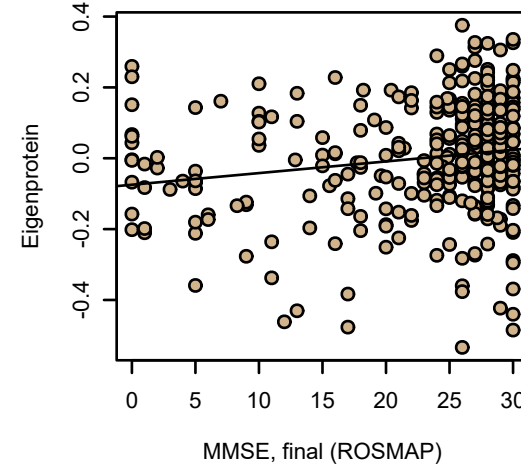
M12 tan
ND K-W p = 0.92 | AD K-W p = 0.14



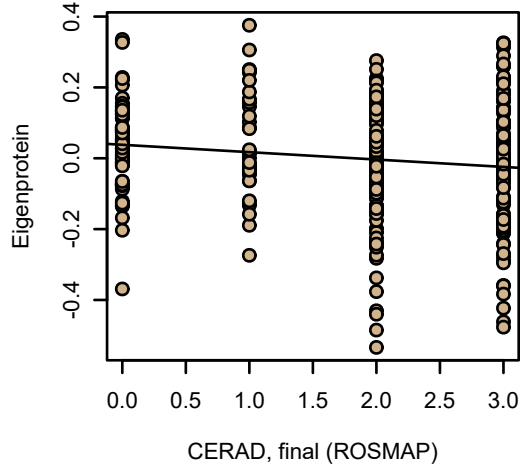
bicor=0.18, p=0.00087
cor=0.18, p=0.0012



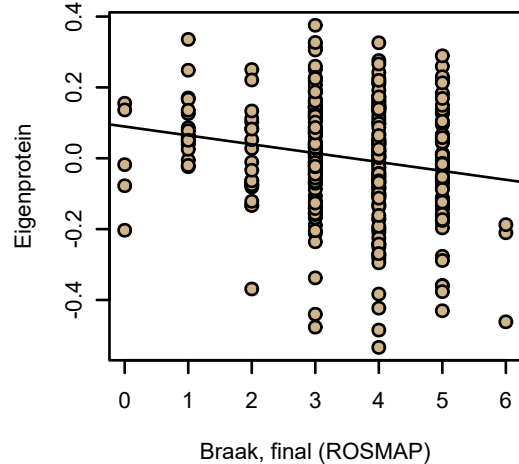
bicor=0.19, p=0.00045
cor=0.17, p=0.0022



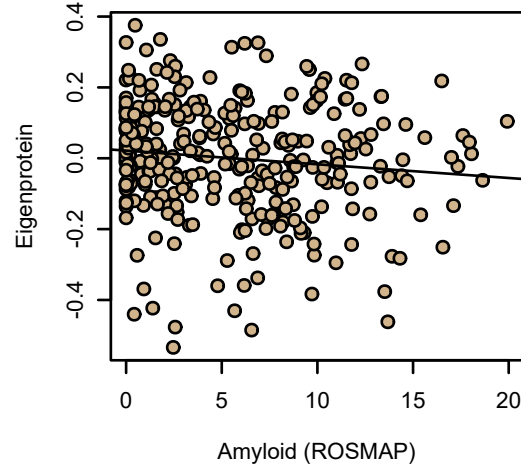
bicor=-0.14, p=0.014
cor=-0.15, p=0.0069



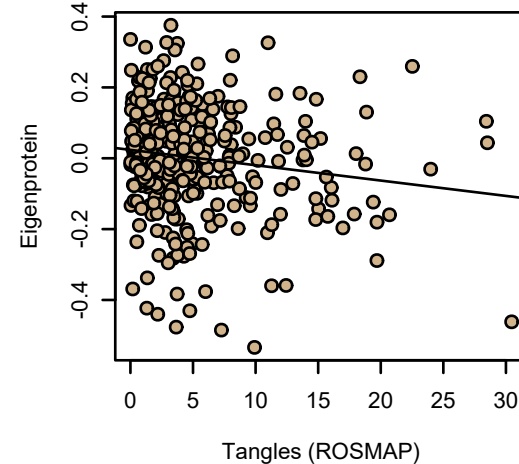
bicor=-0.17, p=0.002
cor=-0.18, p=0.0012



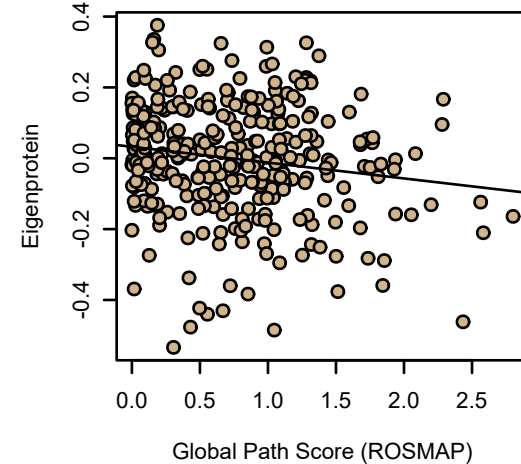
bicor=-0.13, p=0.019
cor=-0.12, p=0.031



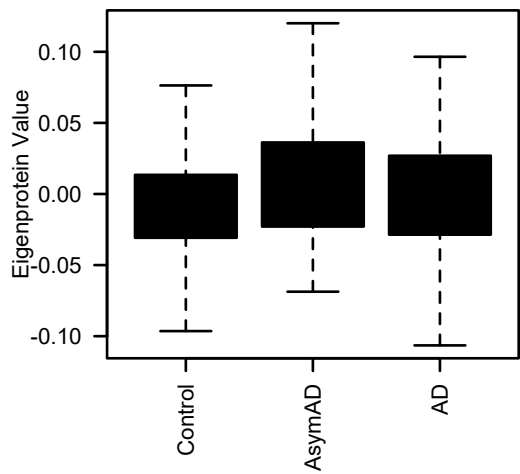
bicor=-0.13, p=0.019
cor=-0.14, p=0.012



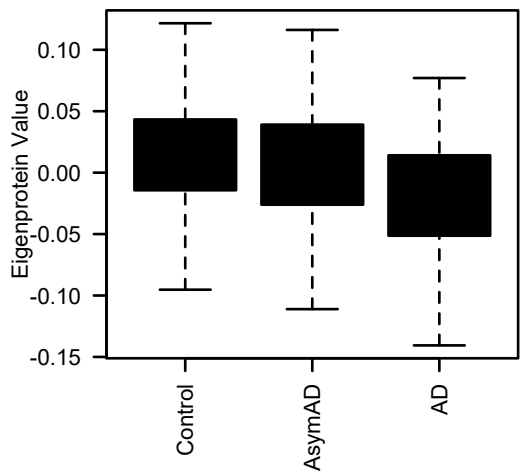
bicor=-0.15, p=0.0056
cor=-0.16, p=0.0039



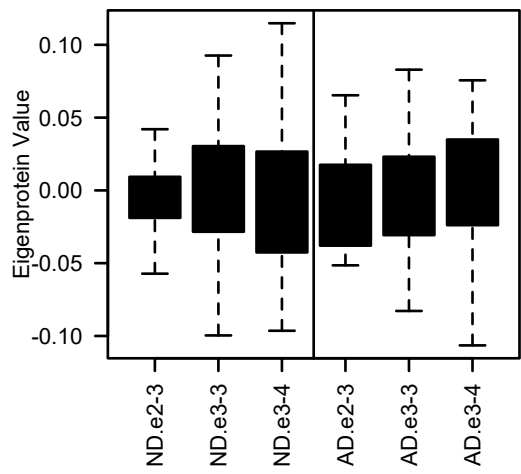
M7 black.Consensus



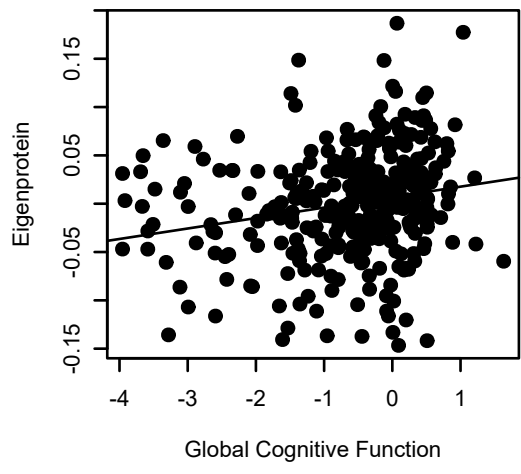
M7 black.ROSMAP TMT (Synthetic)
K-W ANOVA p: 1.5e-05



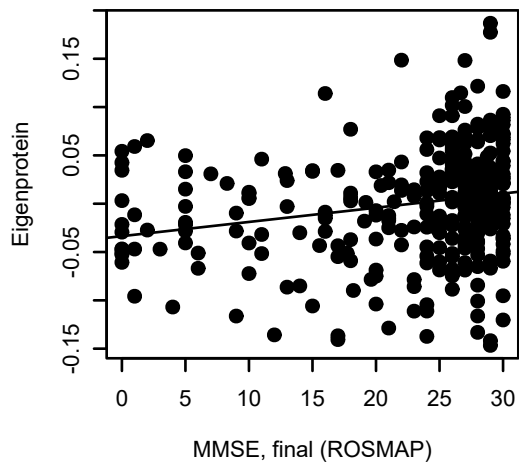
M7 black
ND K-W p = 0.58 | AD K-W p = 0.96



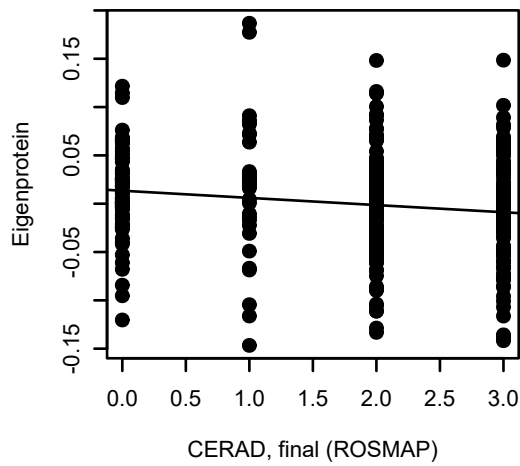
bicor=0.25, p=3.7e-06
cor=0.21, p=0.00014



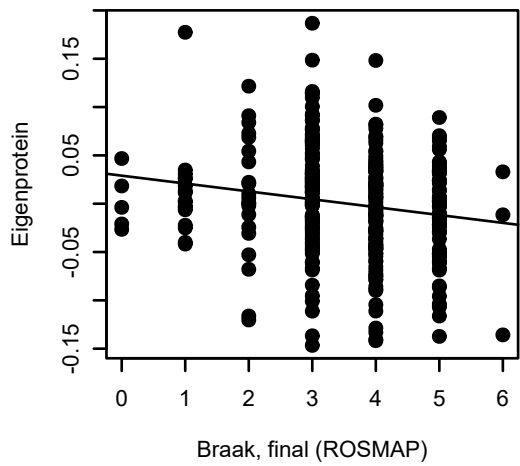
bicor=0.27, p=1.3e-06
cor=0.22, p=6.7e-05



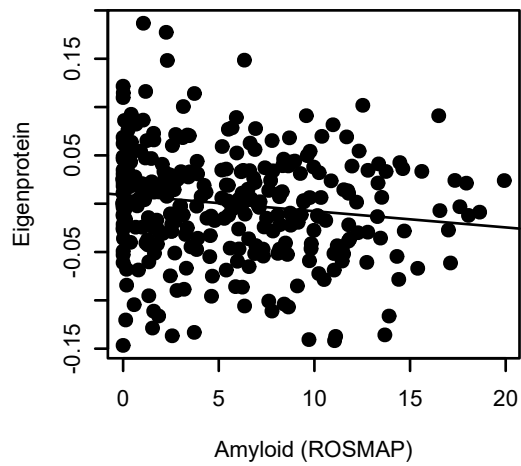
bicor=-0.14, p=0.013
cor=-0.15, p=0.0069



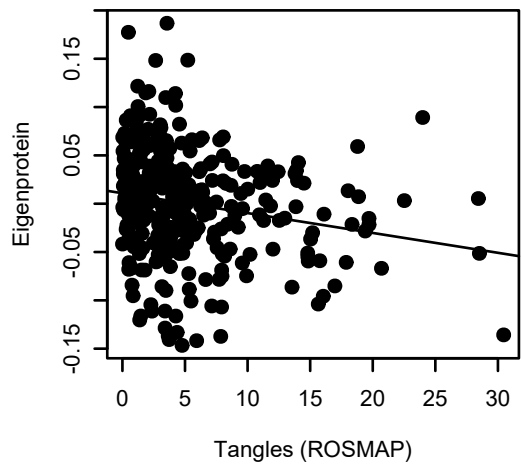
bicor=-0.15, p=0.0087
cor=-0.17, p=0.0022



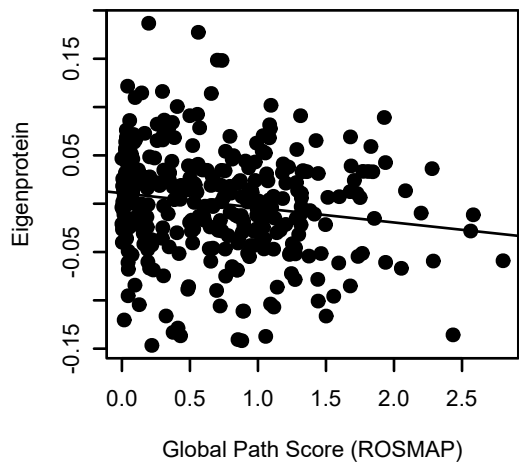
bicor=-0.16, p=0.0044
cor=-0.14, p=0.012



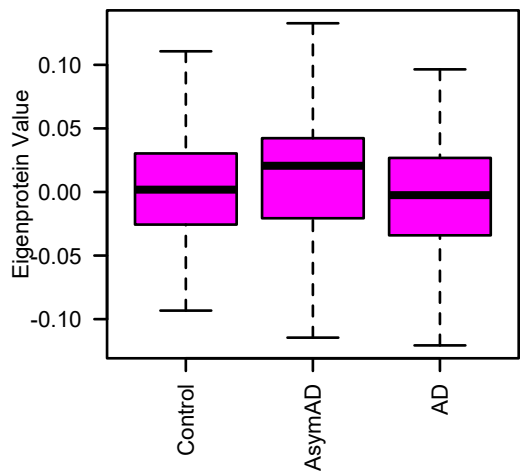
bicor=-0.2, p=0.00028
cor=-0.19, p=0.00061



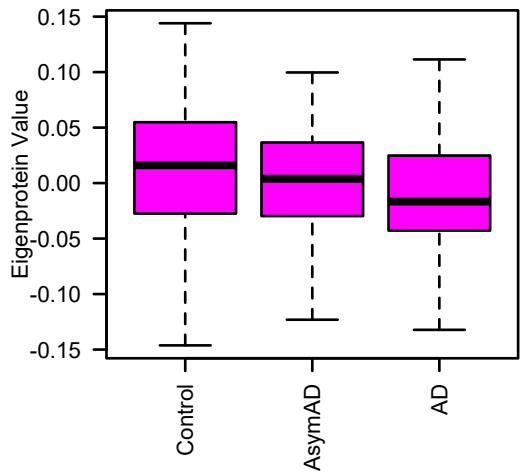
bicor=-0.16, p=0.0031
cor=-0.16, p=0.0039



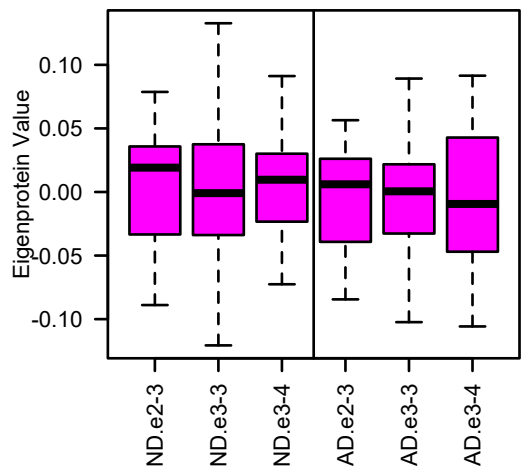
M9 magenta.Consensus



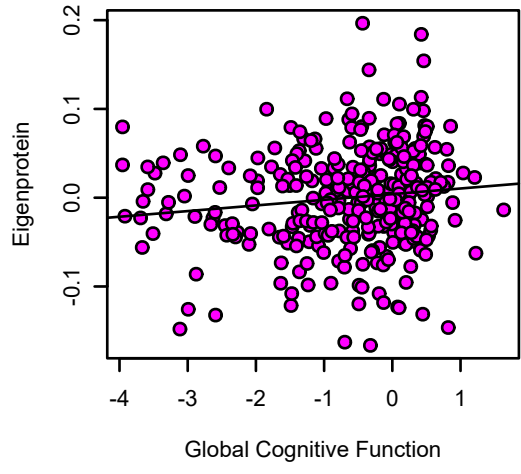
M9 magenta.ROSMAP TMT (Synthetic)
K-W ANOVA p: 0.0073



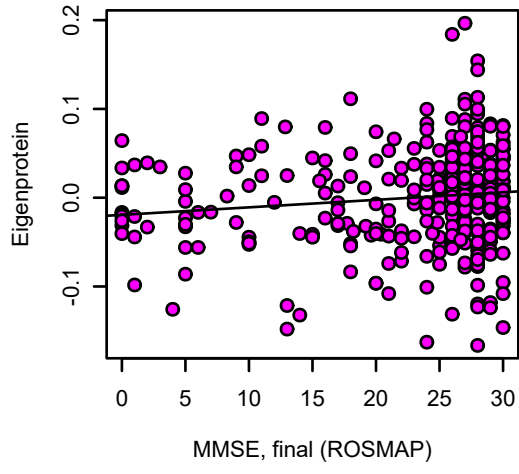
M9 magenta
ND K-W p = 0.74 | AD K-W p = 0.96



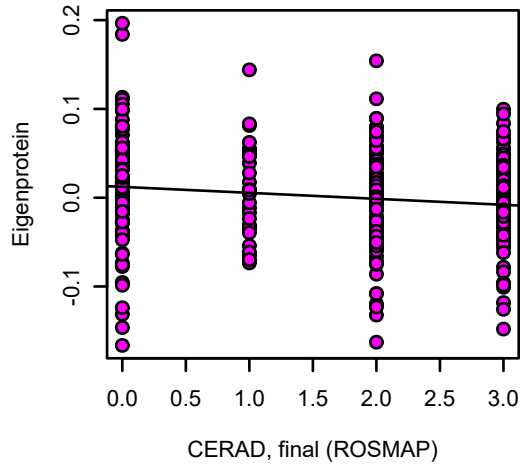
bicor=0.15, p=0.0075
cor=0.12, p=0.031



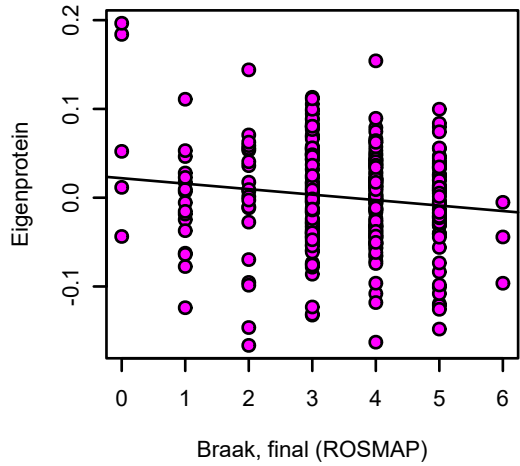
bicor=0.13, p=0.025
cor=0.13, p=0.019



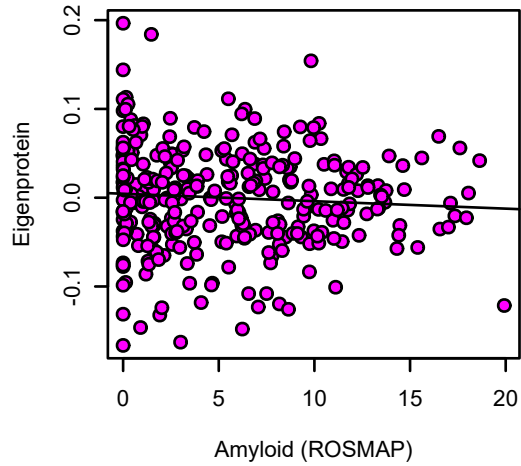
bicor=-0.13, p=0.019
cor=-0.13, p=0.019



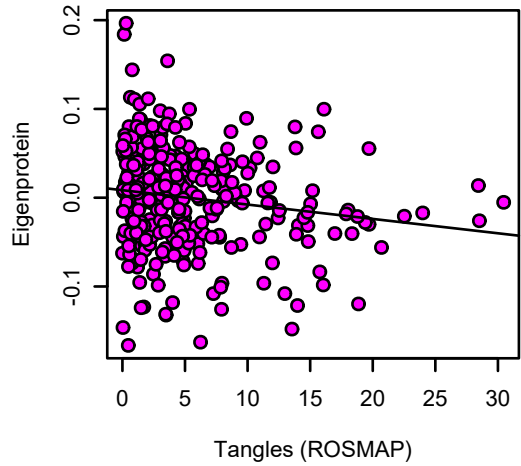
bicor=-0.09, p=0.11
cor=-0.13, p=0.019



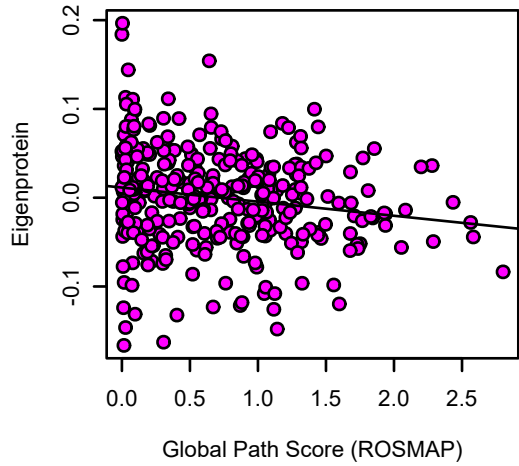
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cor=-0.072, p=0.2



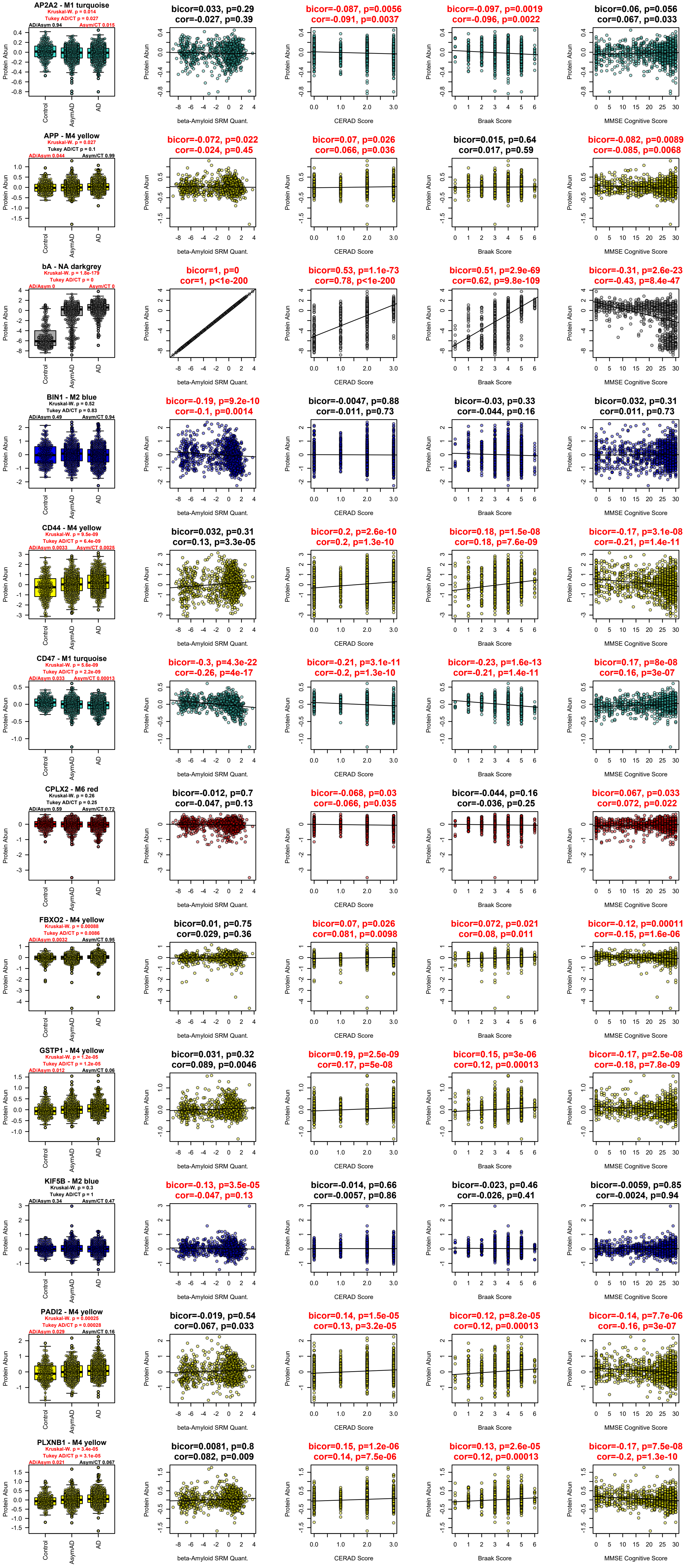
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cor=-0.15, p=0.007

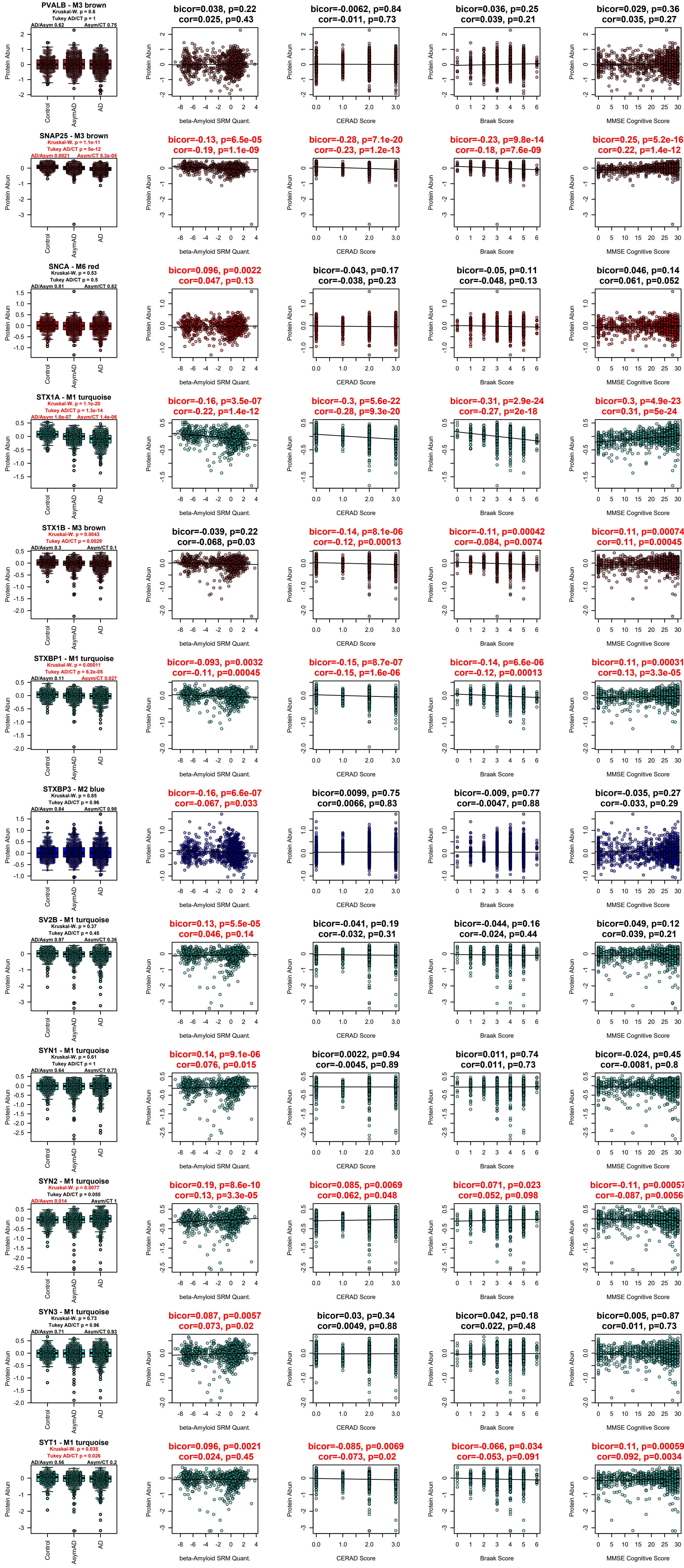


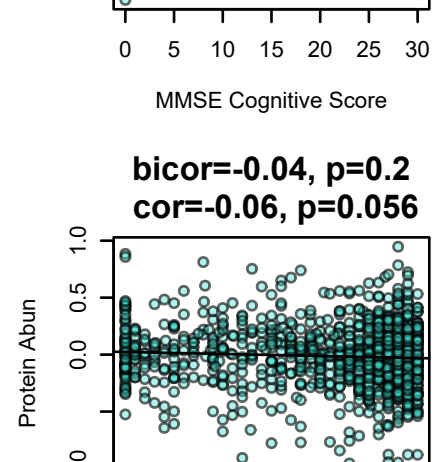
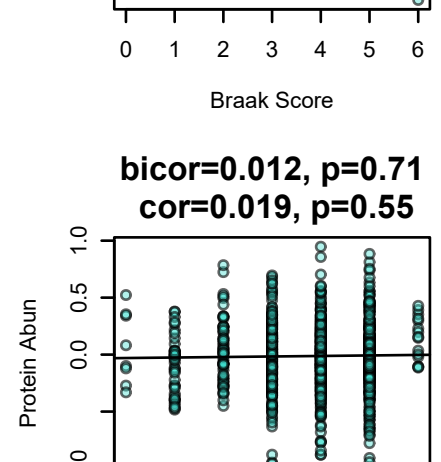
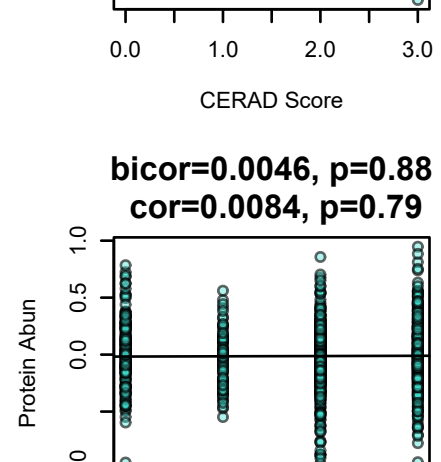
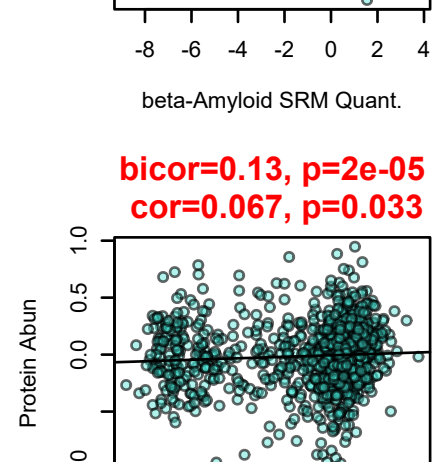
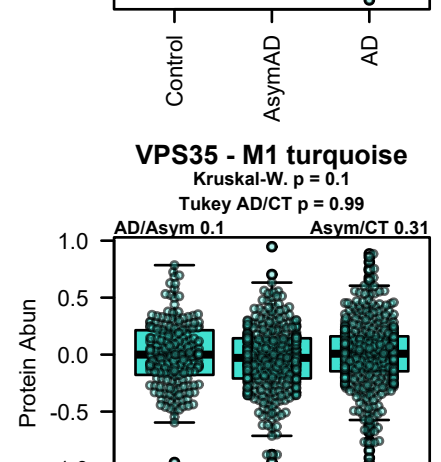
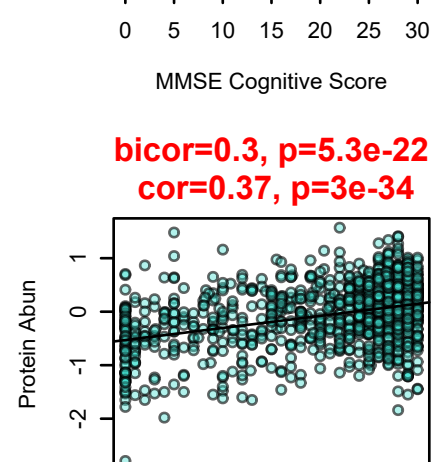
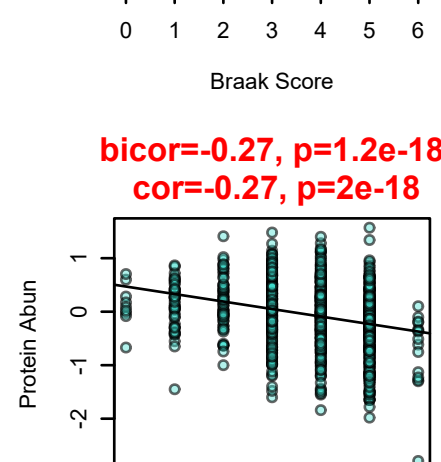
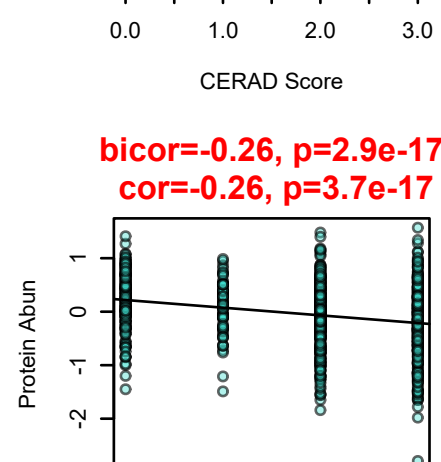
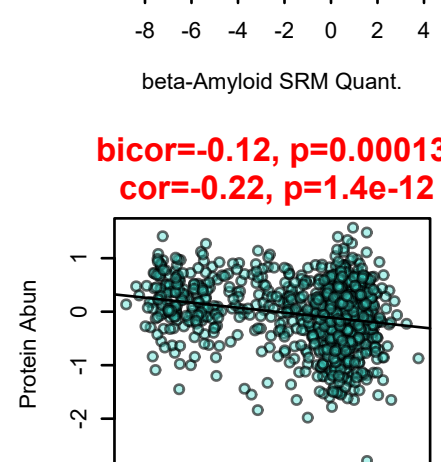
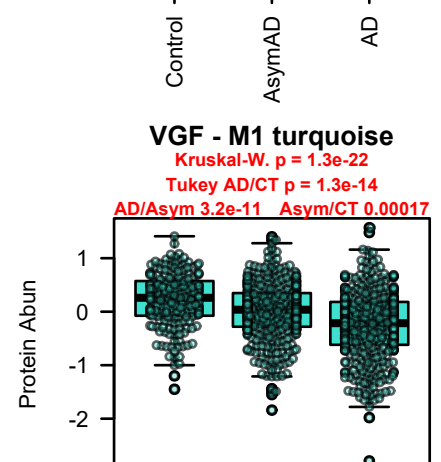
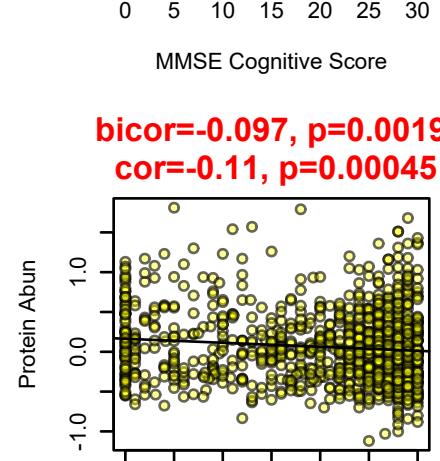
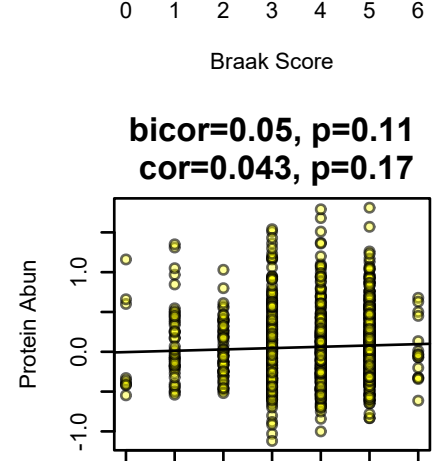
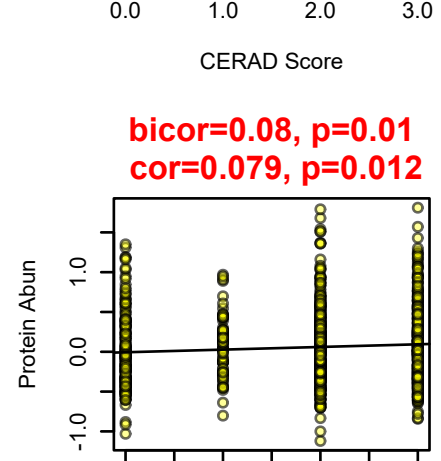
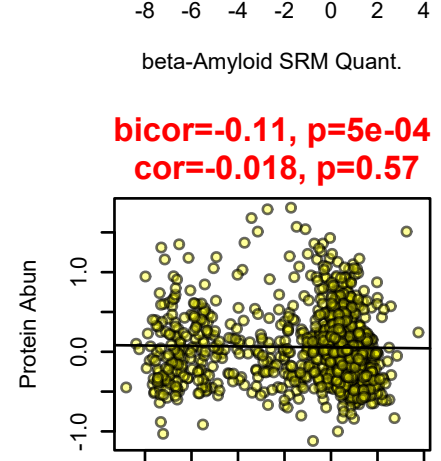
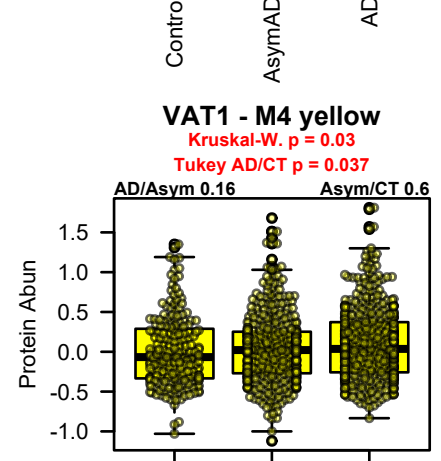
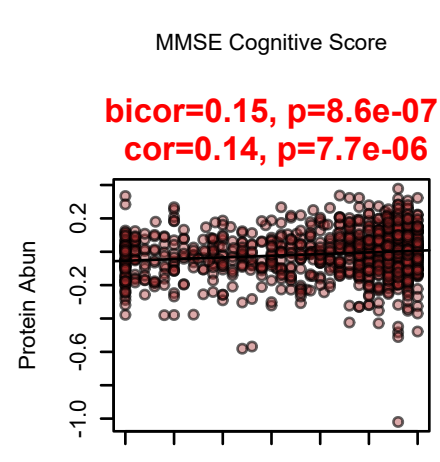
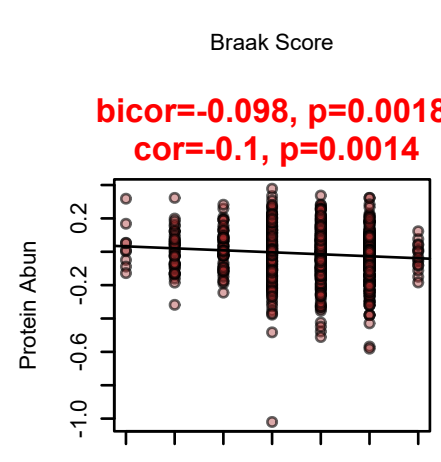
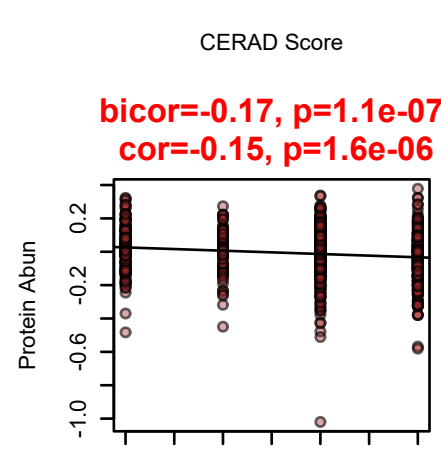
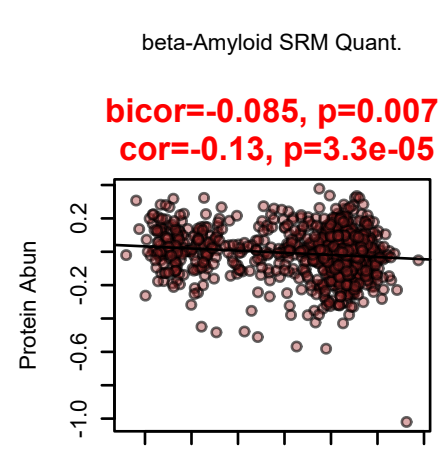
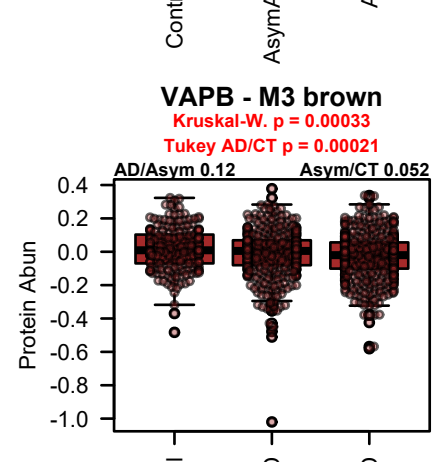
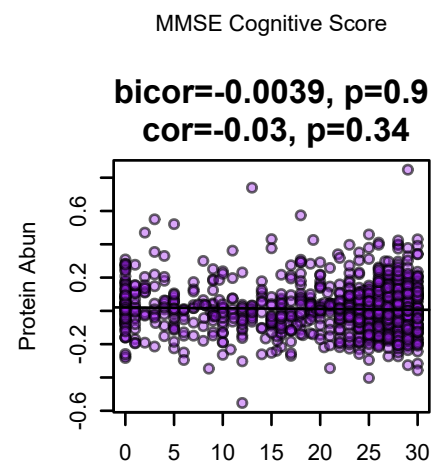
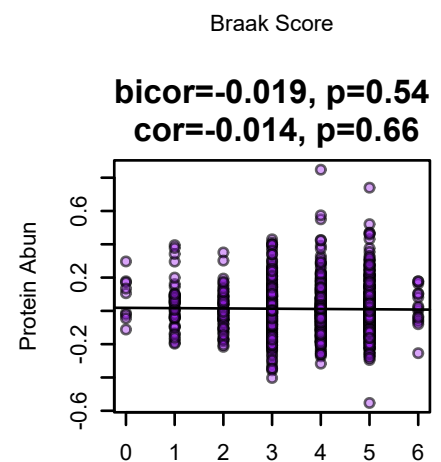
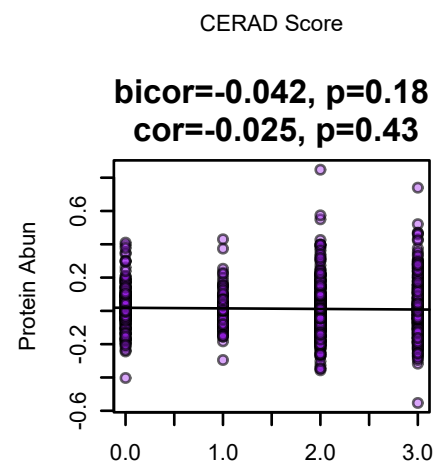
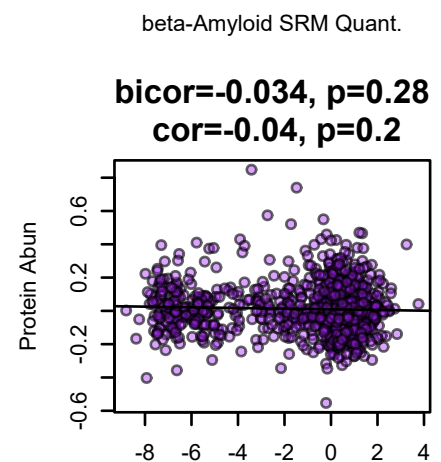
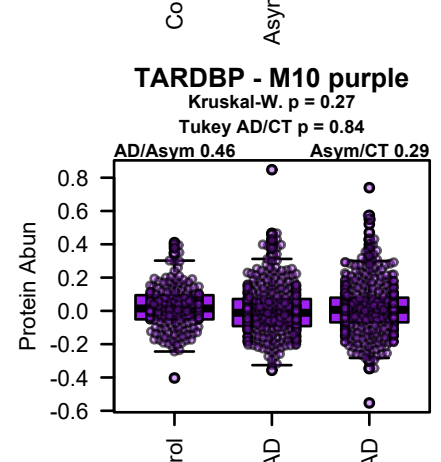
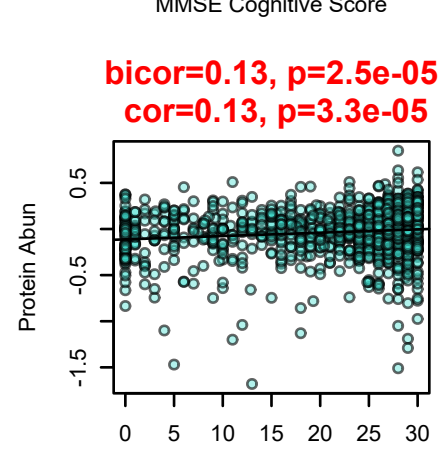
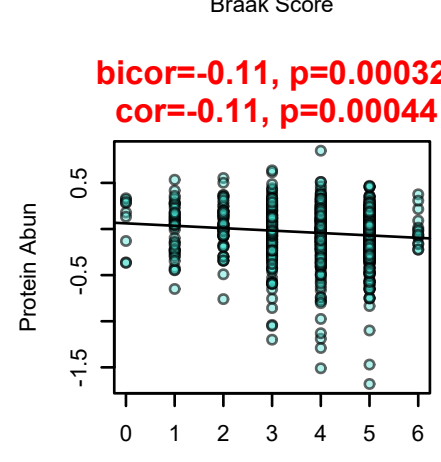
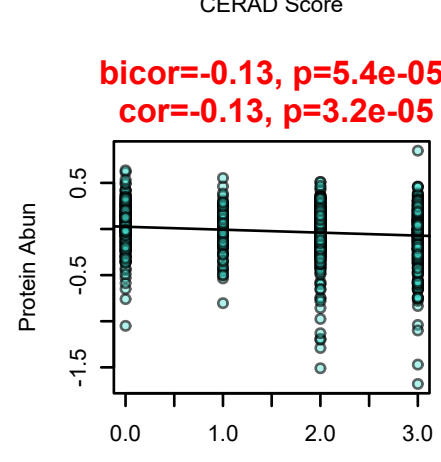
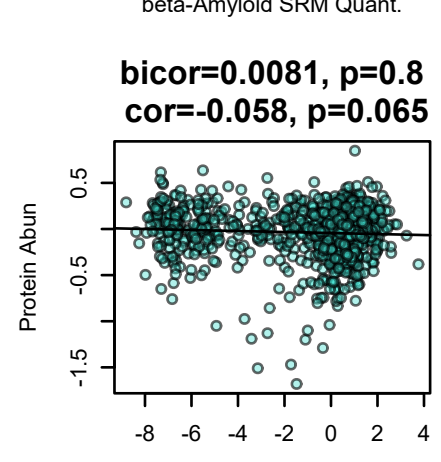
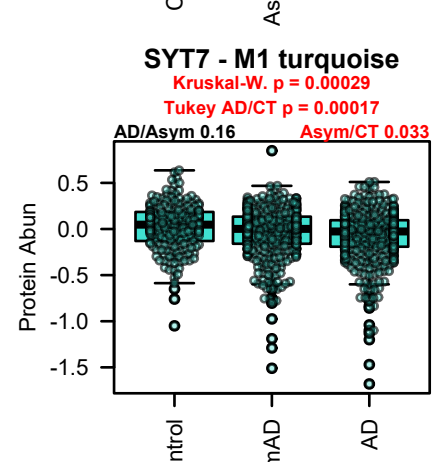
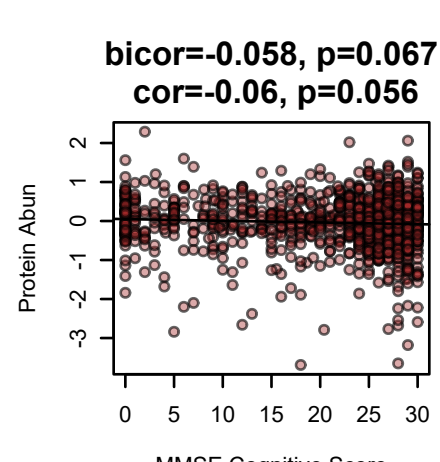
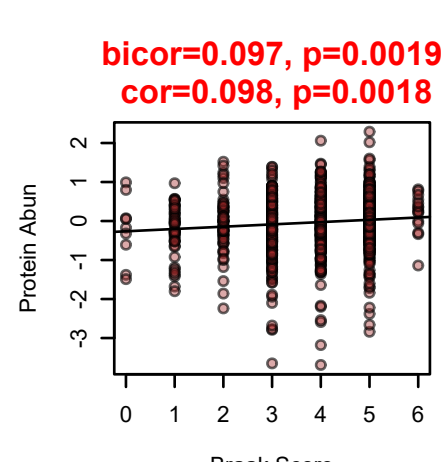
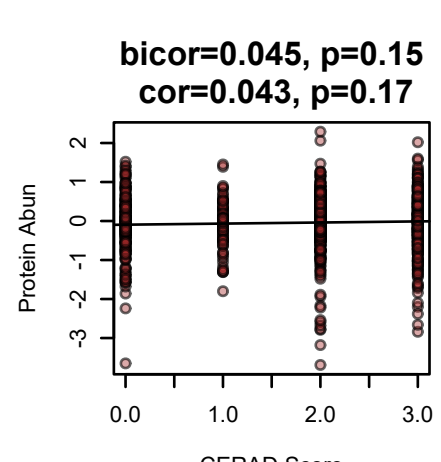
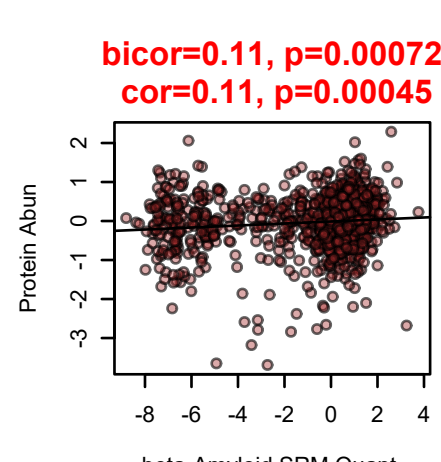
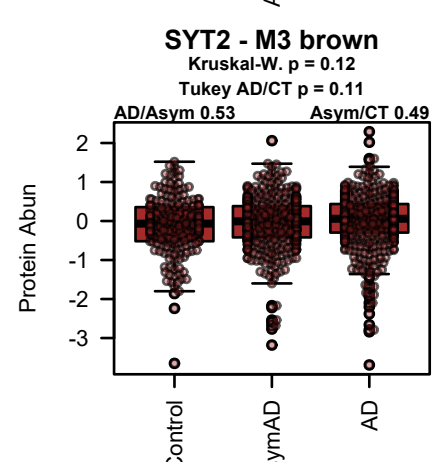
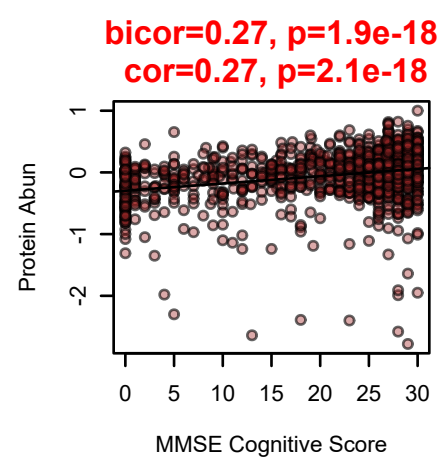
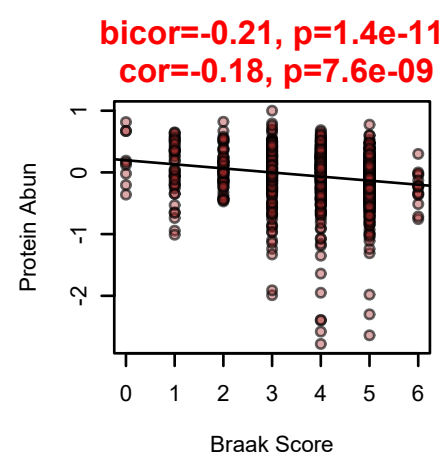
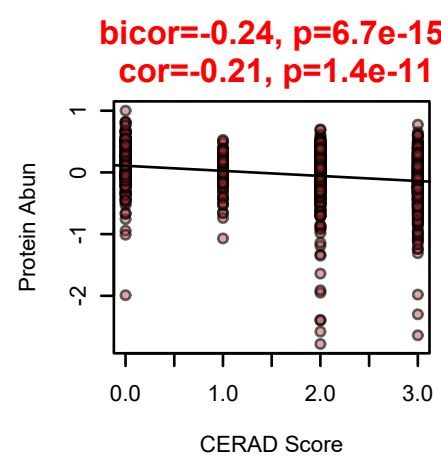
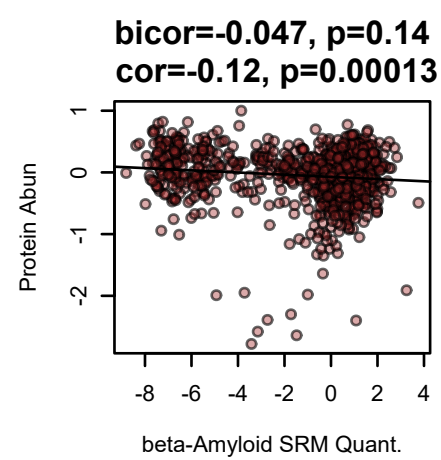
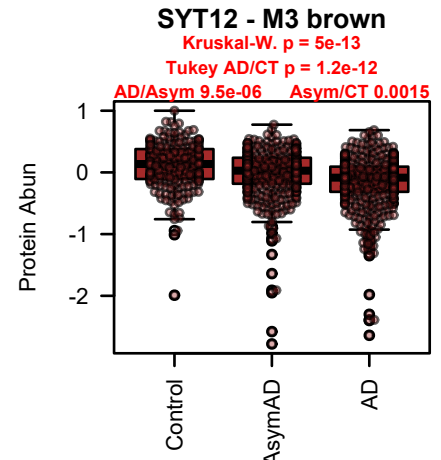
bicor=-0.17, p=0.002
cor=-0.17, p=0.0022



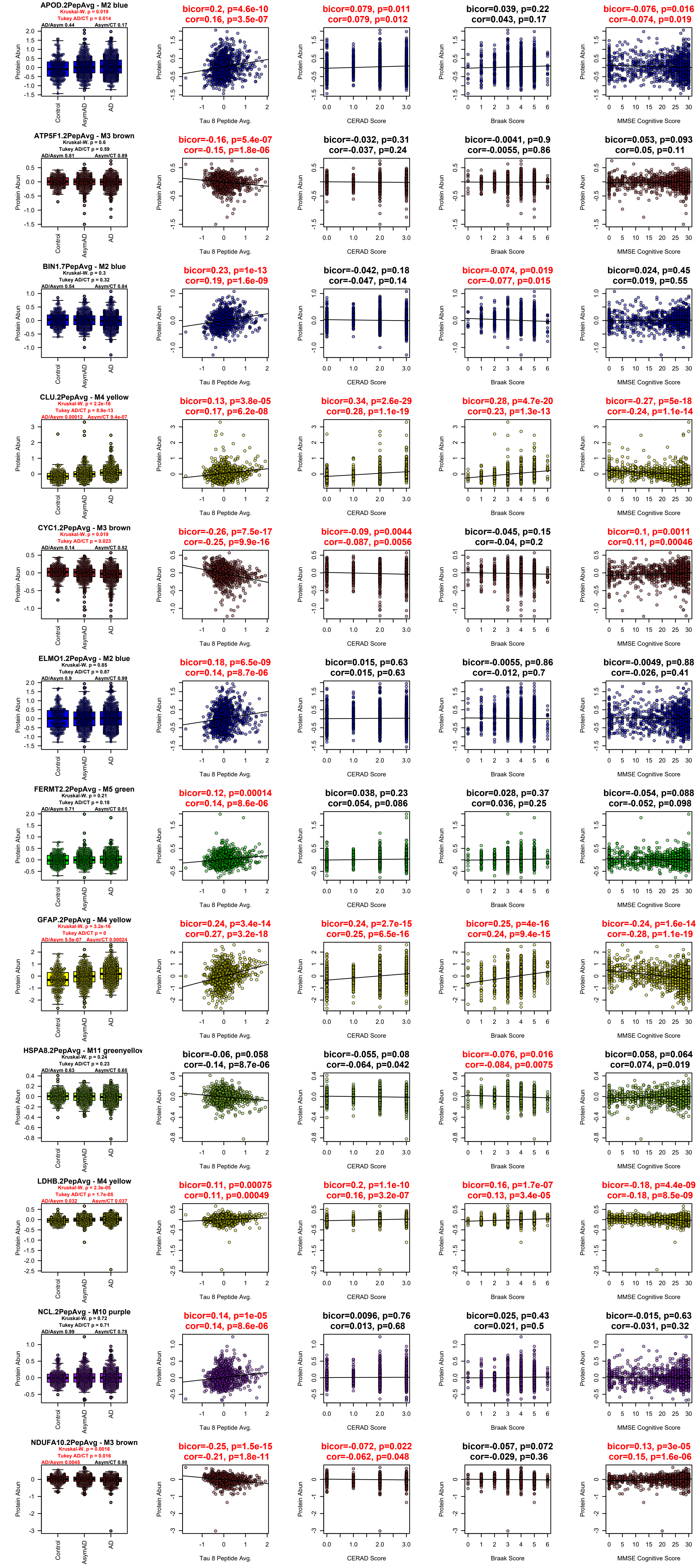
Supplementary Figure 4. AD Network Validation in ROS/MAP. The top 20% of proteins by kME value in each AD brain protein network module was used to create a synthetic eigenprotein, which was then measured by case status in ROS/MAP and correlated with different traits as assessed in the ROS/MAP cohorts ($n=323$ independent case samples after network connectivity outlier removal). The first boxplot for each module is the AD network eigenprotein by case status, given as reference for the second boxplot, which is the synthetic eigenprotein in the ROS/MAP cohorts (control, $n=78$; AsymAD, $n=142$; AD, $n=103$). Control and AsymAD cases were grouped into non-demented (ND) in the *APOE* analysis for sufficient statistical power (ND: $n=31$ E2/3, $n=144$ E3/3, $n=36$ E3/4; AD: $n=10$ E2/3, $n=65$ E3/3, $n=25$ E3/4). E2/2 ($n=2$ control, $n=1$ AsymAD) and E2/4 ($n=6$ AsymAD, $n=3$ AD) were excluded from the analysis. Synthetic eigenprotein differences by case status or *APOE* genotype in ROS/MAP were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

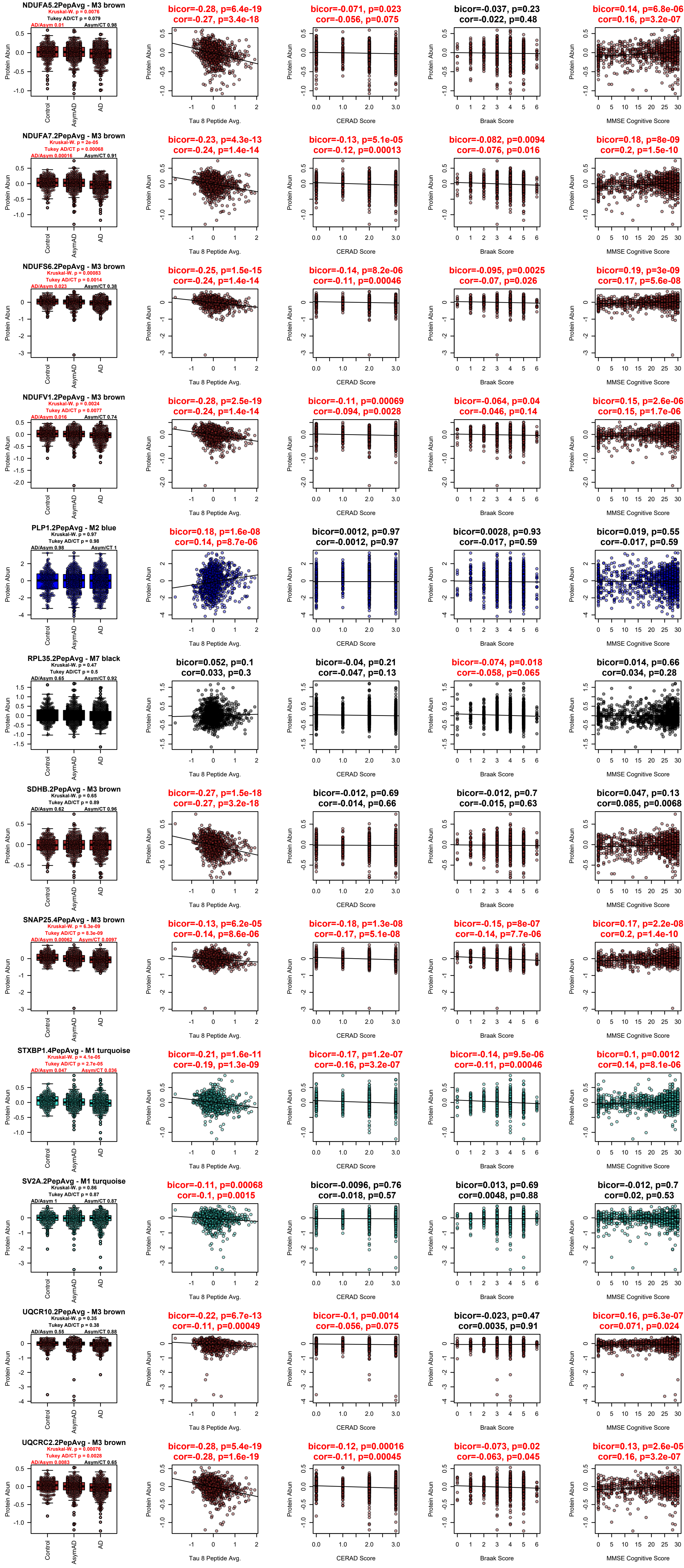


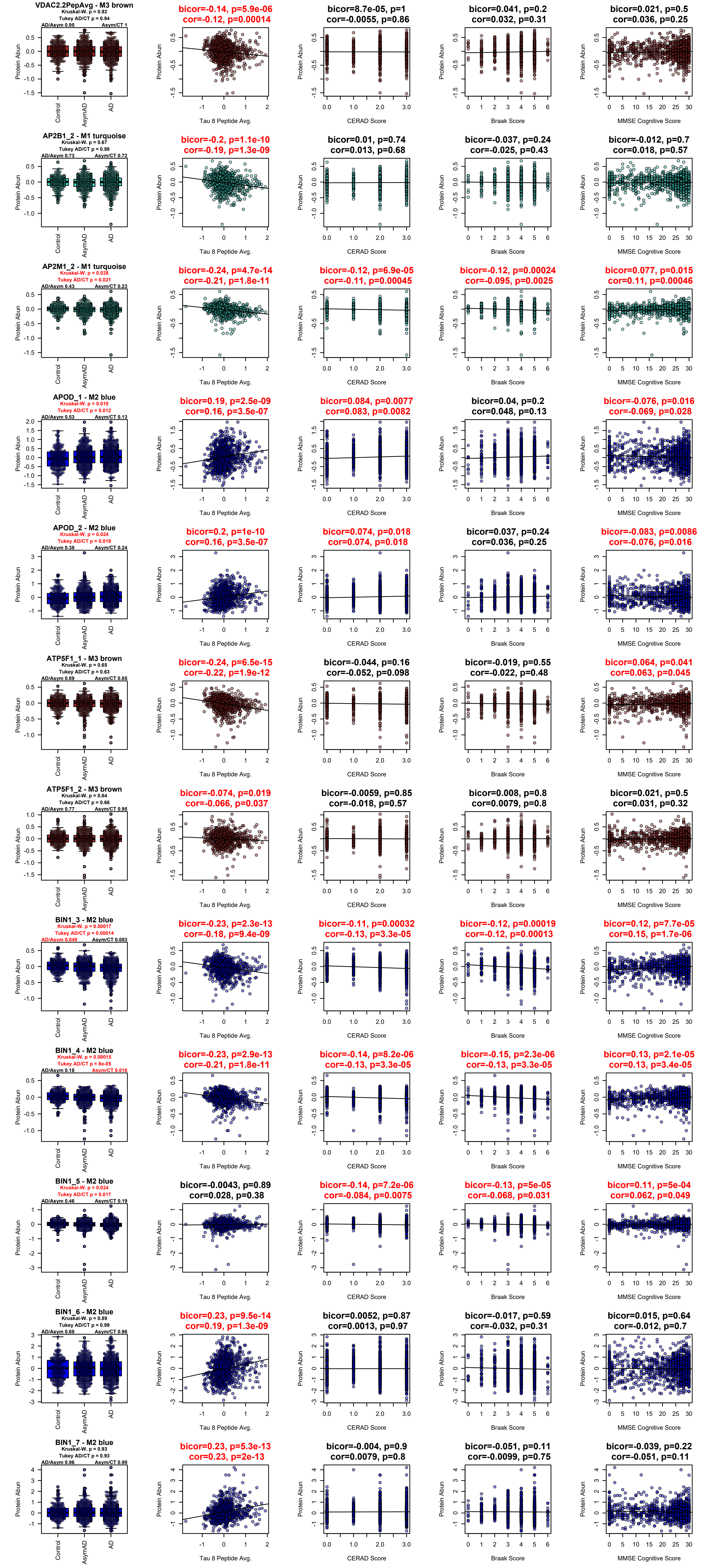


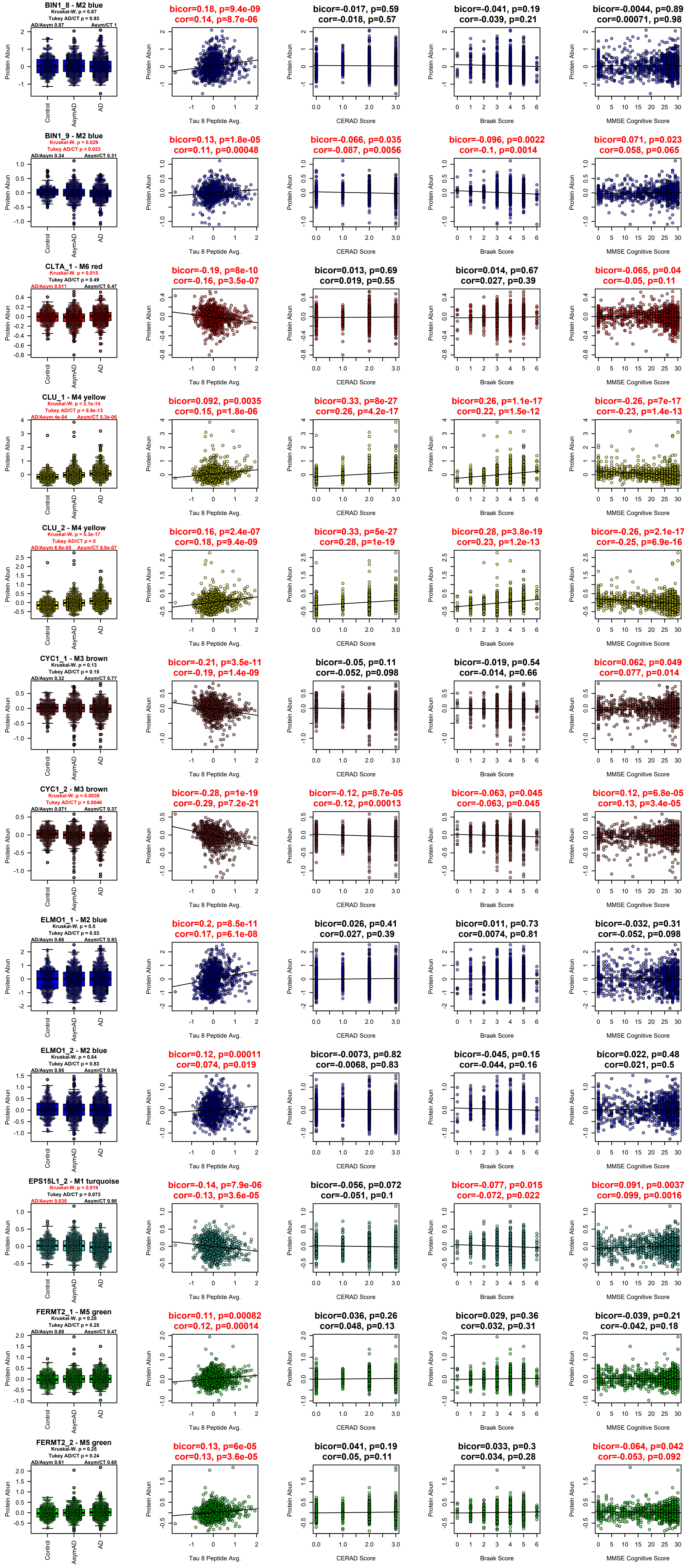


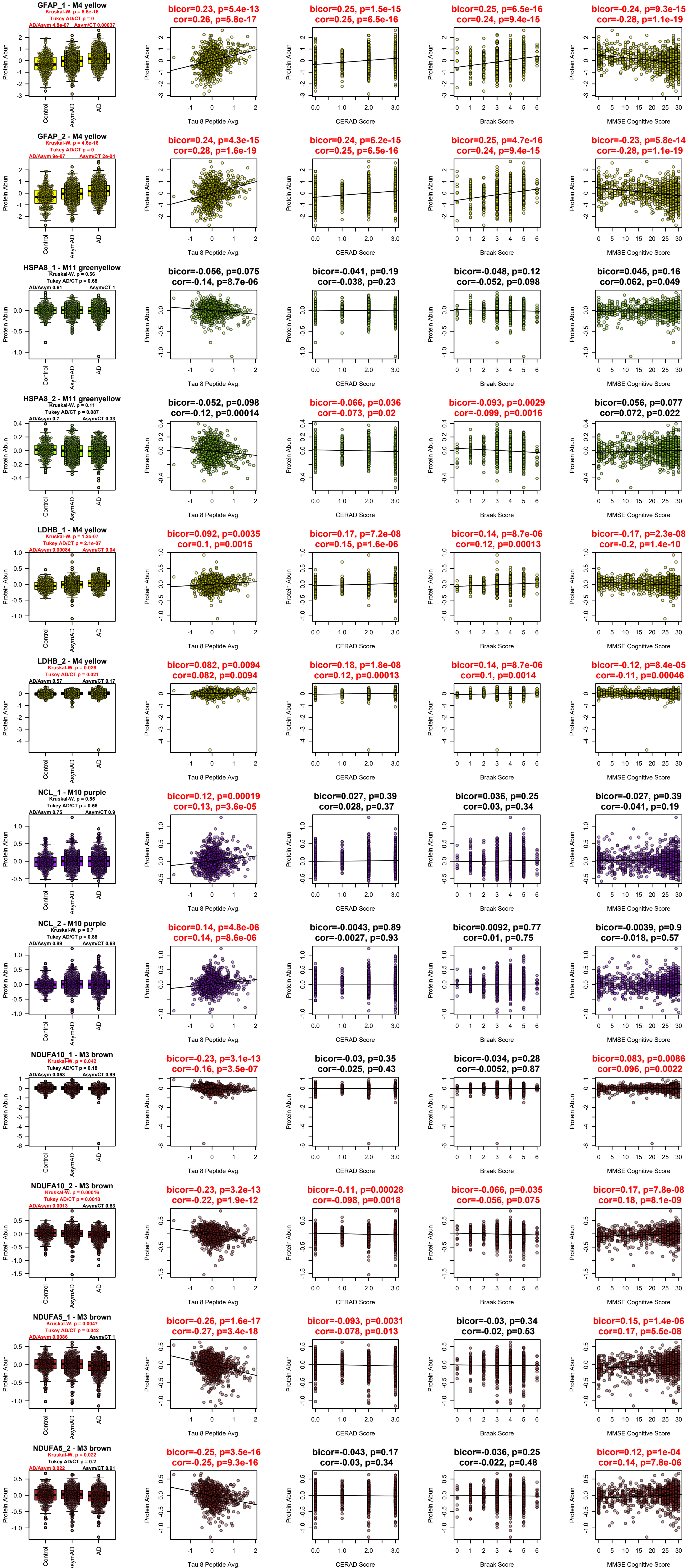
Supplementary Figure 5. Round 1 Targeted Measurements of AD Network Proteins in ROS/MAP. Levels of 67 proteins were measured by selected reaction monitoring (SRM) mass spectrometry across 1016 ROS/MAP cases (control, $n=139$; AsymAD, $n=384$; AD, $n=439$ independent case samples). One peptide per protein was selected for measurement. Peptide sequences can be found at <https://www.synapse.org/#!Synapse:syn10468856>. Protein levels were correlated to A β levels as measured by SRM, CERAD score, Braak stage, and MMSE. Protein level differences by case status were assessed by Kruskal-Wallis (K-W) one-way ANOVA with Tukey test. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Data for each protein is colored by the AD network module in which it resides. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

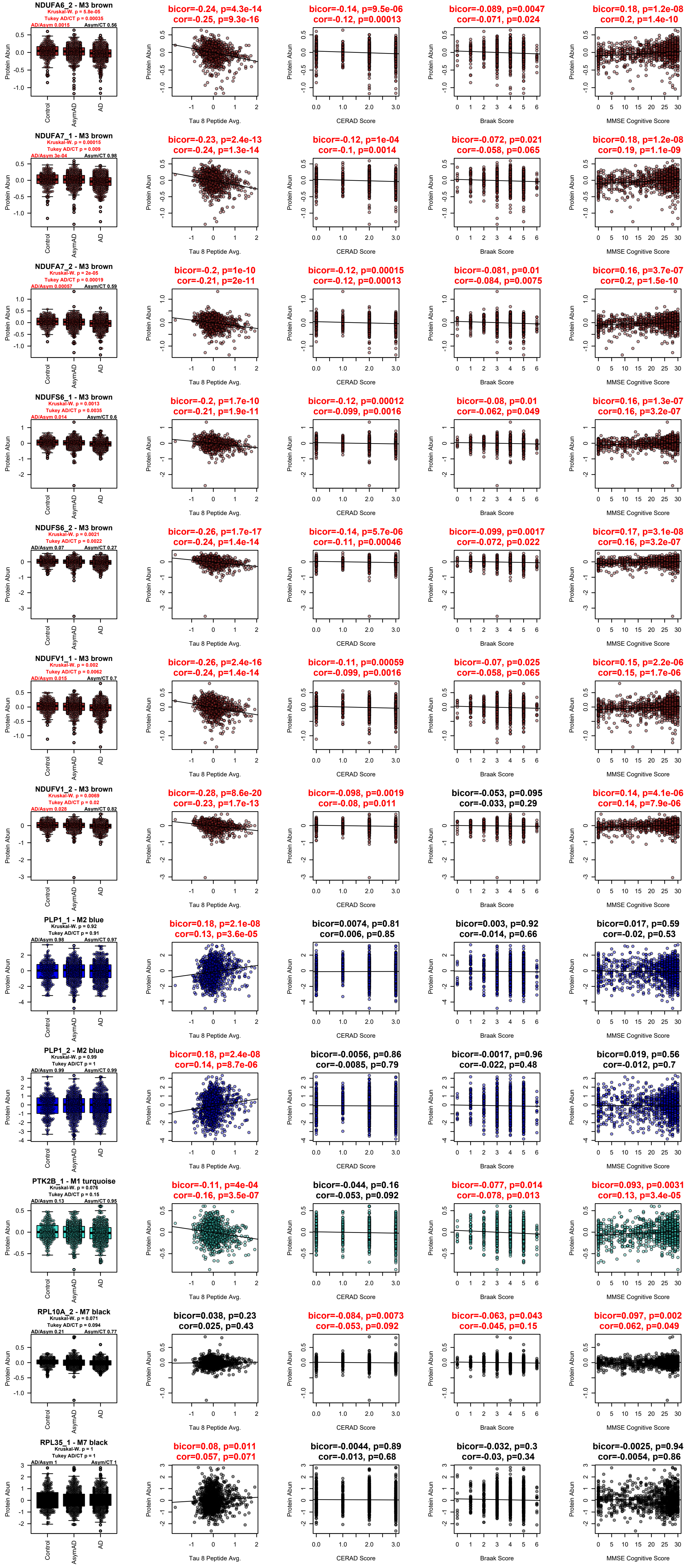


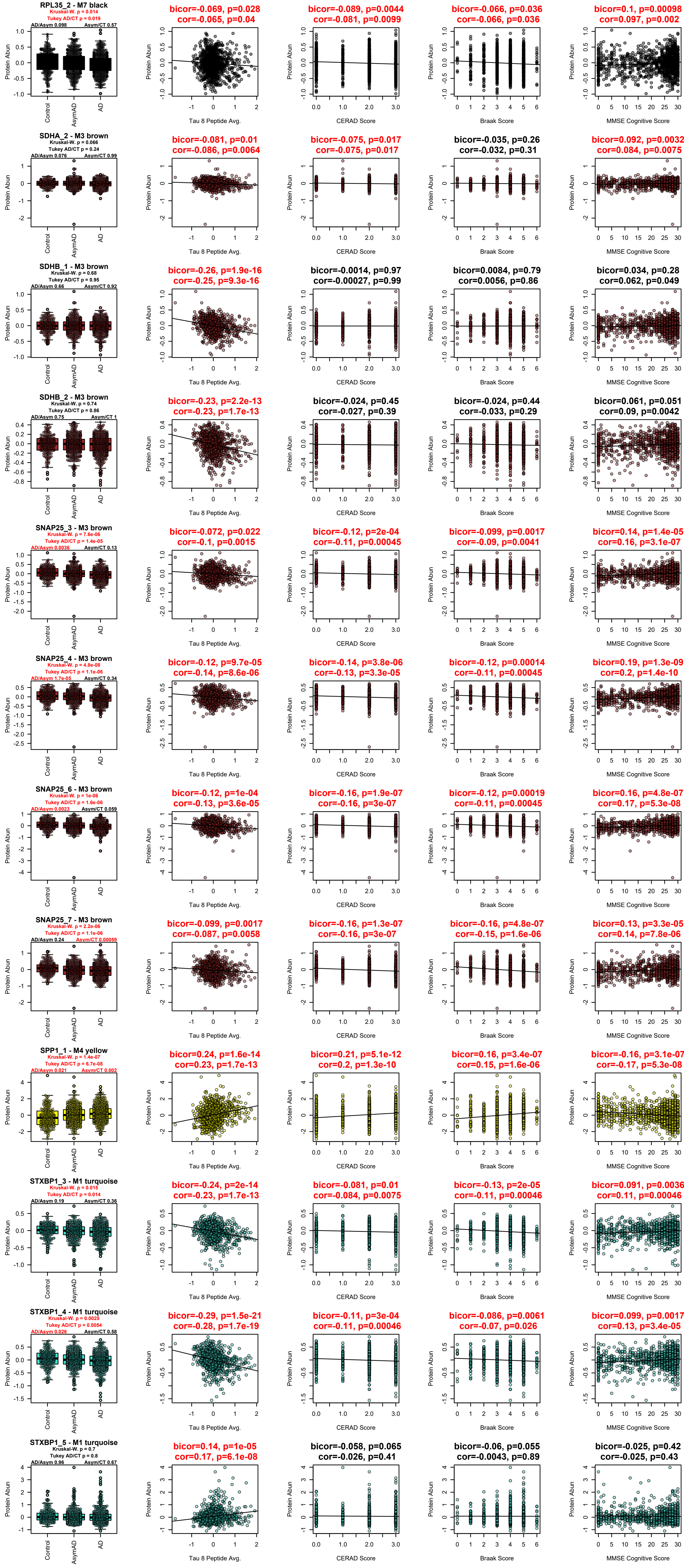


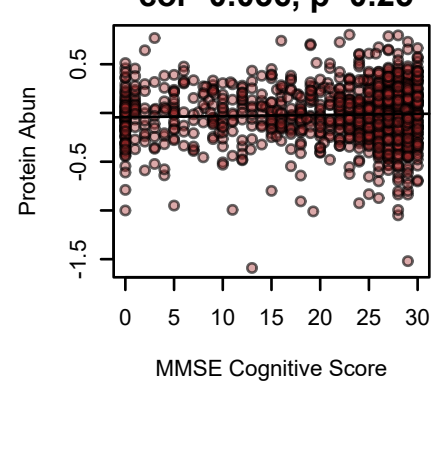
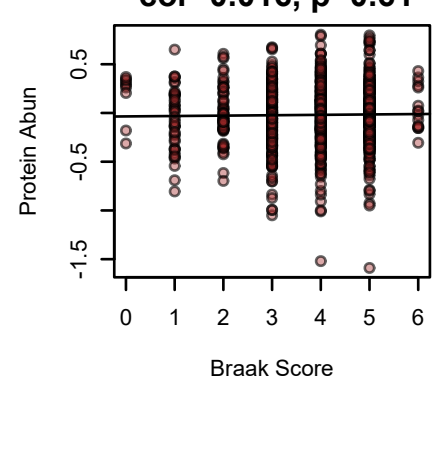
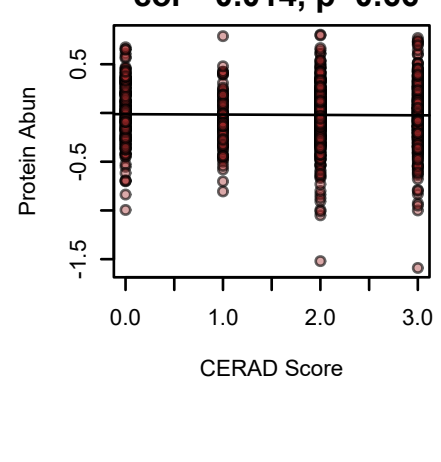
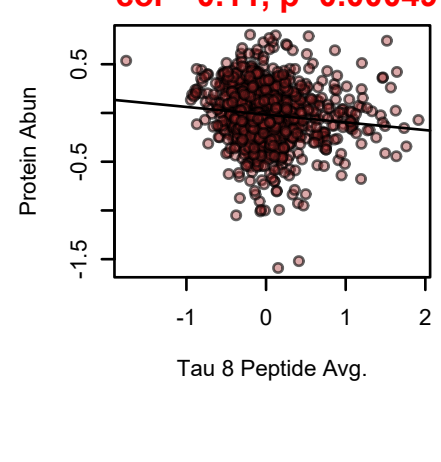
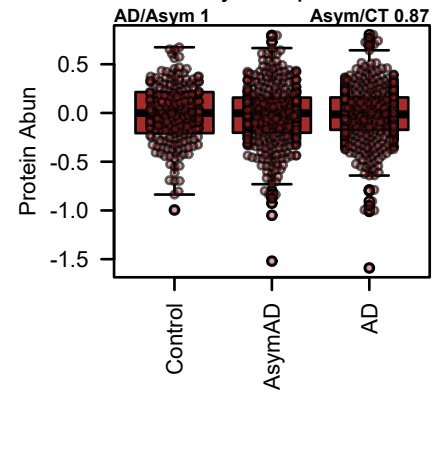
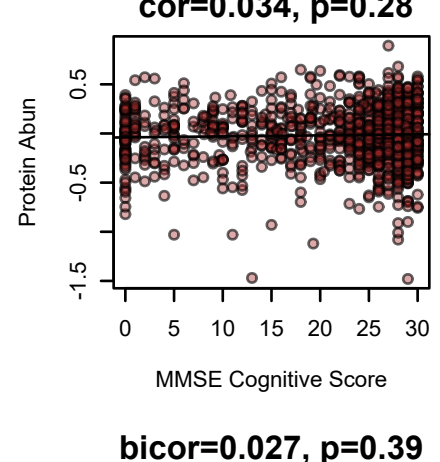
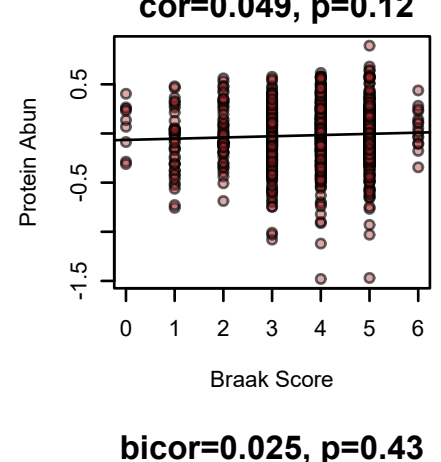
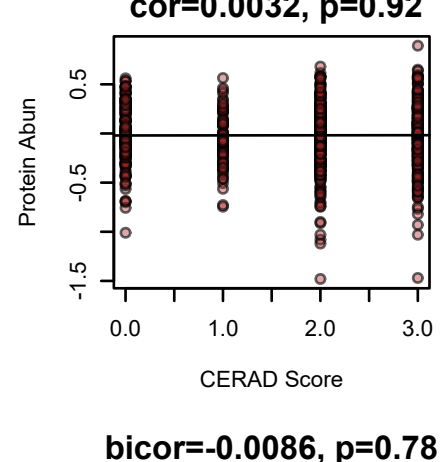
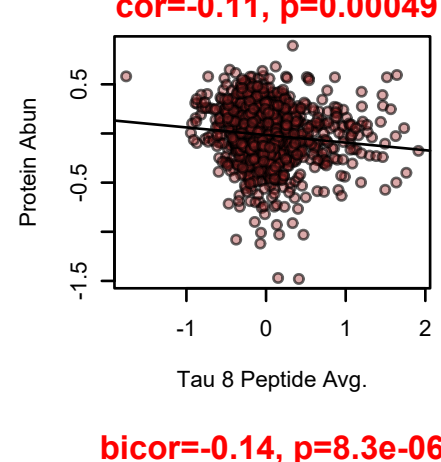
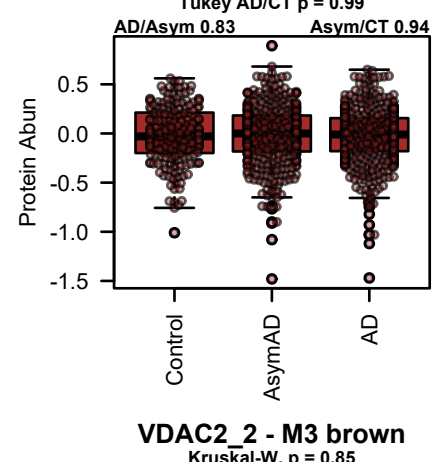
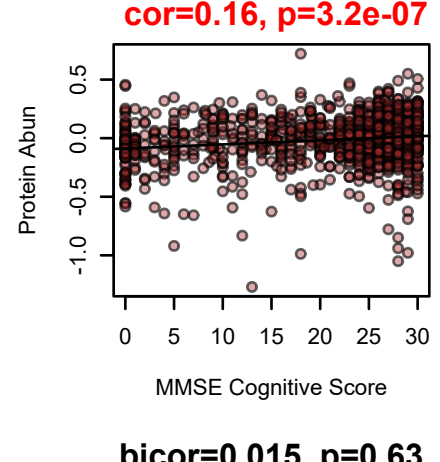
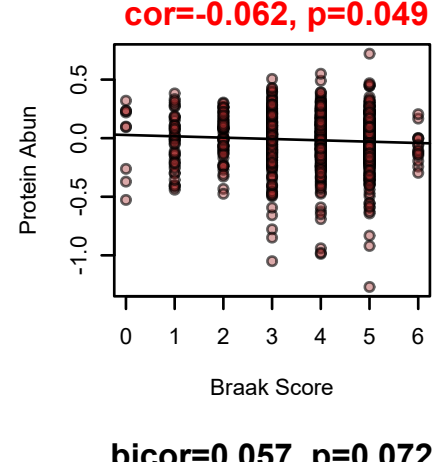
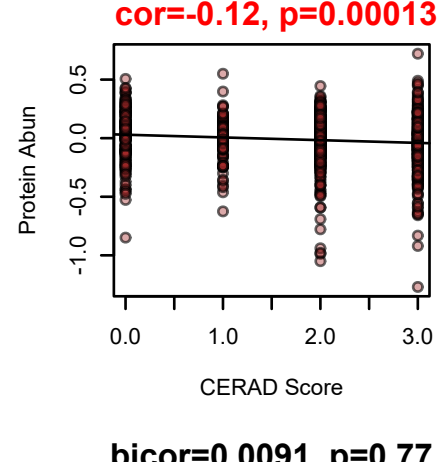
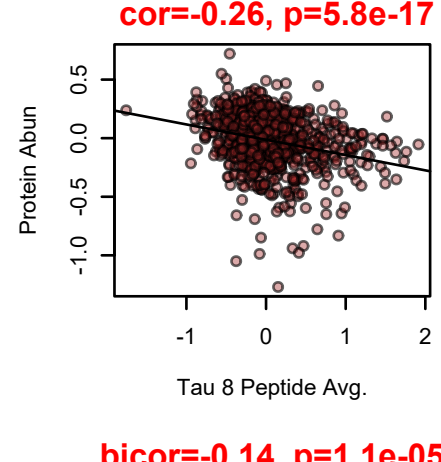
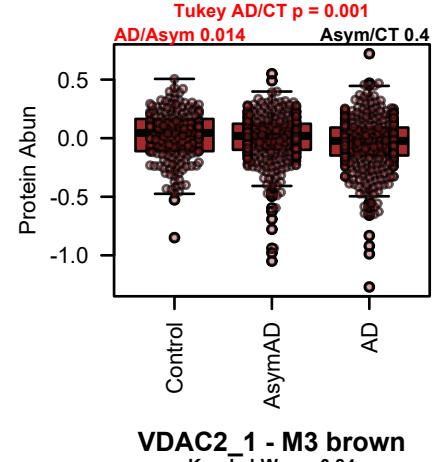
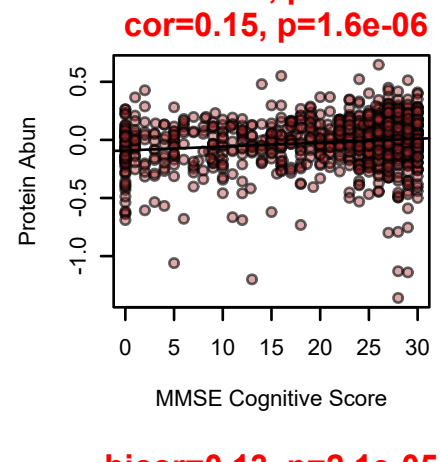
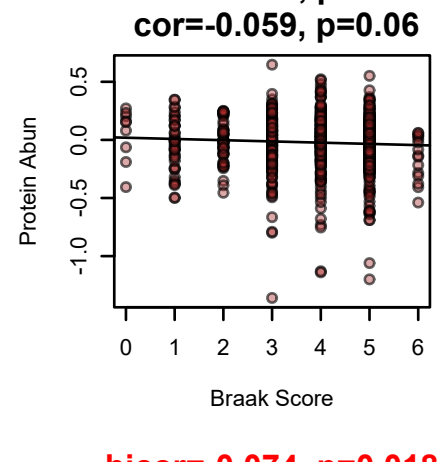
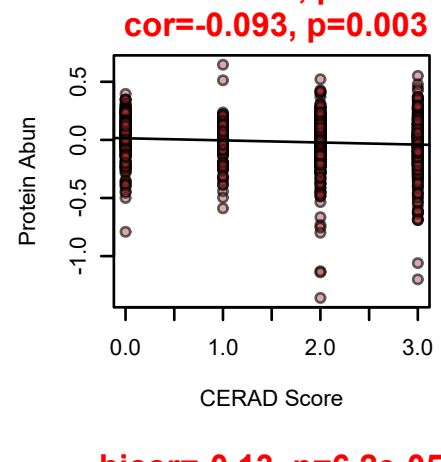
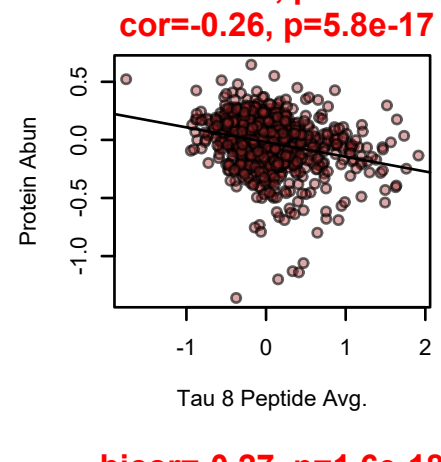
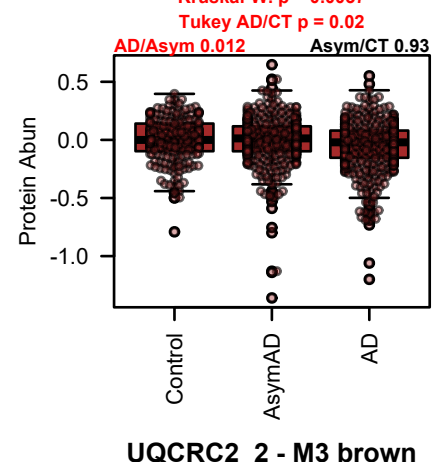
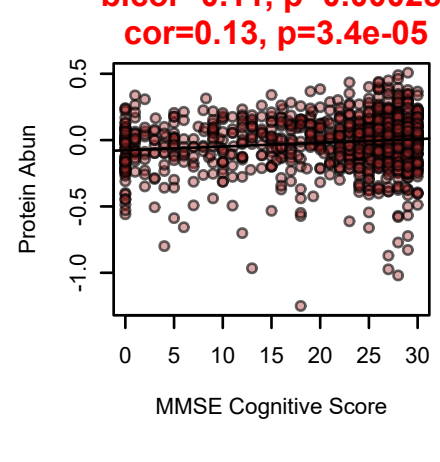
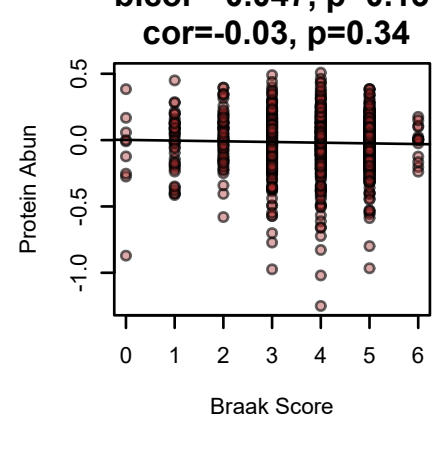
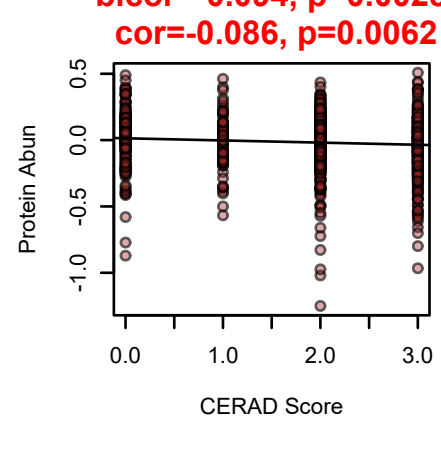
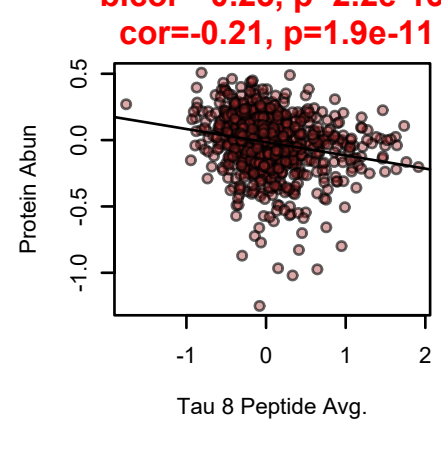
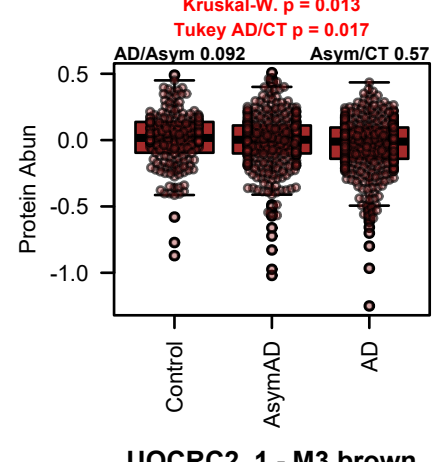
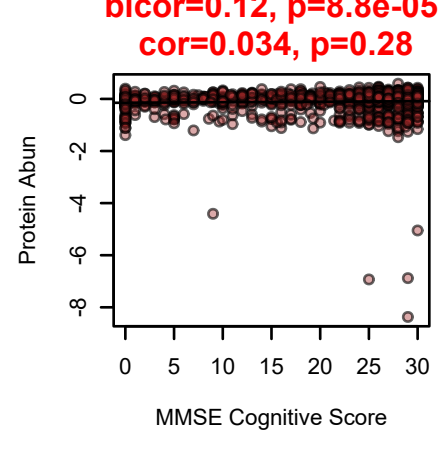
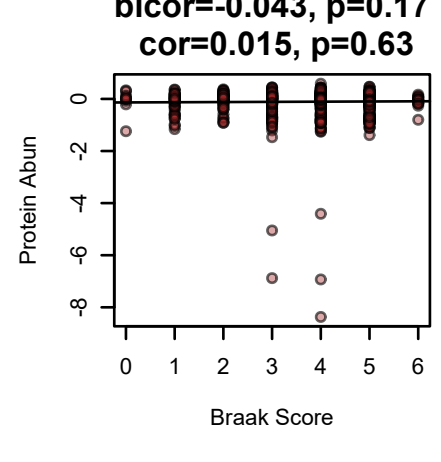
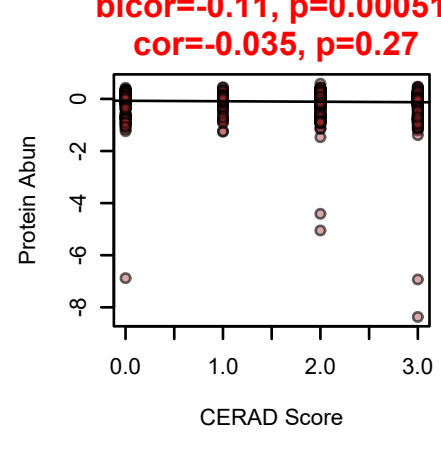
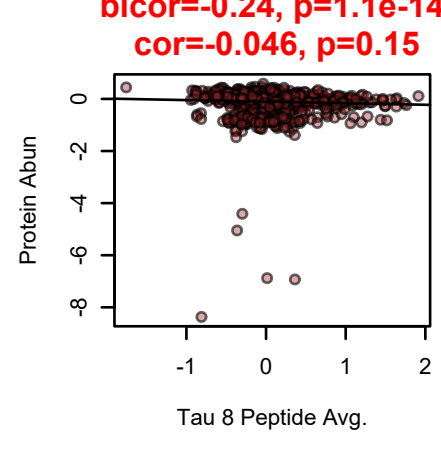
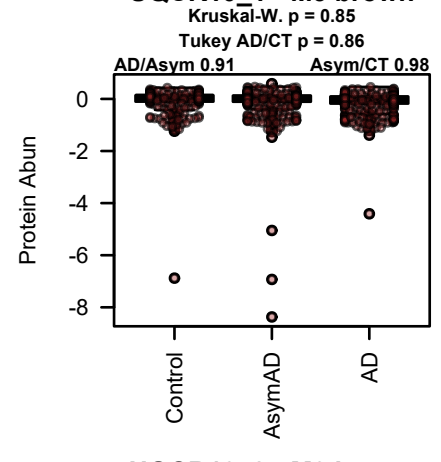
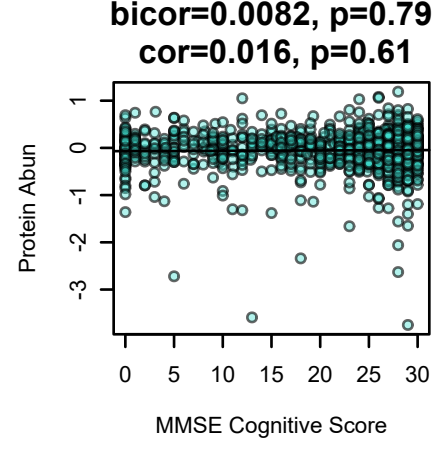
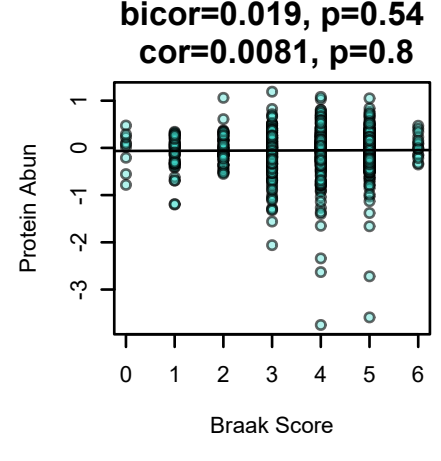
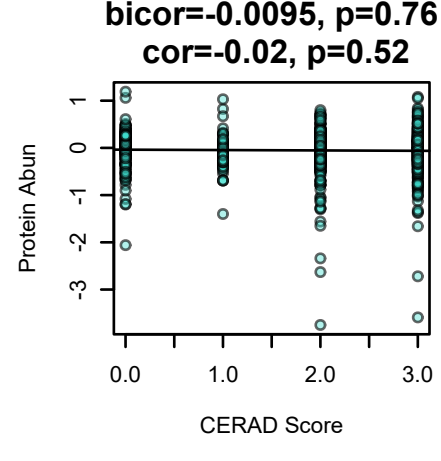
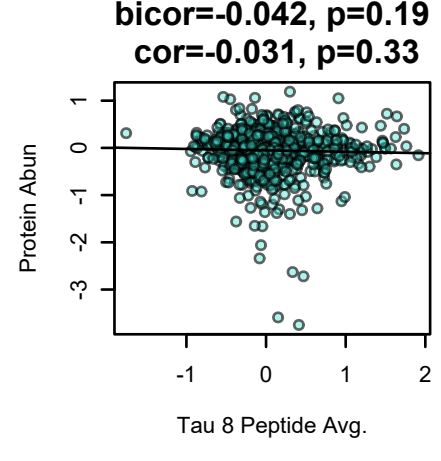
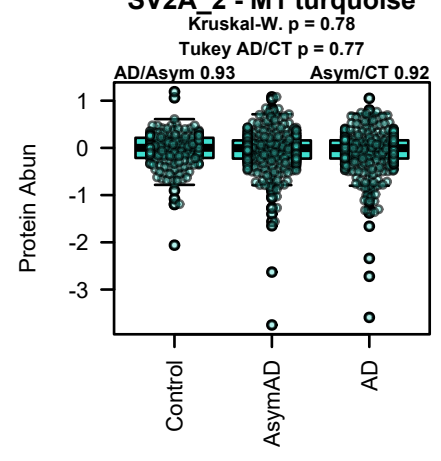
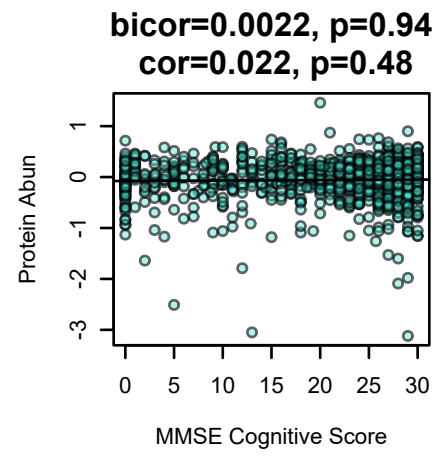
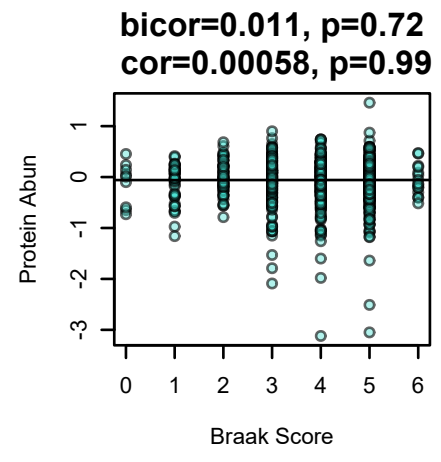
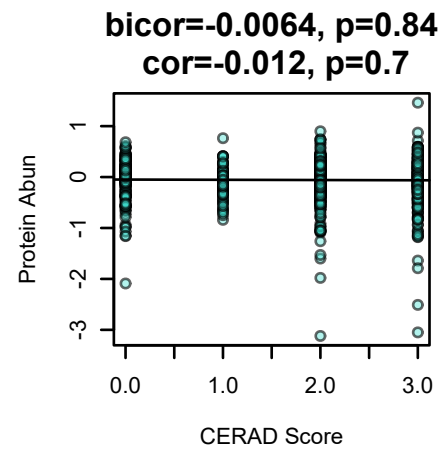
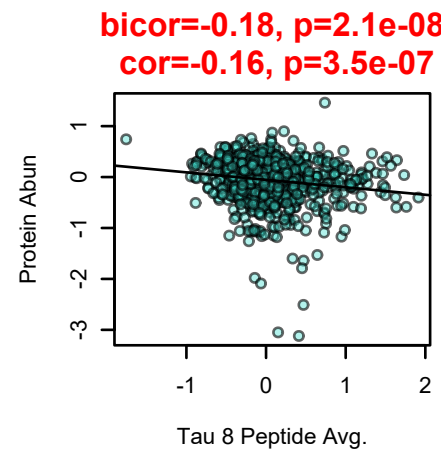
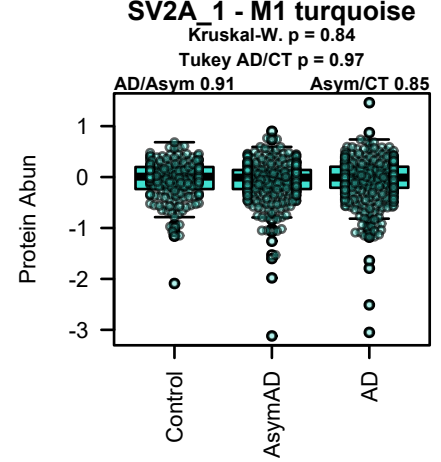
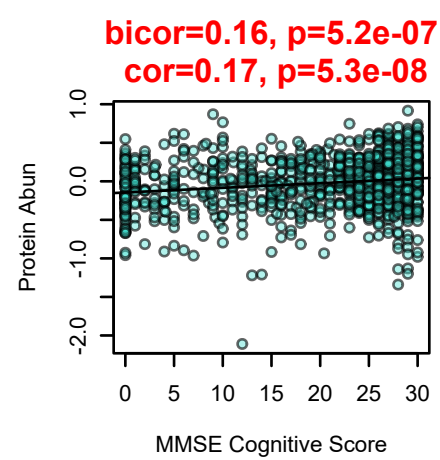
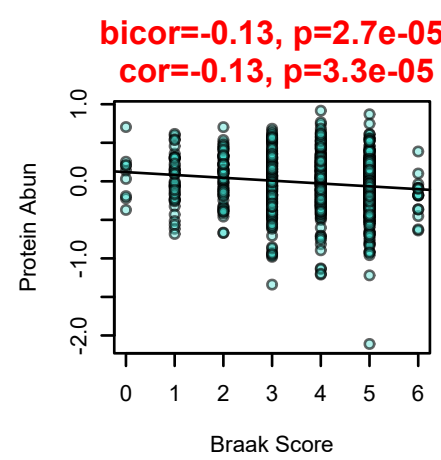
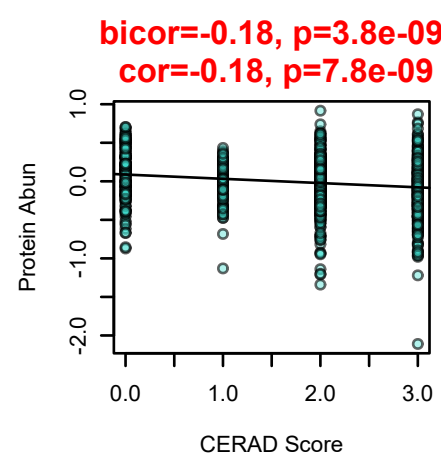
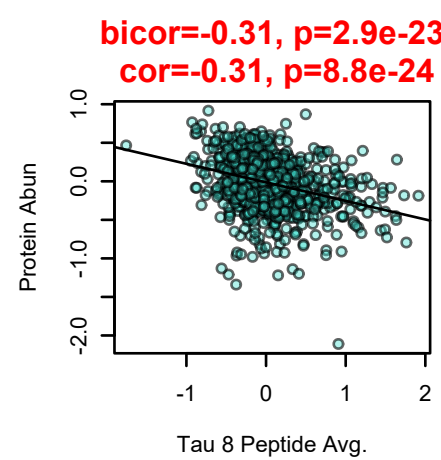
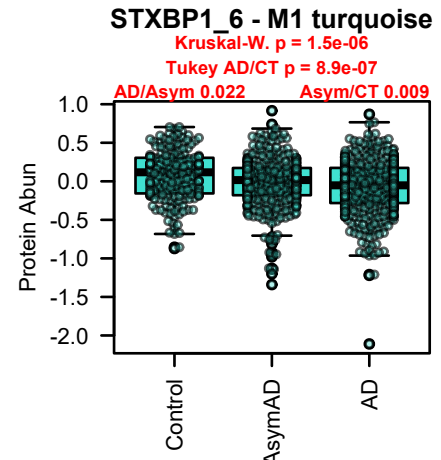






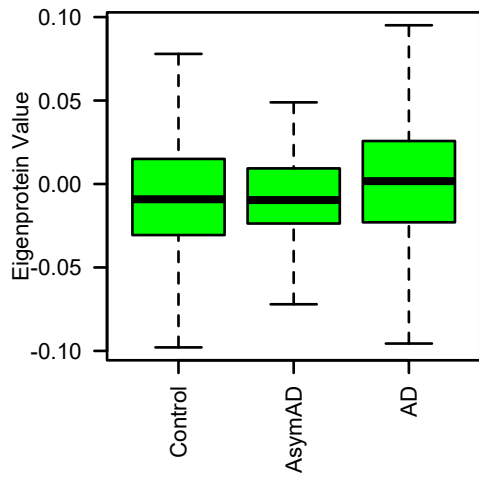




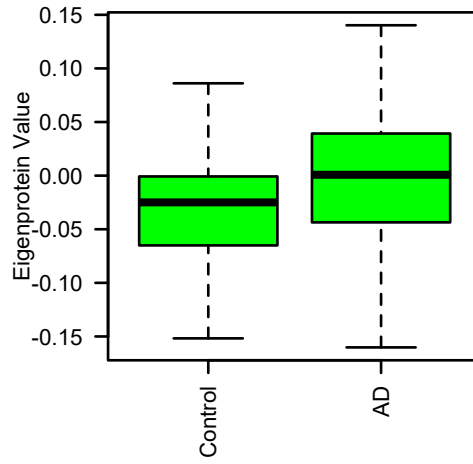


Supplementary Figure 6. Round 2 Targeted Measurements in ROS/MAP. Levels of 37 proteins were measured by selected reaction monitoring (SRM) mass spectrometry across 1016 ROS/MAP cases (control, $n=139$; AsymAD, $n=384$; AD, $n=439$ independent case samples). Most proteins were measured with at least two peptides per protein, and therefore protein level measurements for these proteins are calculated as the average of the individual peptide measurements. Individual peptide measurements are shown after the protein level measurements. Peptide sequences can be found at <https://www.synapse.org/#!/Synapse:syn10468856>. Protein and peptide levels were correlated to tau levels as measured by SRM, CERAD score, Braak stage, and MMSE. Differences in levels by case status were assessed by Kruskal-Wallis (K-W) one-way ANOVA with Tukey test. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Data for each protein and peptide is colored by the AD network module in which it resides. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

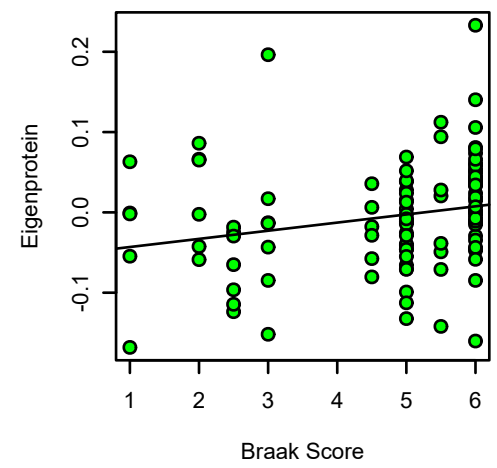
M5 green.Consensus



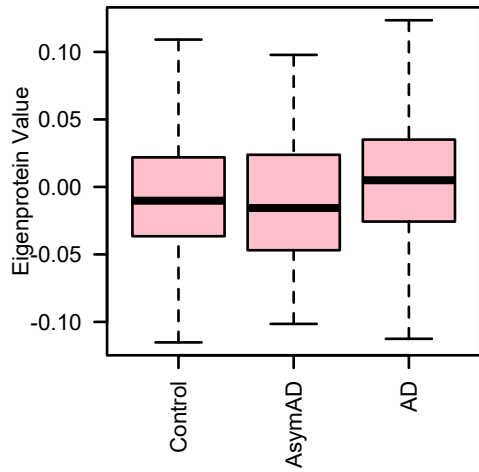
M5 green.MayoTC (Synthetic)
K-W ANOVA p: 0.11



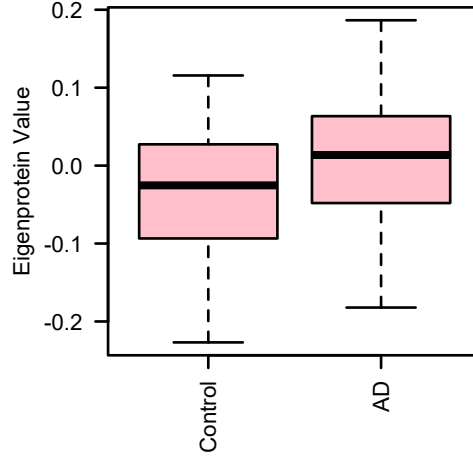
bicor=0.26, p=0.0079
cor=0.22, p=0.023



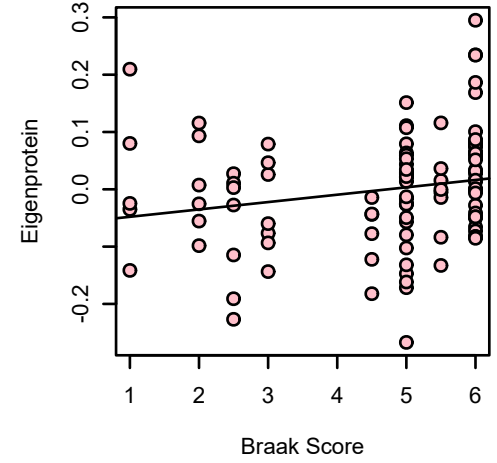
M8 pink.Consensus



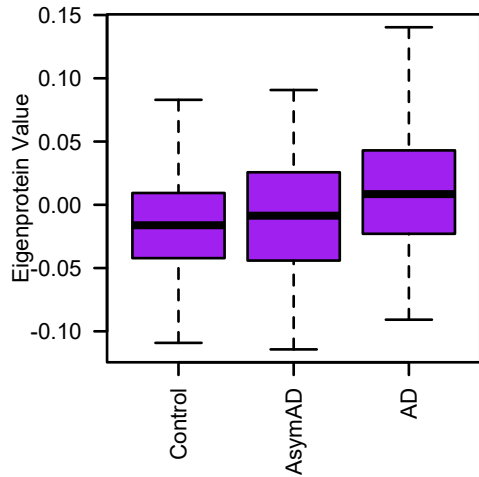
M8 pink.MayoTC (Synthetic)
K-W ANOVA p: 0.15



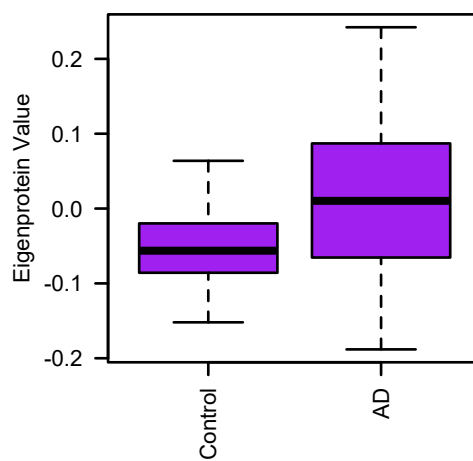
bicor=0.23, p=0.016
cor=0.2, p=0.039



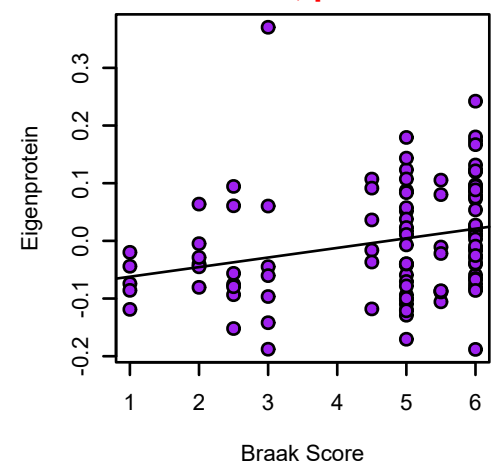
M10 purple.Consensus



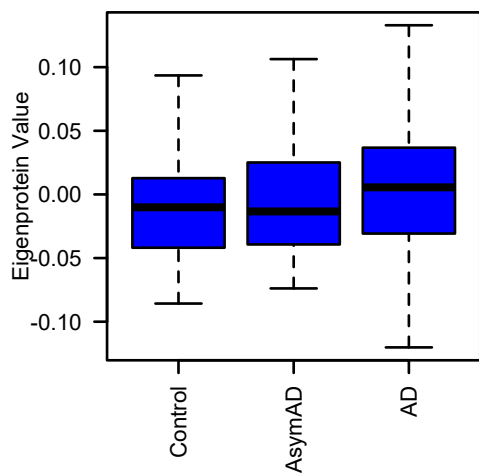
M10 purple.MayoTC (Synthetic)
K-W ANOVA p: 0.038



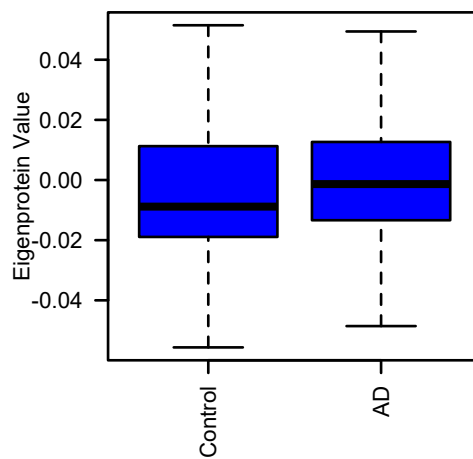
bicor=0.29, p=0.0028
cor=0.26, p=0.0068



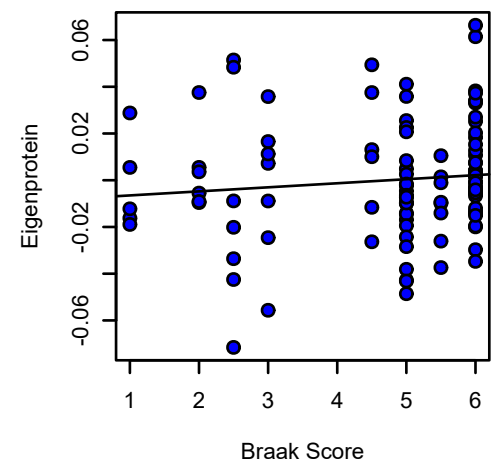
M2 blue.Consensus



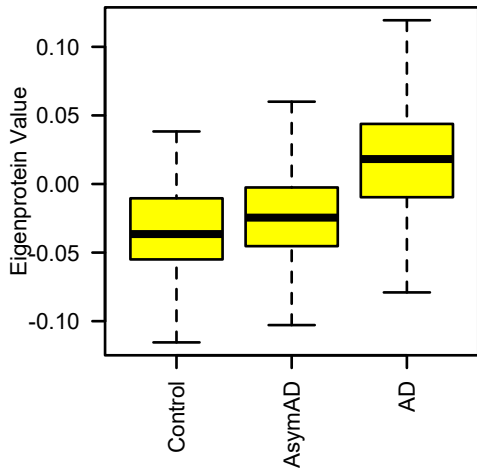
M2 blue.MayoTC (Synthetic)
K-W ANOVA p: 0.44



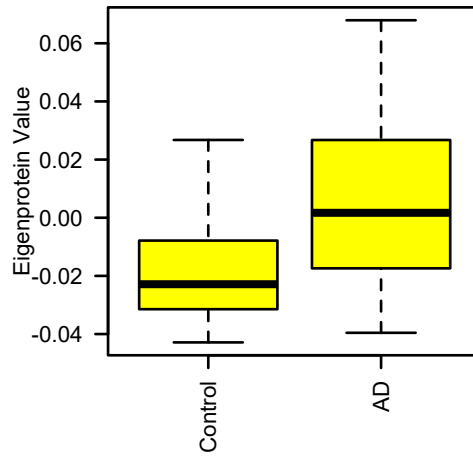
bicor=0.091, p=0.35
cor=0.11, p=0.26



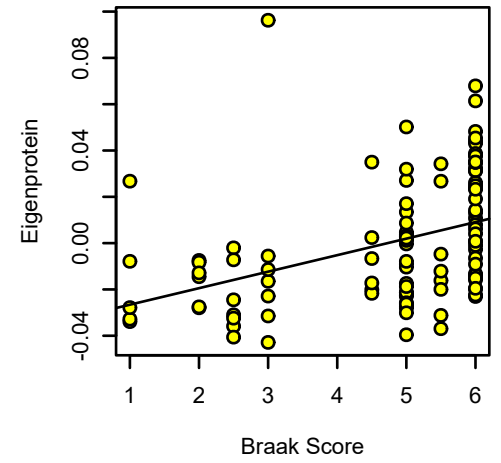
M4 yellow.Consensus



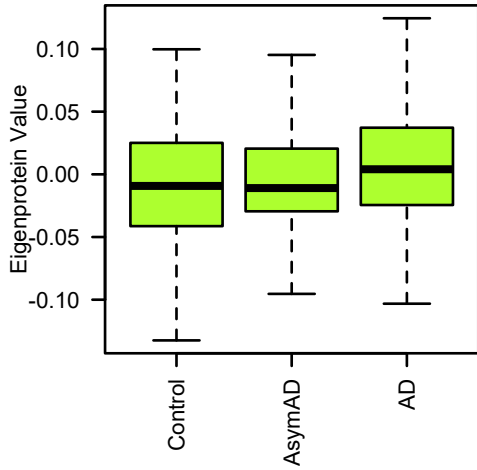
M4 yellow.MayoTC (Synthetic)
K-W ANOVA p: 0.0011



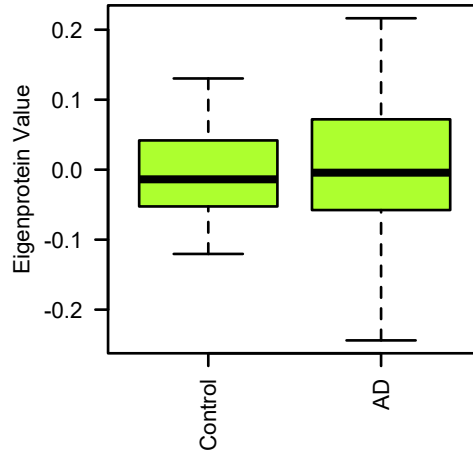
bicor=0.45, p=1.5e-06
cor=0.39, p=3.3e-05



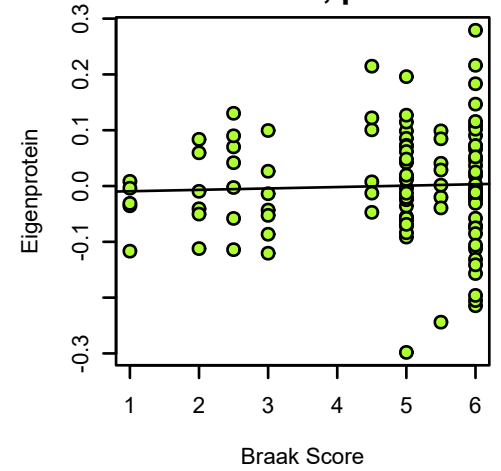
M11 greenyellow.Consensus



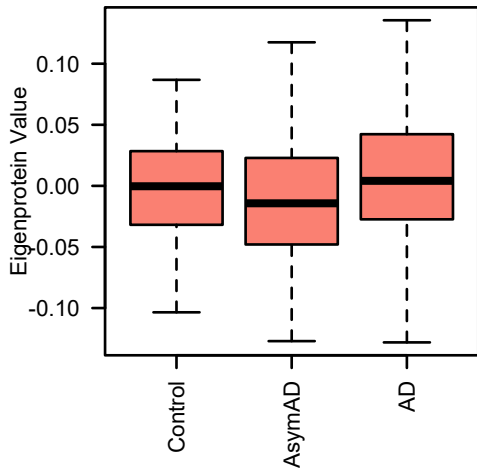
M11 greenyellow.MayoTC (Synthetic)
K-W ANOVA p: 0.51



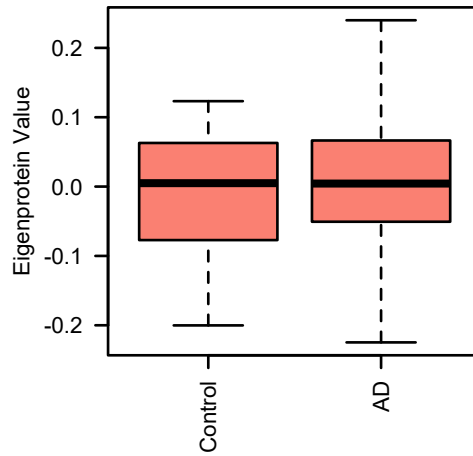
bicor=0.016, p=0.87
cor=0.039, p=0.69



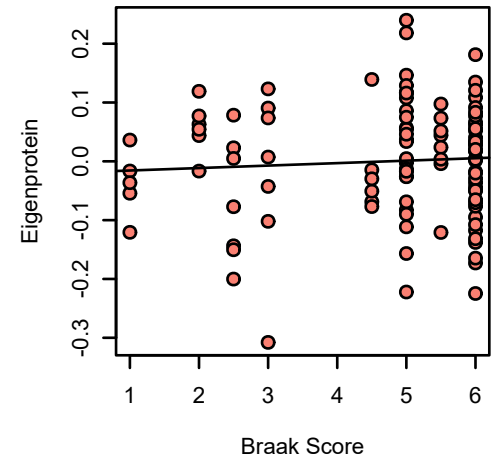
M13 salmon.Consensus



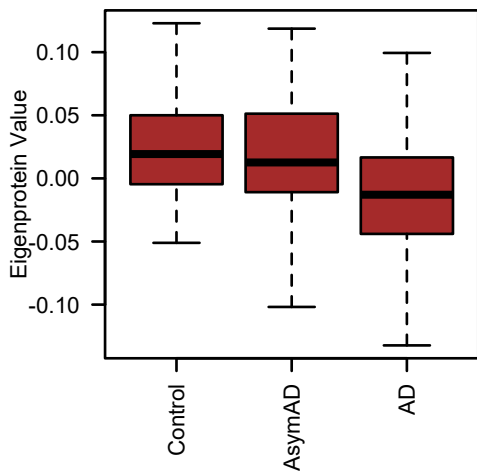
M13 salmon.MayoTC (Synthetic)
K-W ANOVA p: 0.27



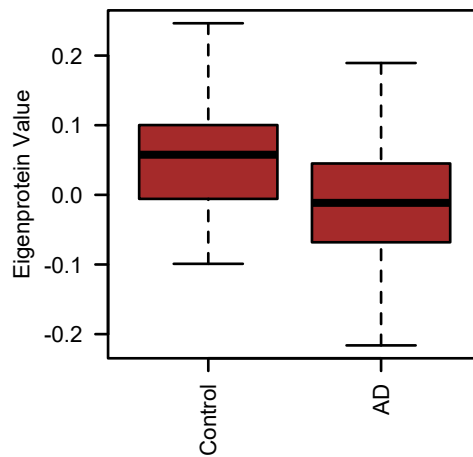
bicor=0.044, p=0.65
cor=0.065, p=0.51



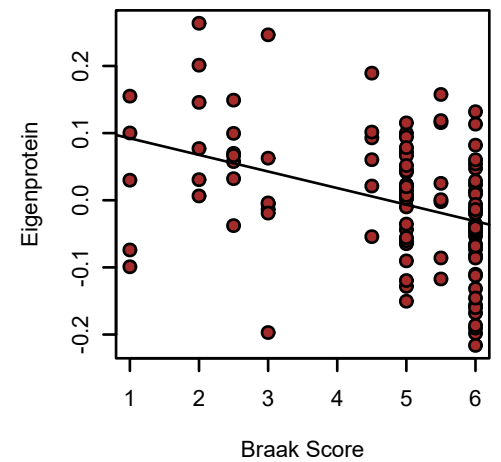
M3 brown.Consensus



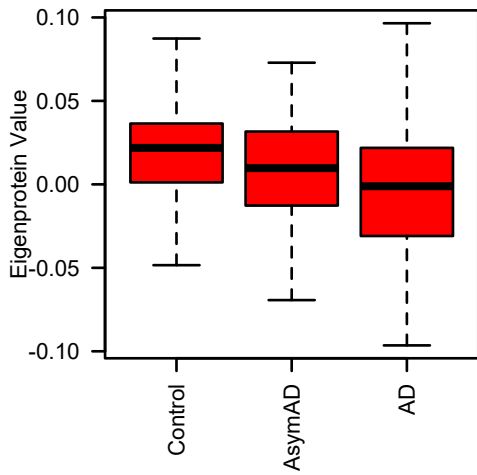
M3 brown.MayoTC (Synthetic)
K-W ANOVA p: 0.0013



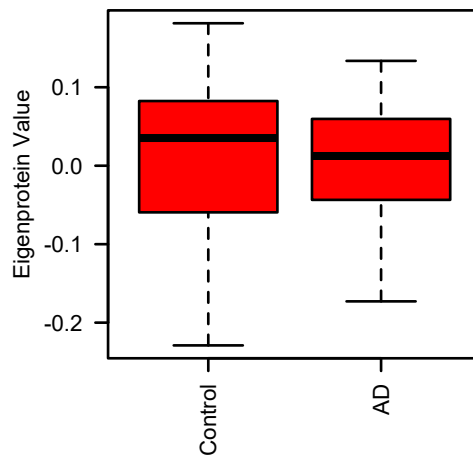
bicor=-0.39, p=3.4e-05
cor=-0.38, p=5.4e-05



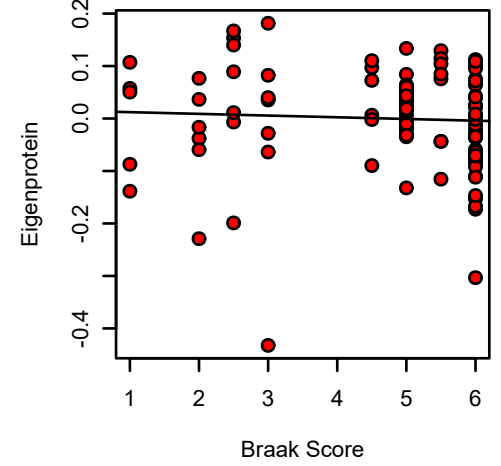
M6 red.Consensus



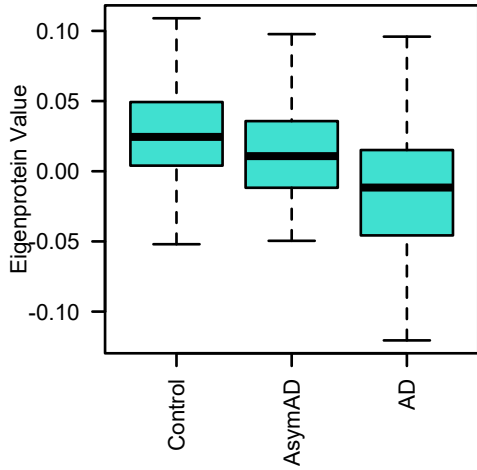
M6 red.MayoTC (Synthetic)
K-W ANOVA p: 0.87



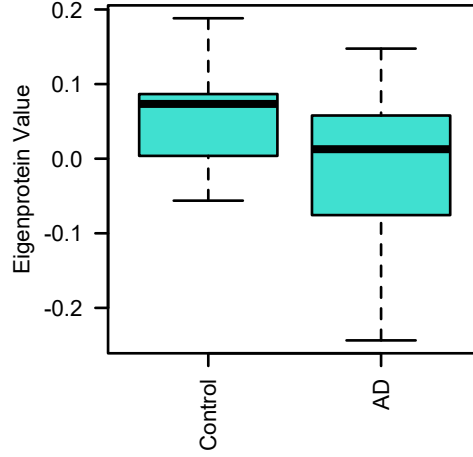
bicor=-0.13, p=0.17
cor=-0.05, p=0.61



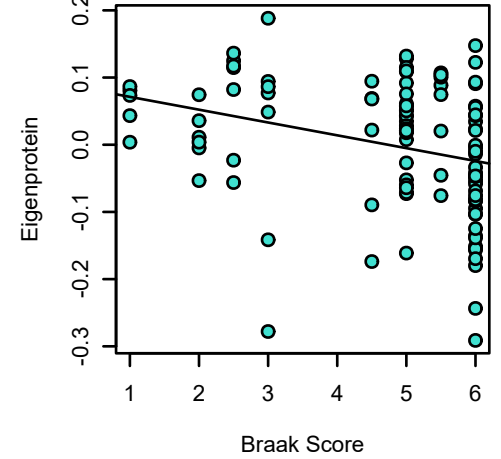
M1 turquoise.Consensus



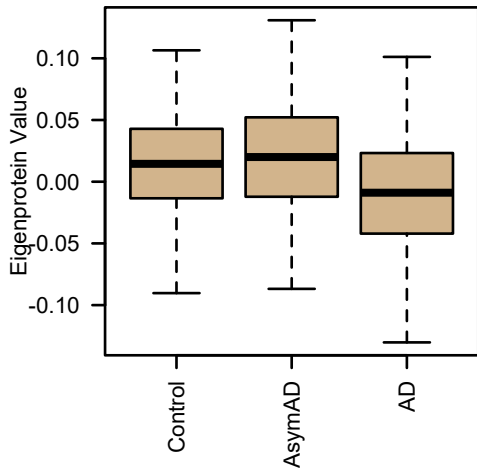
M1 turquoise.MayoTC (Synthetic)
K-W ANOVA p: 0.029



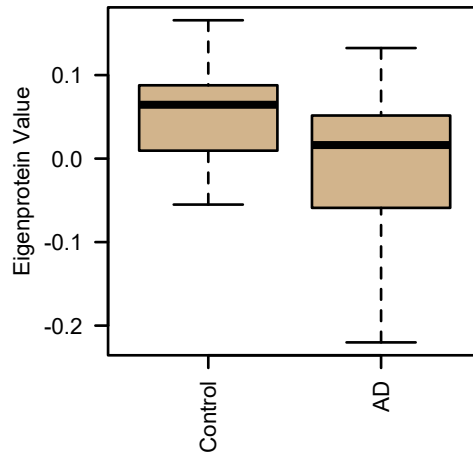
bicor=-0.3, p=0.0015
cor=-0.3, p=0.0017



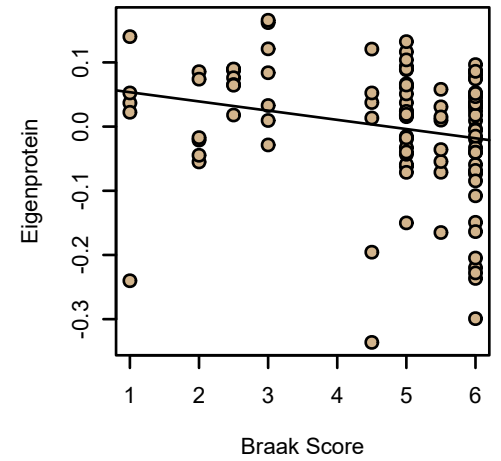
M12 tan.Consensus



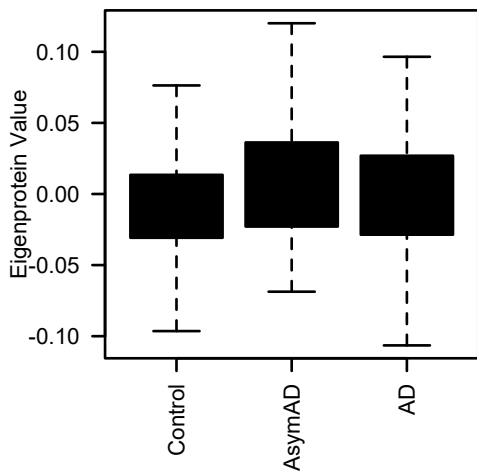
M12 tan.MayoTC (Synthetic)
K-W ANOVA p: 0.011



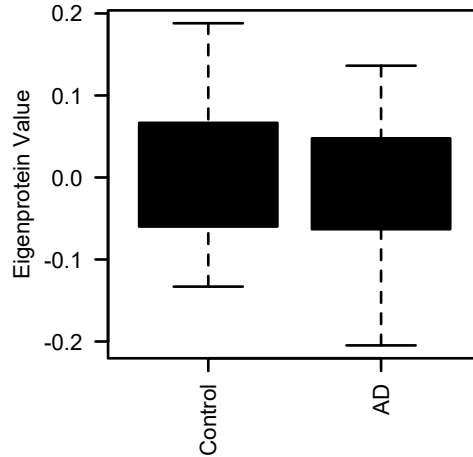
bicor=-0.27, p=0.0054
cor=-0.22, p=0.023



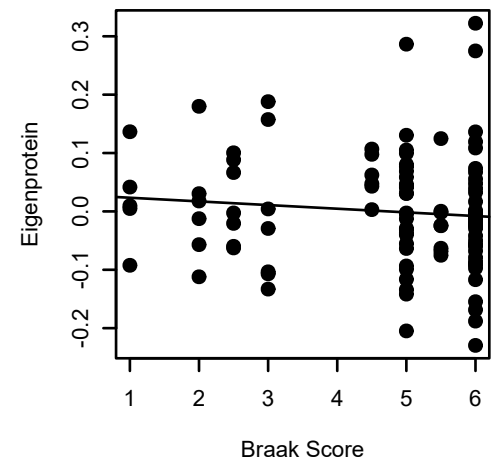
M7 black.Consensus



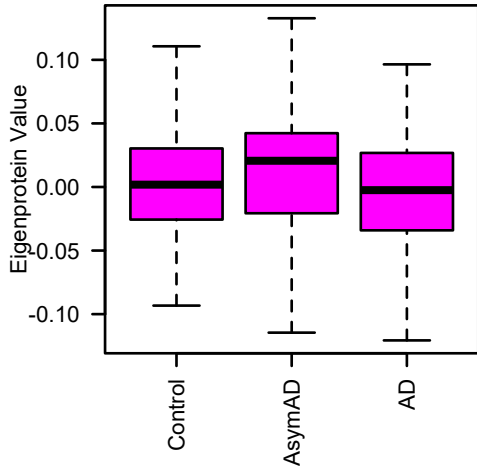
M7 black.MayoTC (Synthetic)
K-W ANOVA p: 0.58



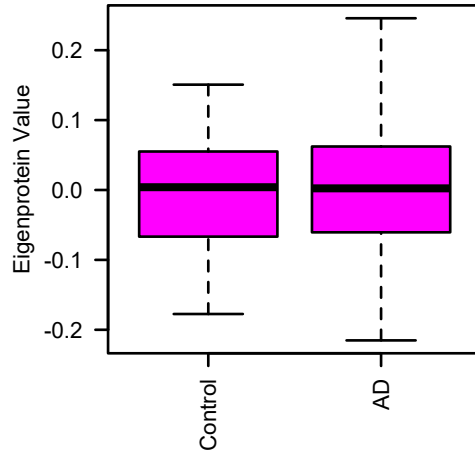
bicor=-0.13, p=0.18
cor=-0.097, p=0.32



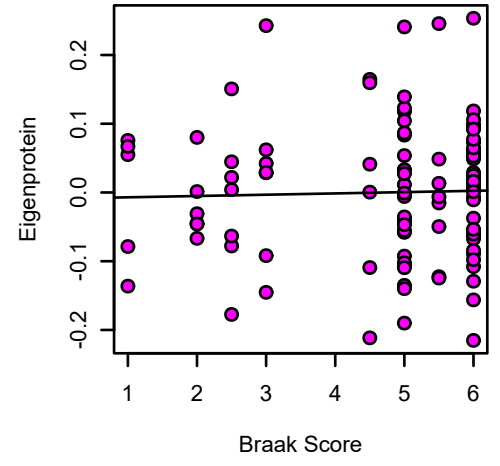
M9 magenta.Consensus



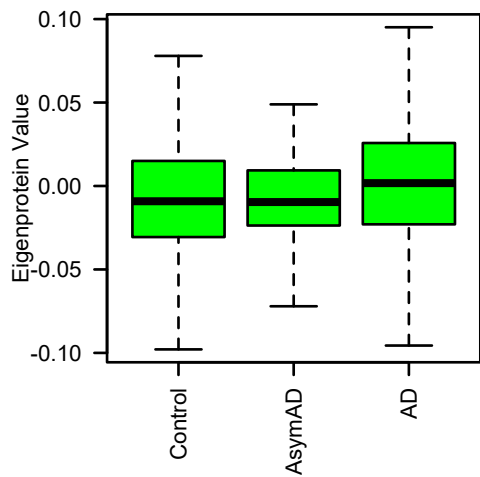
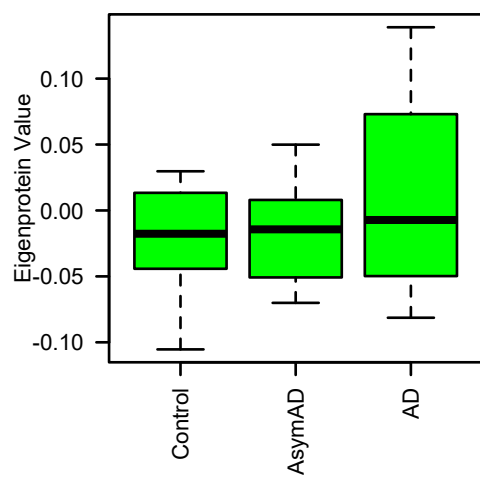
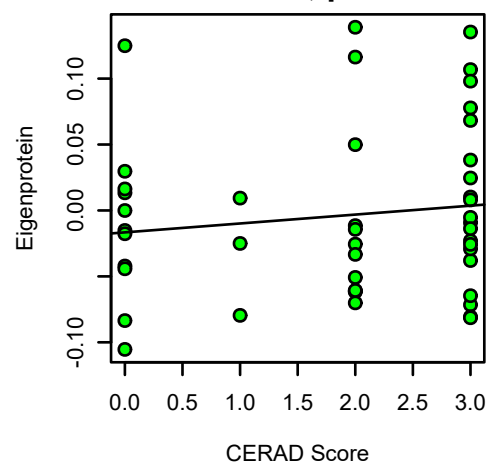
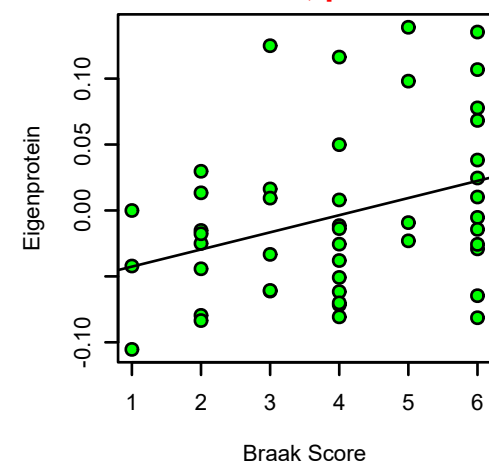
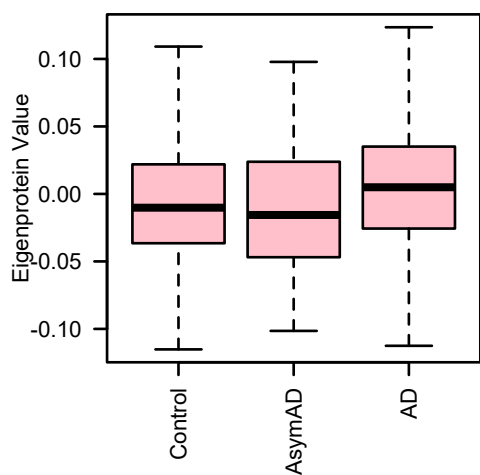
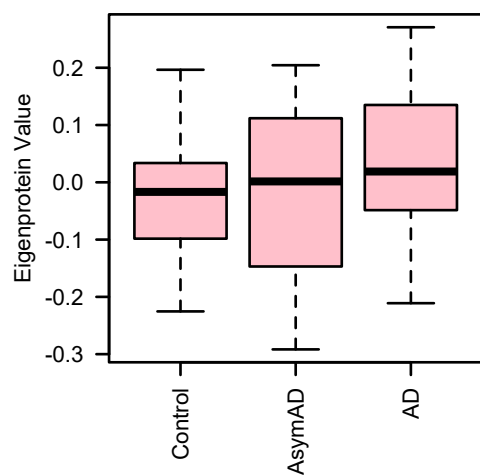
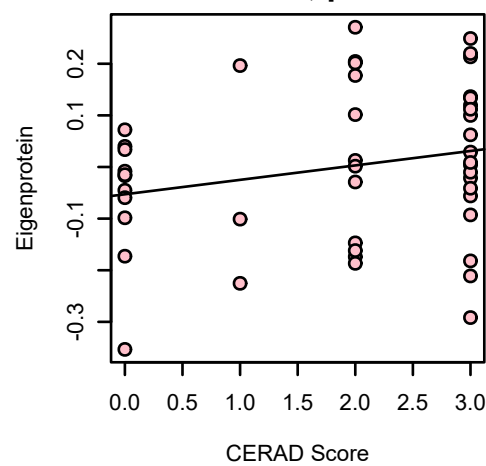
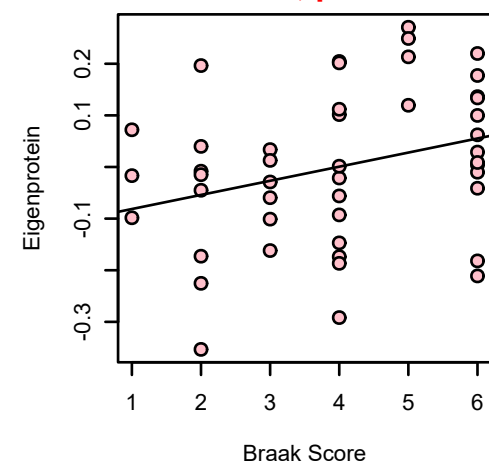
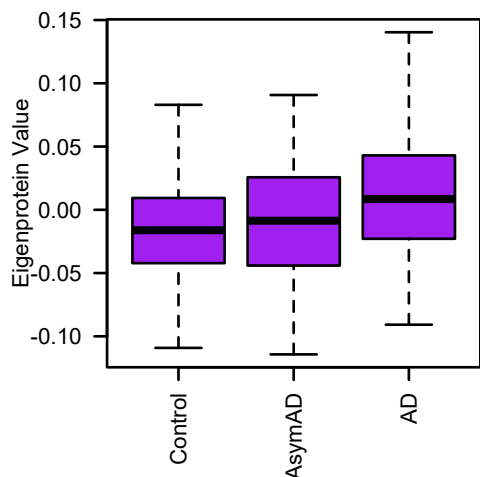
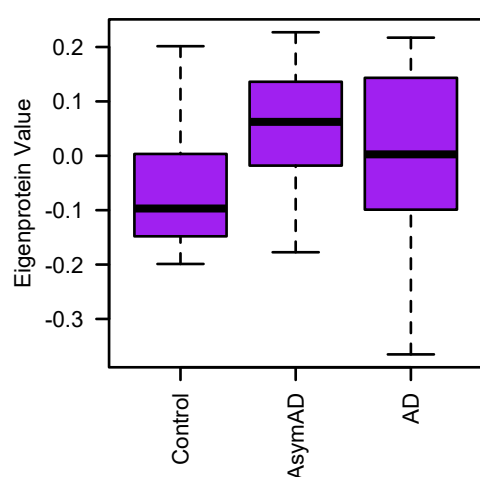
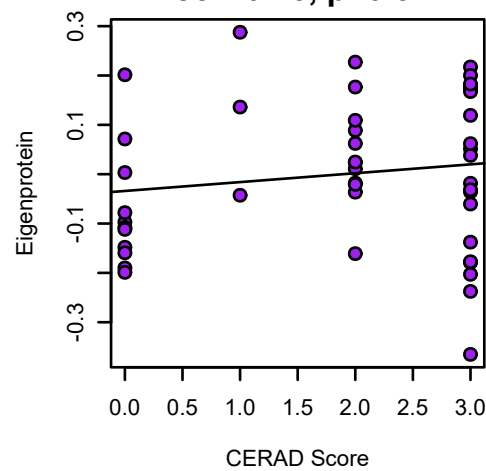
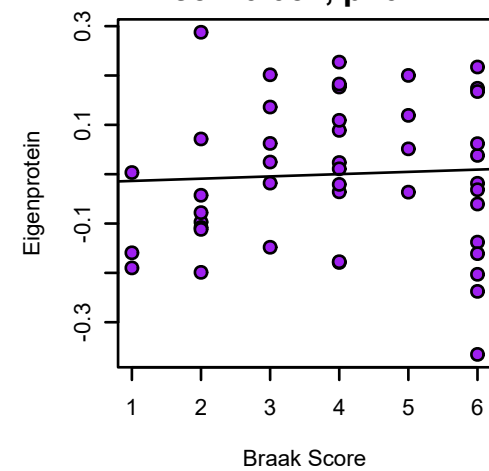
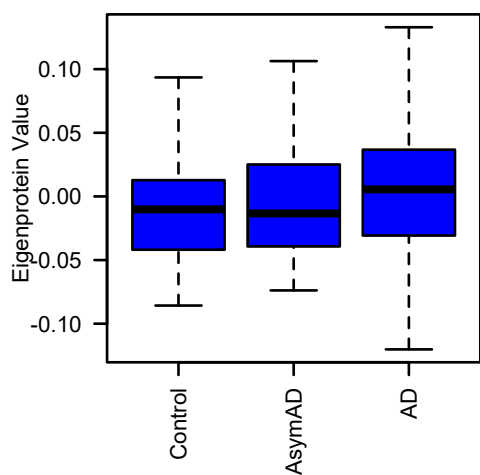
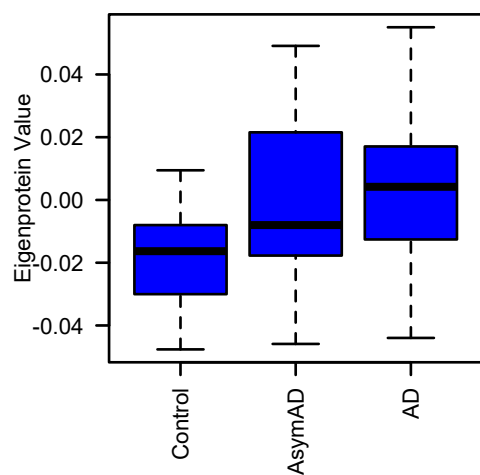
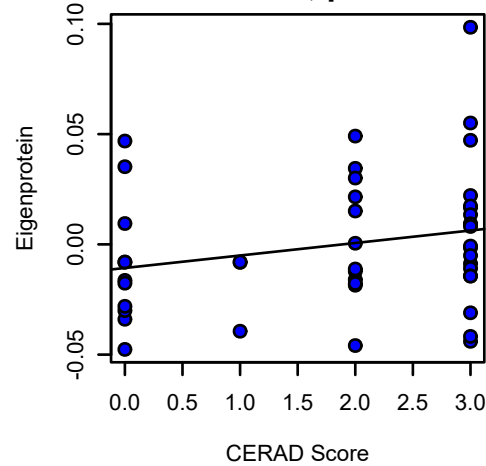
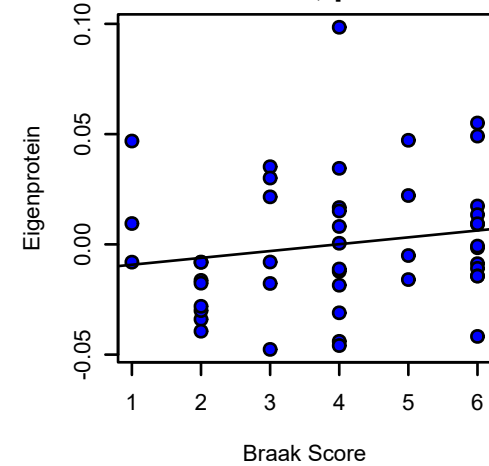
M9 magenta.MayoTC (Synthetic)
K-W ANOVA p: 0.9

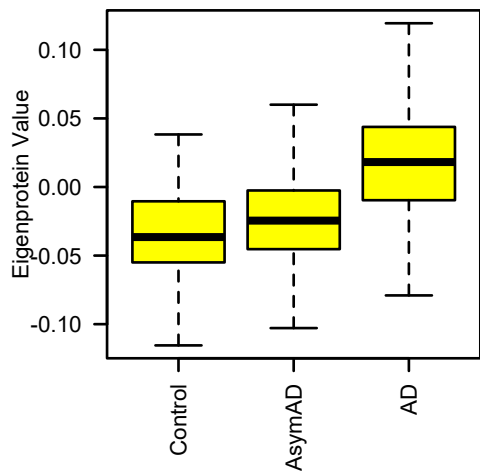
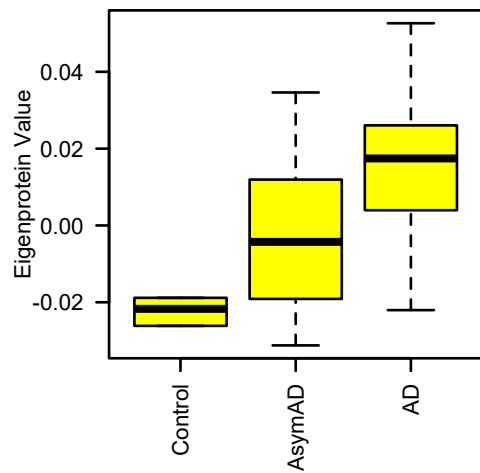
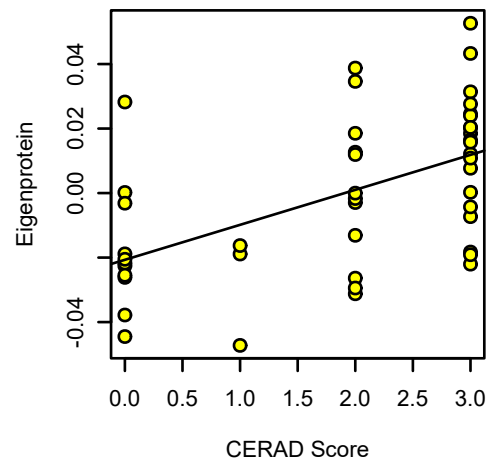
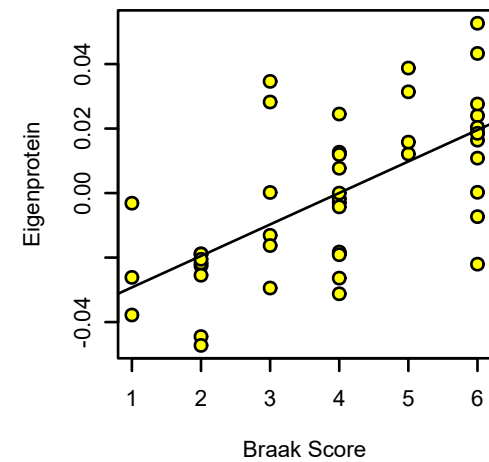
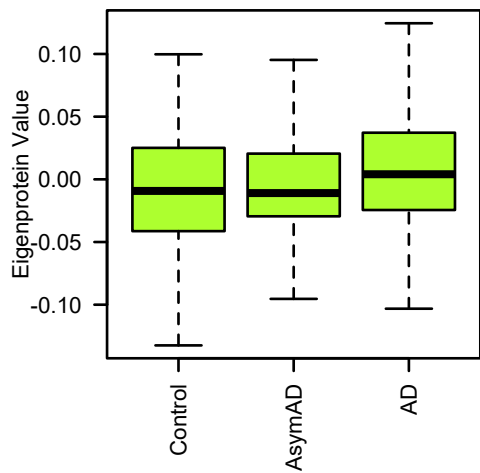
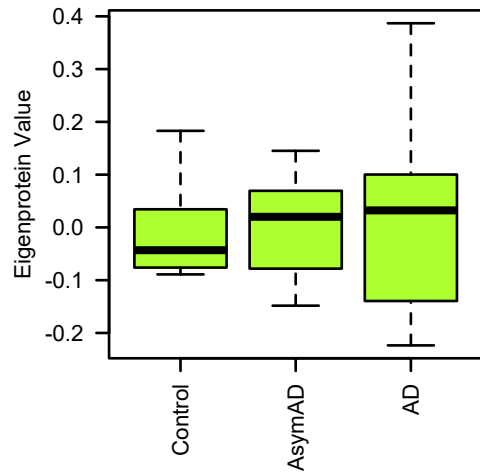
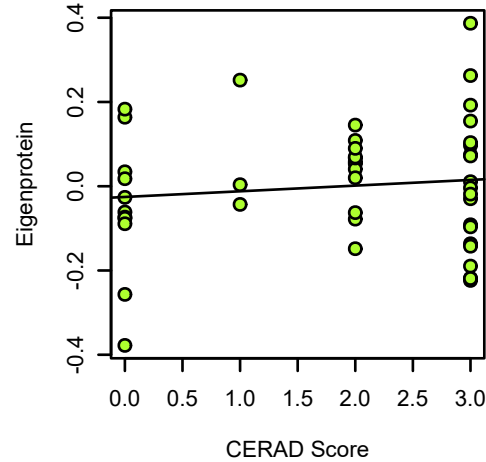
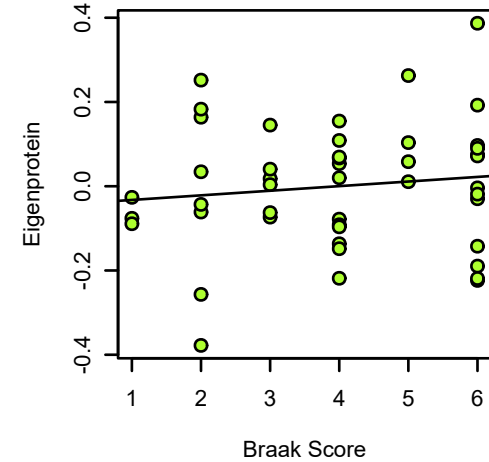
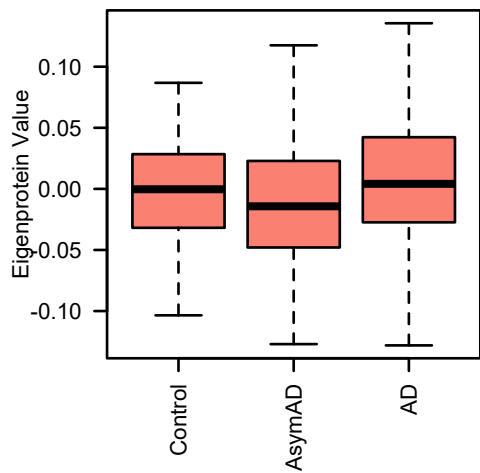
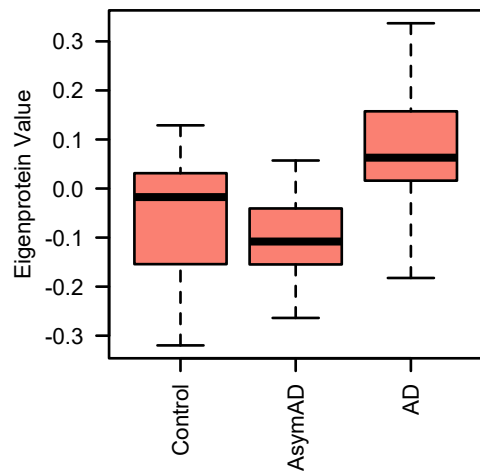
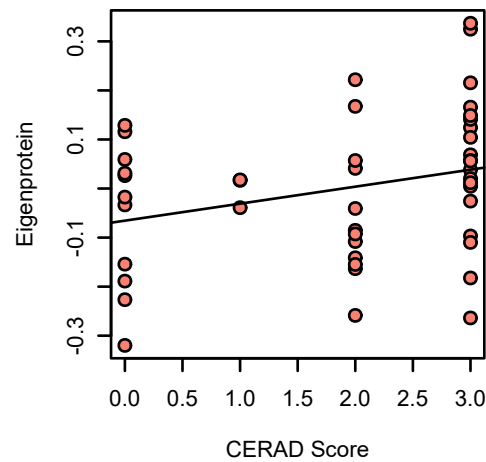
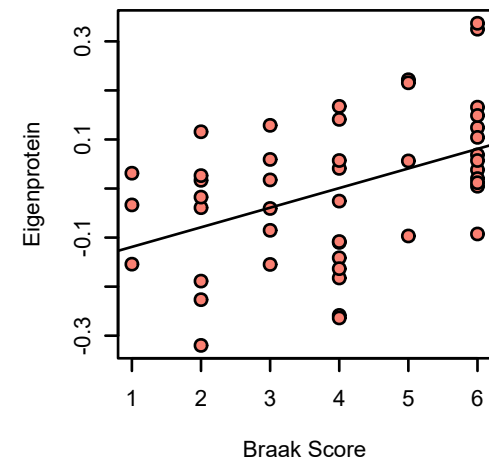
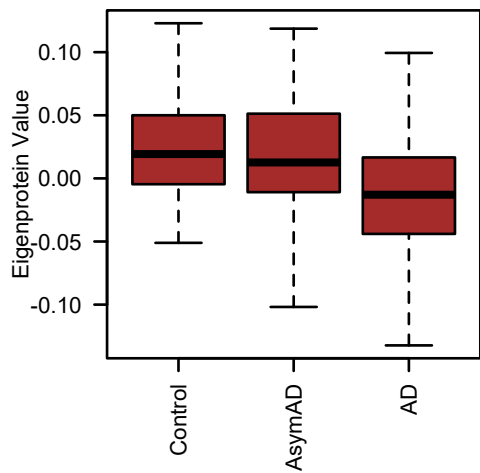
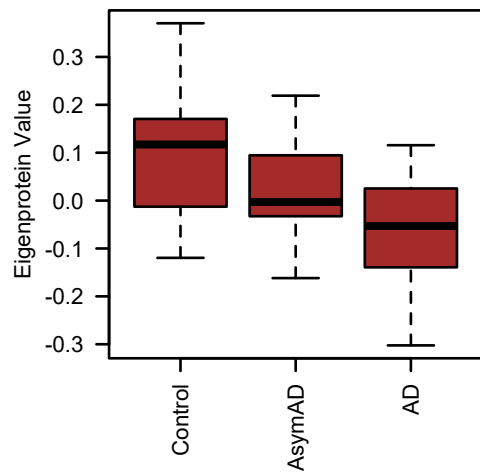
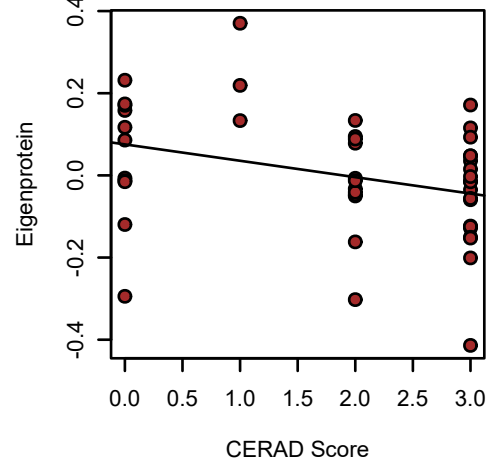
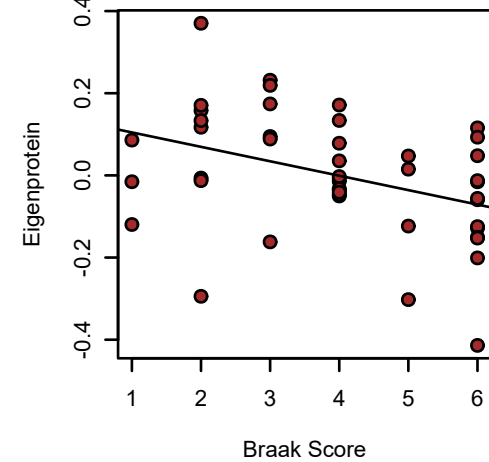


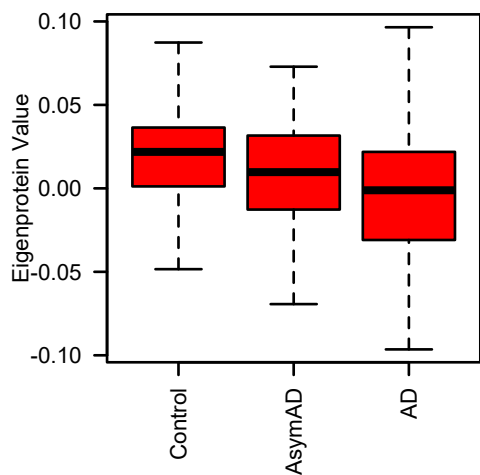
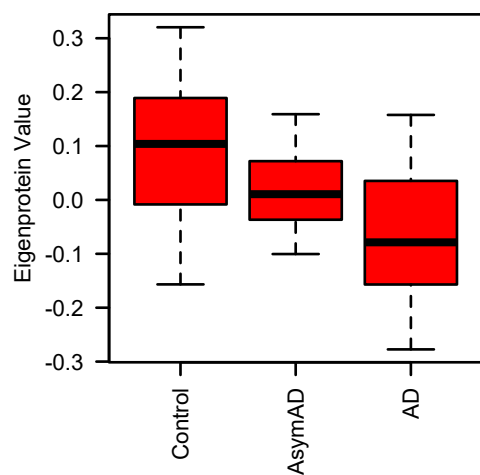
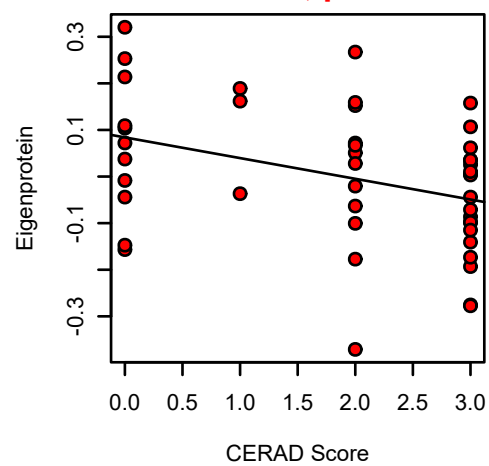
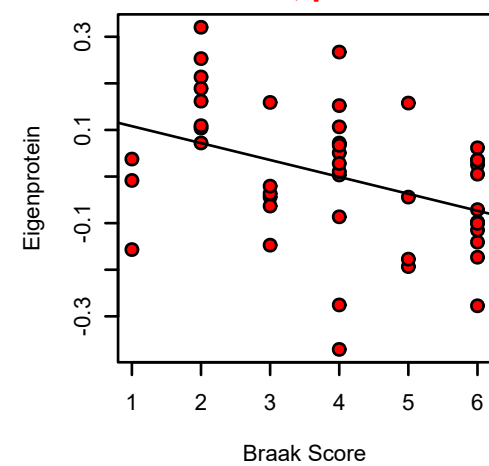
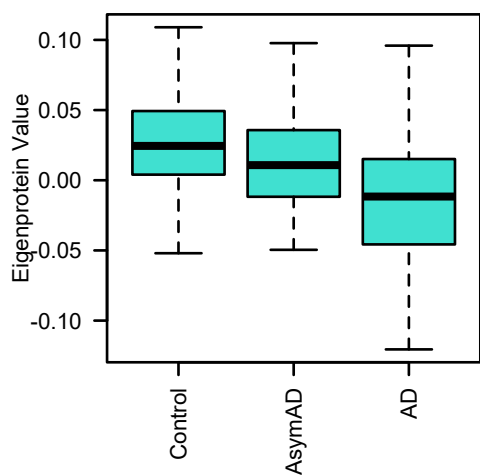
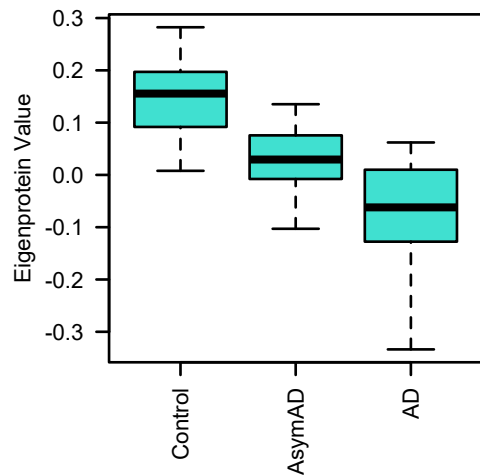
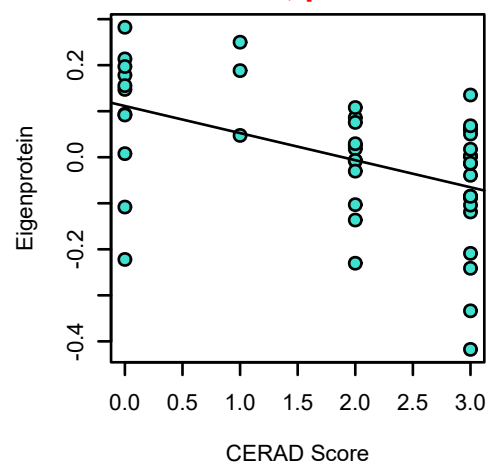
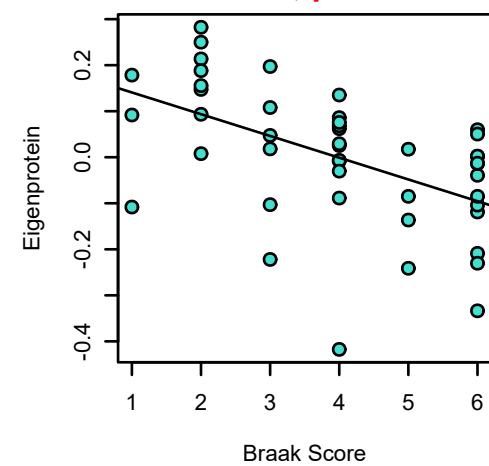
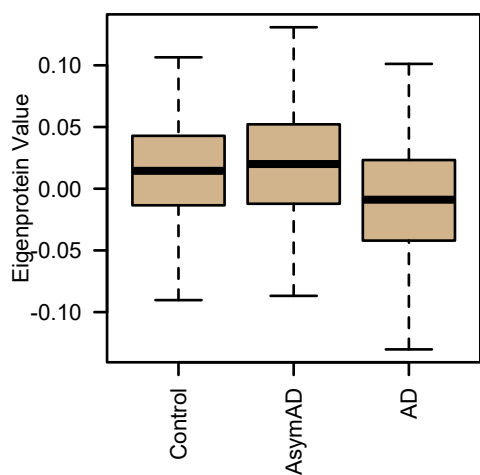
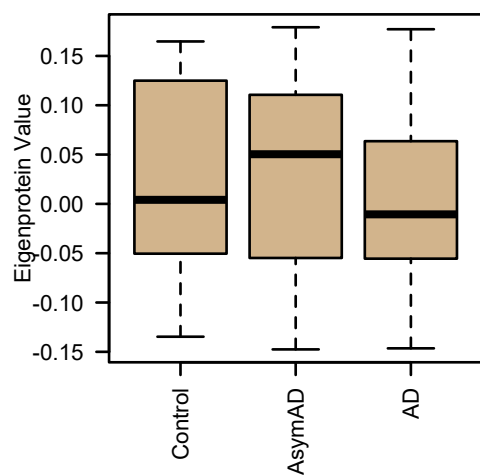
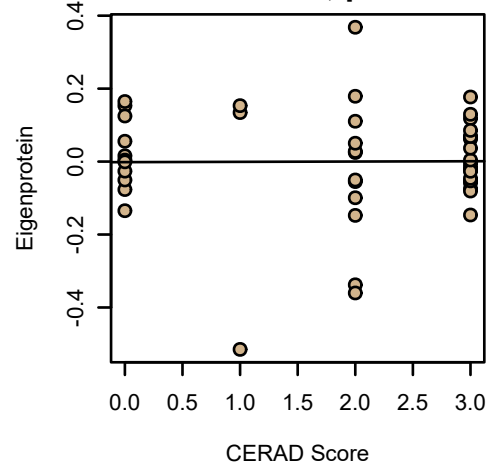
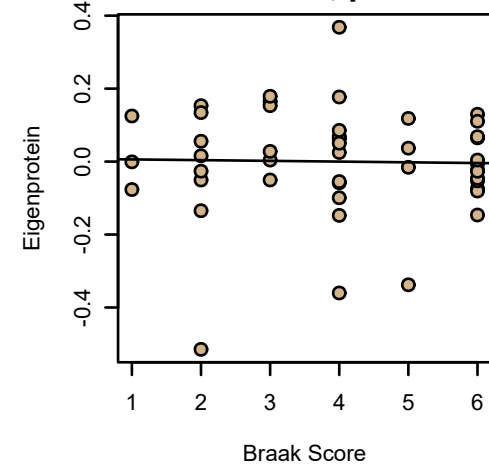
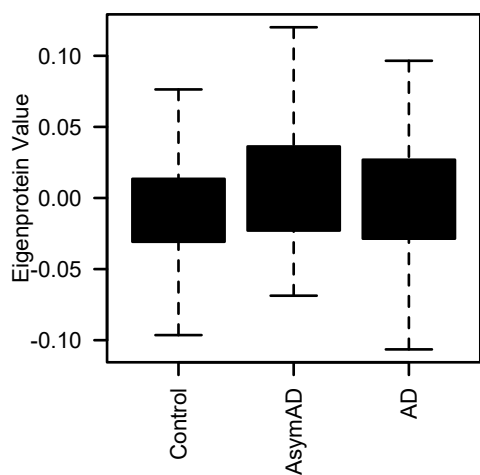
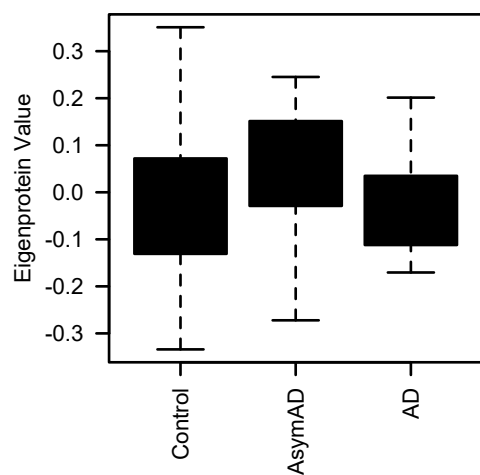
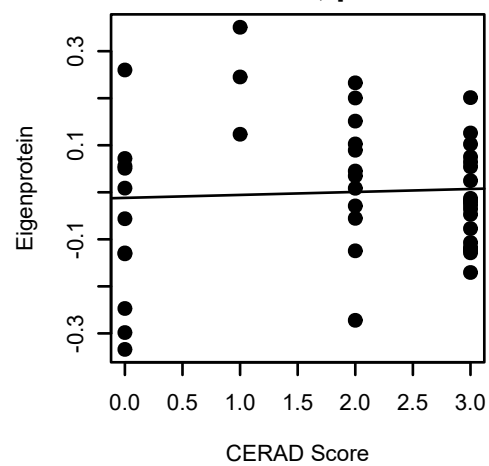
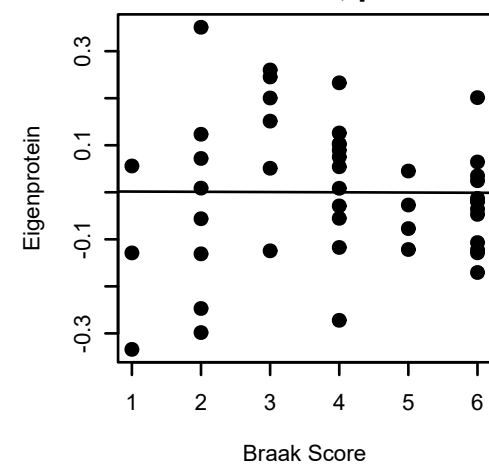
bicor=0.036, p=0.72
cor=0.029, p=0.77



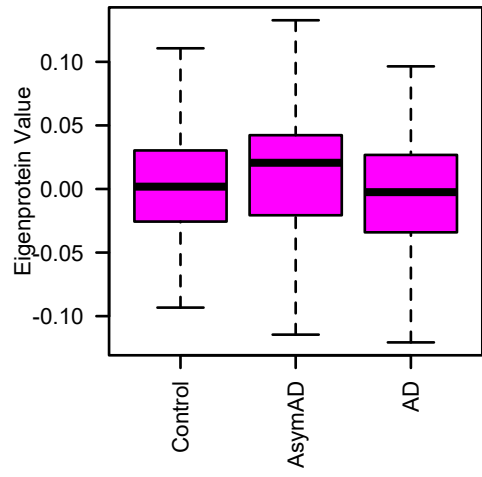
Supplementary Figure 7. AD Network Modules in Temporal Cortex. The top 20% of proteins by kME value in each AD brain protein network module was used to create a synthetic eigenprotein, which was then measured by case status in the Mayo cohort (temporal cortex) and correlated with Braak score ($n=107$ independent case samples after network connectivity outlier removal). The first boxplot for each module is the AD network eigenprotein by case status, given as reference for the second boxplot, which is the synthetic eigenprotein in the Mayo cohort (control, $n=25$; AD, $n=82$). Synthetic eigenprotein differences by case status in the Mayo cohort were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Correlations were performed using both Pearson correlation (*cor*) and biweight midcorrelation (*bicor*), which is more robust to outliers. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

M5 green.Consensus**M5 green.BLSApc (Synthetic)**
K-W ANOVA p: 0.41**bicor=0.12, p=0.42**
cor=0.13, p=0.39**bicor=0.33, p=0.023**
cor=0.34, p=0.021**M8 pink.Consensus****M8 pink.BLSApc (Synthetic)**
K-W ANOVA p: 0.25**bicor=0.22, p=0.14**
cor=0.23, p=0.12**bicor=0.3, p=0.04**
cor=0.3, p=0.043**M10 purple.Consensus****M10 purple.BLSApc (Synthetic)**
K-W ANOVA p: 0.28**bicor=0.15, p=0.31**
cor=0.15, p=0.32**bicor=0.067, p=0.66**
cor=0.051, p=0.74**M2 blue.Consensus****M2 blue.BLSApc (Synthetic)**
K-W ANOVA p: 0.23**bicor=0.2, p=0.18**
cor=0.23, p=0.12**bicor=0.19, p=0.21**
cor=0.17, p=0.26

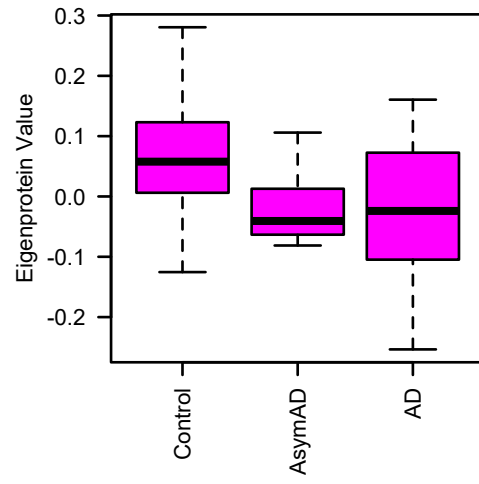
M4 yellow.Consensus**M4 yellow.BLSApc (Synthetic)**
K-W ANOVA p: 3.1e-05**bicor=0.54, p=9.8e-05**
cor=0.54, p=0.00011**bicor=0.66, p=6.8e-07**
cor=0.65, p=1e-06**M11 greenyellow.Consensus****M11 greenyellow.BLSApc (Synthetic)**
K-W ANOVA p: 0.74**bicor=0.069, p=0.65**
cor=0.11, p=0.47**bicor=0.093, p=0.54**
cor=0.12, p=0.43**M13 salmon.Consensus****M13 salmon.BLSApc (Synthetic)**
K-W ANOVA p: 6e-04**bicor=0.28, p=0.058**
cor=0.28, p=0.059**bicor=0.44, p=0.0024**
cor=0.44, p=0.0022**M3 brown.Consensus****M3 brown.BLSApc (Synthetic)**
K-W ANOVA p: 0.0078**bicor=-0.34, p=0.019**
cor=-0.33, p=0.025**bicor=-0.39, p=0.0072**
cor=-0.39, p=0.0074

M6 red.Consensus**M6 red.BLSApc (Synthetic)**
K-W ANOVA p: 0.015**bicor=-0.36, p=0.013**
cor=-0.36, p=0.014**bicor=-0.42, p=0.0041**
cor=-0.4, p=0.0059**M1 turquoise.Consensus****M1 turquoise.BLSApc (Synthetic)**
K-W ANOVA p: 0.00036**bicor=-0.49, p=0.00056**
cor=-0.48, p=0.00074**bicor=-0.55, p=6.4e-05**
cor=-0.52, p=0.00021**M12 tan.Consensus****M12 tan.BLSApc (Synthetic)**
K-W ANOVA p: 0.77**bicor=-0.073, p=0.63**
cor=0.0067, p=0.96**bicor=-0.14, p=0.34**
cor=-0.022, p=0.88**M7 black.Consensus****M7 black.BLSApc (Synthetic)**
K-W ANOVA p: 0.26**bicor=0.027, p=0.86**
cor=0.051, p=0.74**bicor=-0.025, p=0.87**
cor=-0.0056, p=0.97

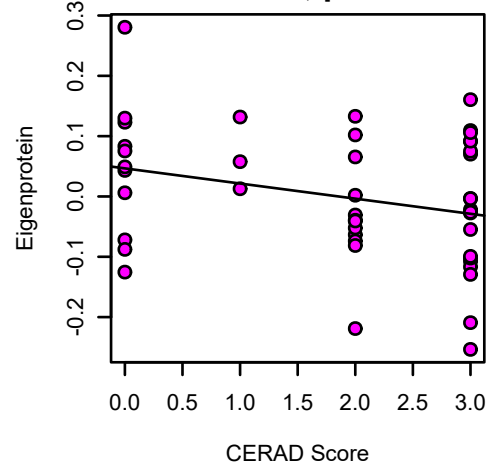
M9 magenta.Consensus



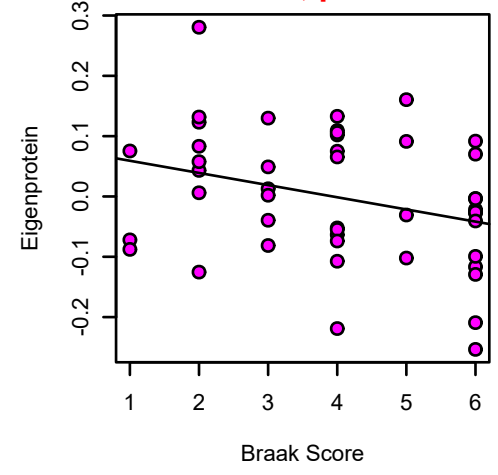
M9 magenta.BLSApc (Synthetic)
K-W ANOVA p: 0.1



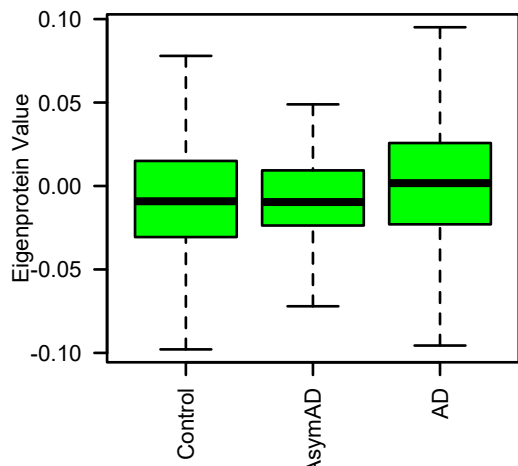
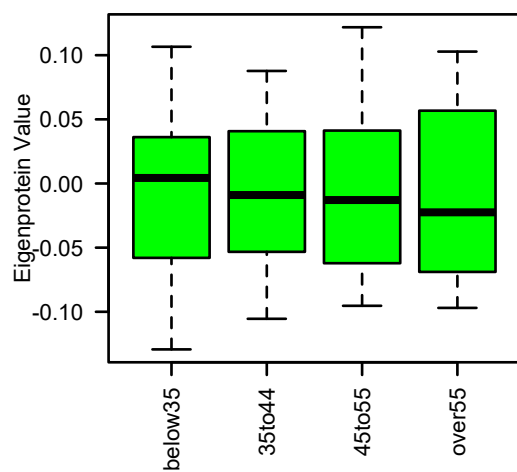
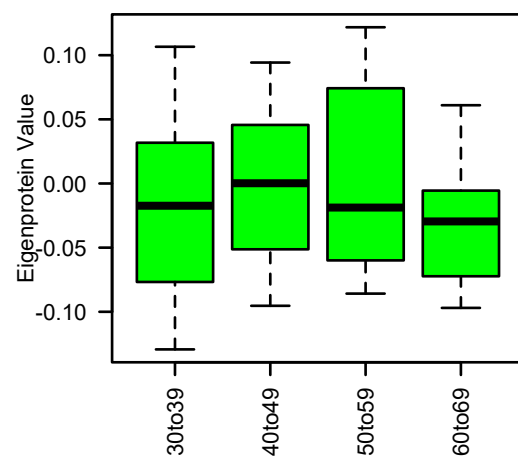
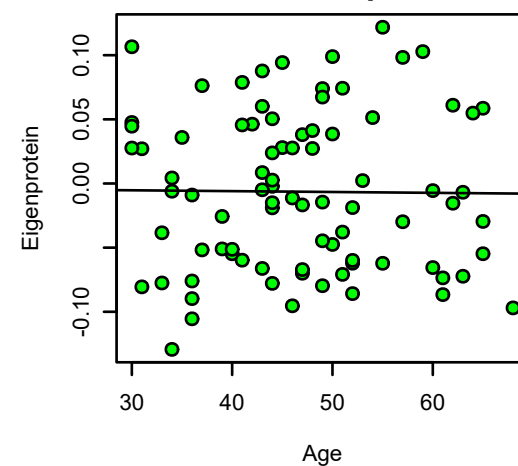
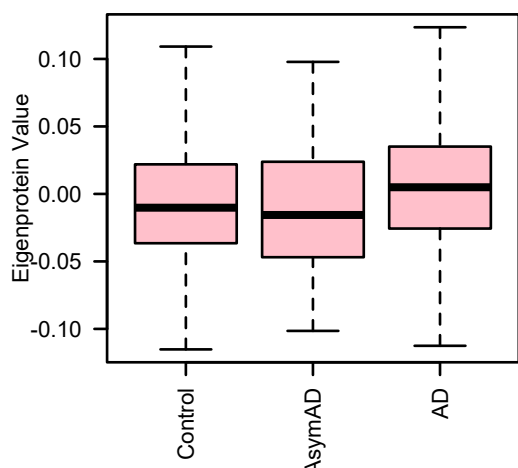
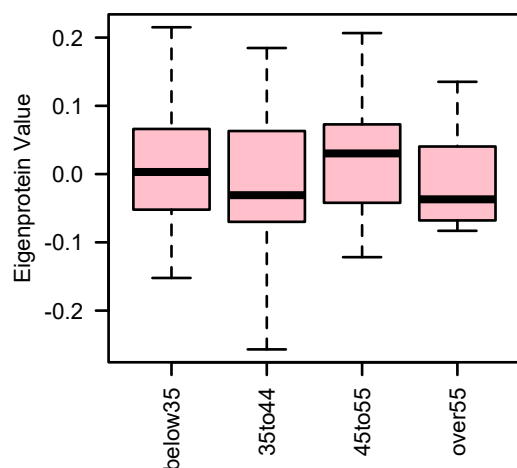
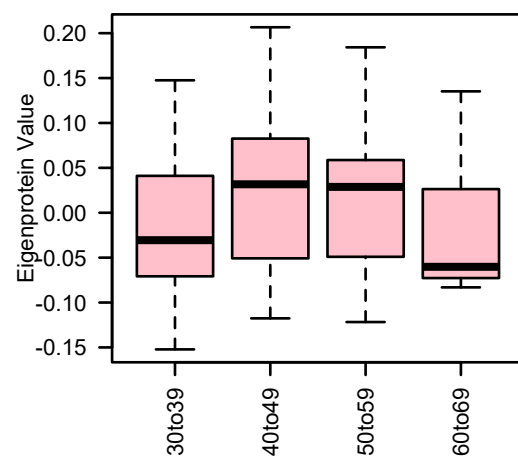
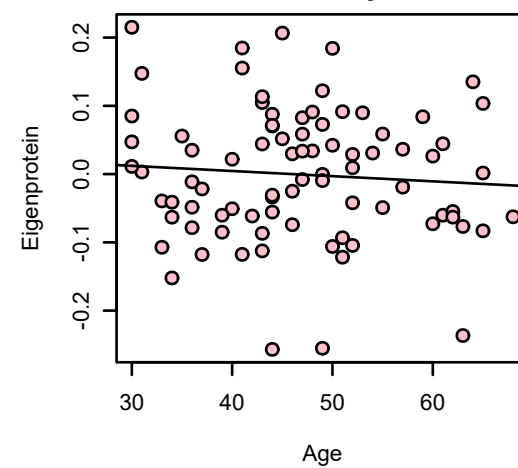
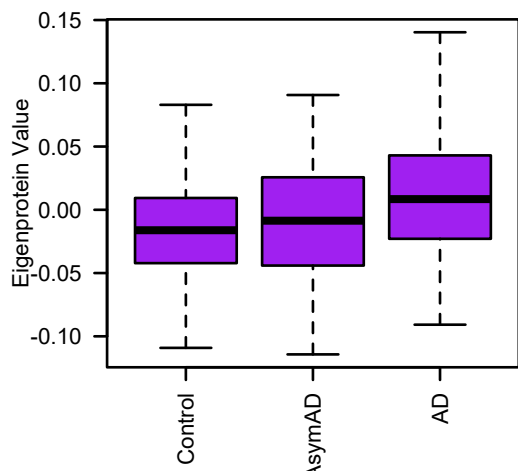
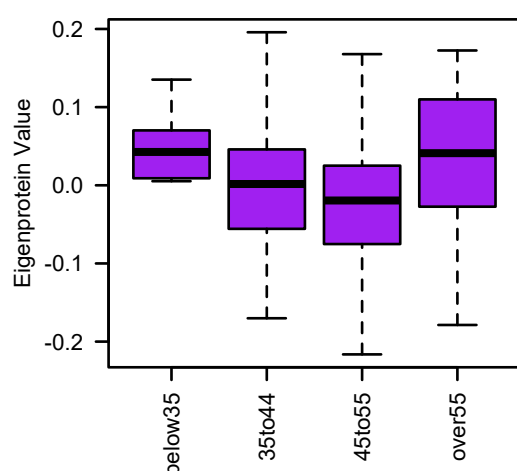
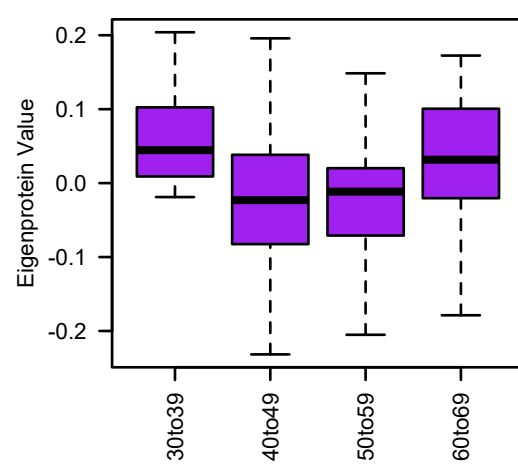
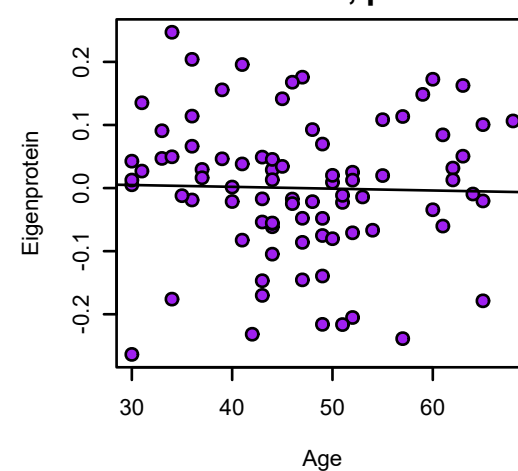
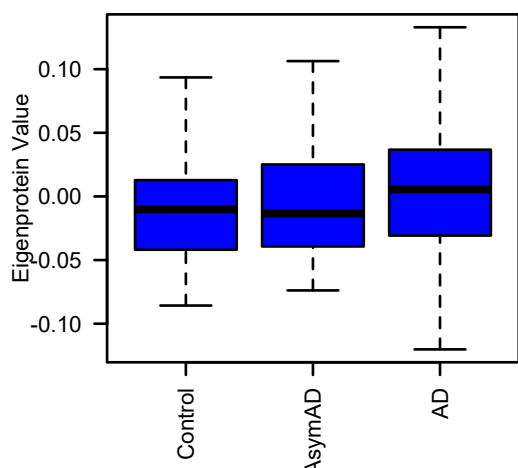
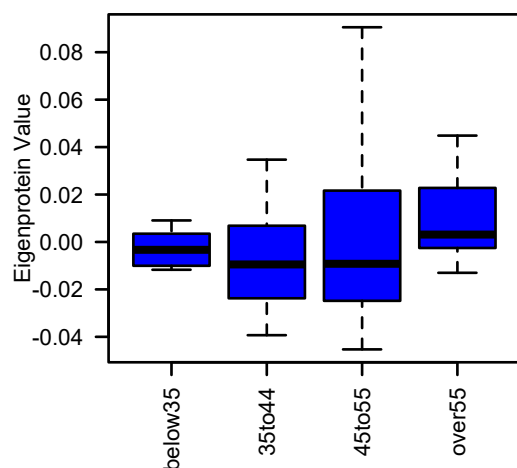
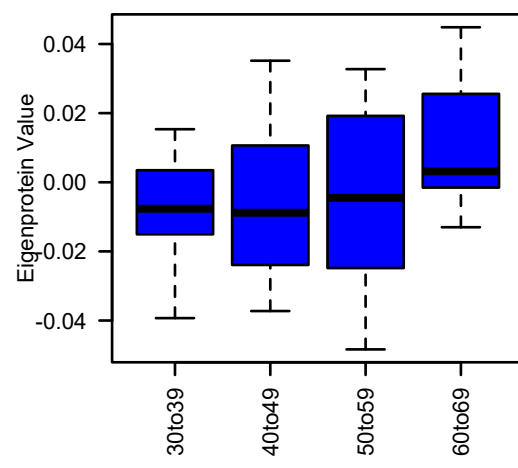
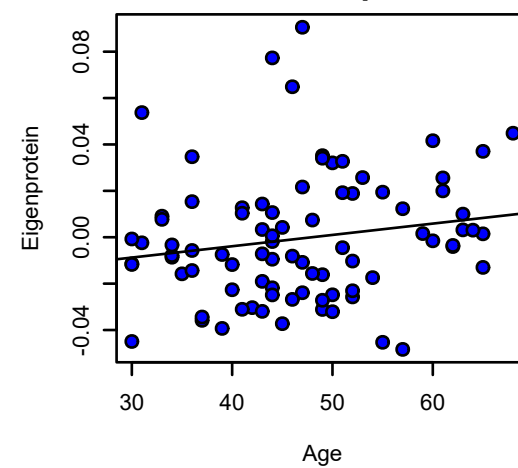
bicor=-0.27, p=0.072
cor=-0.28, p=0.059



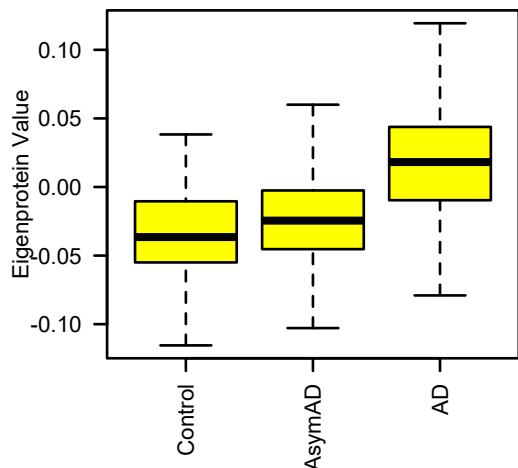
bicor=-0.29, p=0.047
cor=-0.3, p=0.043



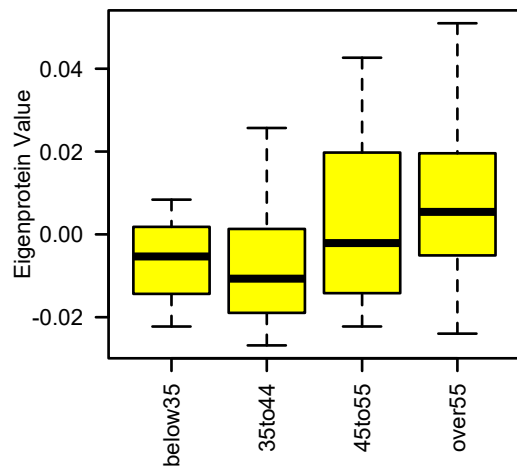
Supplementary Figure 8. AD Network Modules in Precuneus. The top 20% of proteins by kME value in each AD brain protein network module was used to create a synthetic eigenprotein, which was then measured by case status in the BLSA cohort (precuneus) and correlated with CERAD and Braak scores ($n=46$ independent case samples). The first boxplot for each module is the AD network eigenprotein by case status, given as reference for the second boxplot, which is the synthetic eigenprotein in the BLSA precuneus cohort (control, $n=13$; AsymAD, $n=13$; AD, $n=20$). Synthetic eigenprotein differences by case status in the BLSA precuneus cohort were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

M5 green.Consensus**M5 green.Aging (Synthetic)
K-W ANOVA p: 0.97****M5 green.Aging (Synthetic)
K-W ANOVA p: 0.33****bicor=8e-04, p=0.99
cor=-0.011, p=0.92****M8 pink.Consensus****M8 pink.Aging (Synthetic)
K-W ANOVA p: 0.65****M8 pink.Aging (Synthetic)
K-W ANOVA p: 0.51****bicor=-0.047, p=0.67
cor=-0.078, p=0.48****M10 purple.Consensus****M10 purple.Aging (Synthetic)
K-W ANOVA p: 0.49****M10 purple.Aging (Synthetic)
K-W ANOVA p: 0.091****bicor=-0.049, p=0.66
cor=-0.026, p=0.81****M2 blue.Consensus****M2 blue.Aging (Synthetic)
K-W ANOVA p: 0.37****M2 blue.Aging (Synthetic)
K-W ANOVA p: 0.24****bicor=0.21, p=0.06
cor=0.18, p=0.1**

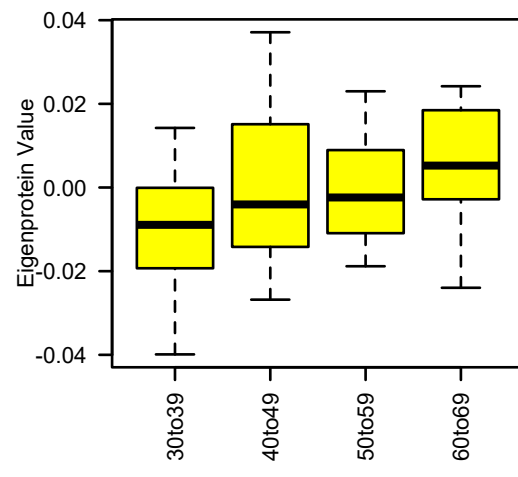
M4 yellow.Consensus



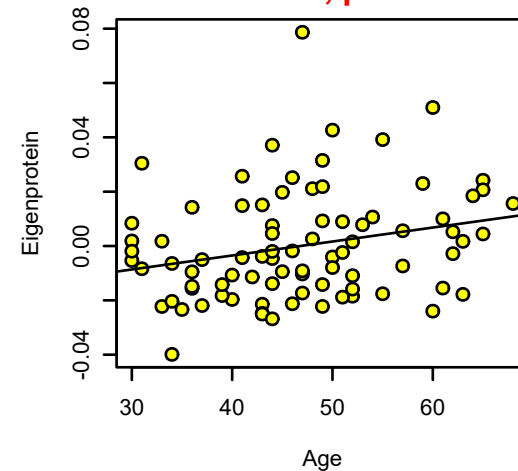
M4 yellow.Aging (Synthetic)
K-W ANOVA p: 0.083



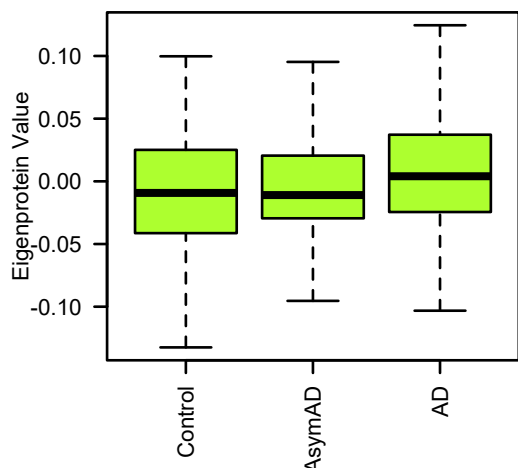
M4 yellow.Aging (Synthetic)
K-W ANOVA p: 0.14



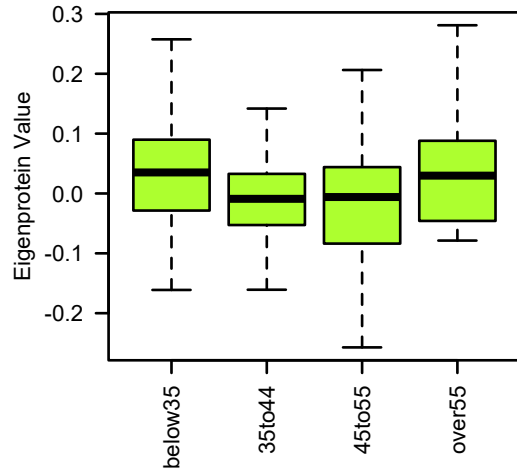
bicor=0.28, p=0.01
cor=0.25, p=0.022



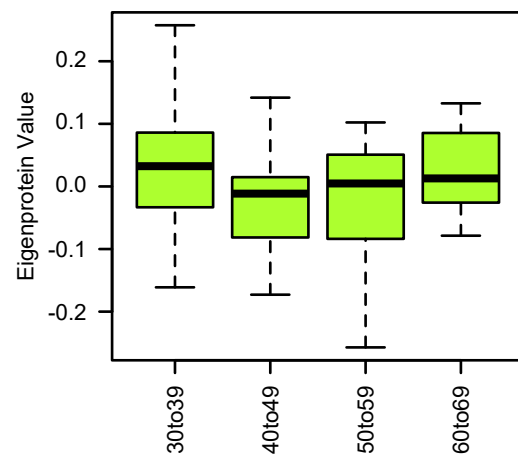
M11 greenyellow.Consensus



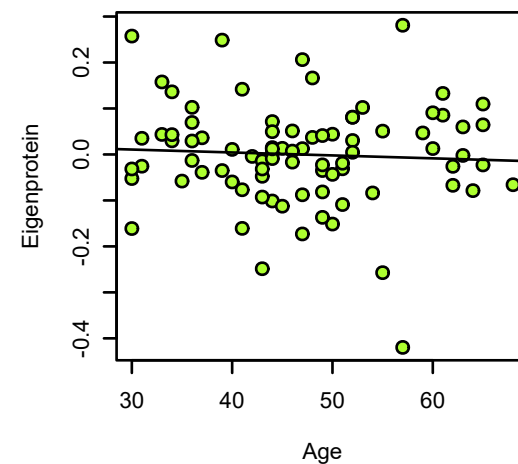
M11 greenyellow.Aging (Synthetic)
K-W ANOVA p: 0.53



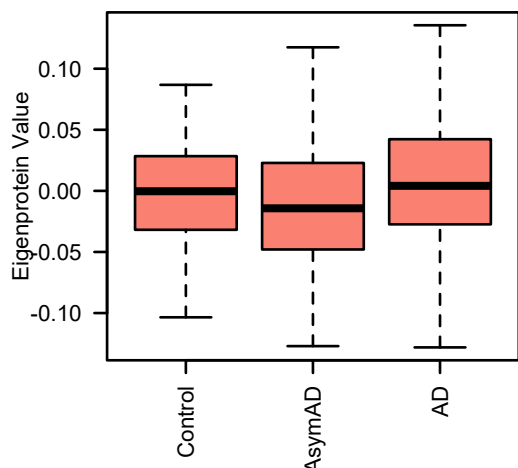
M11 greenyellow.Aging (Synthetic)
K-W ANOVA p: 0.18



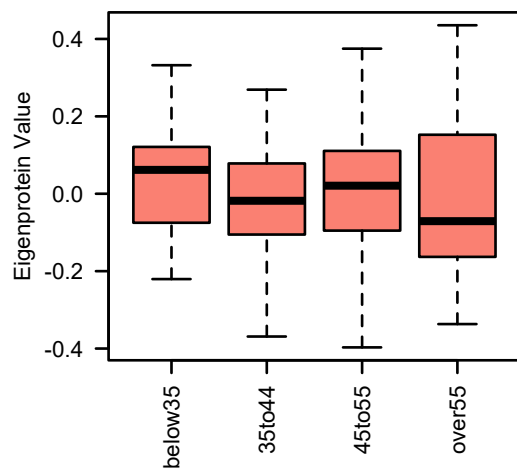
bicor=0.0075, p=0.95
cor=-0.057, p=0.61



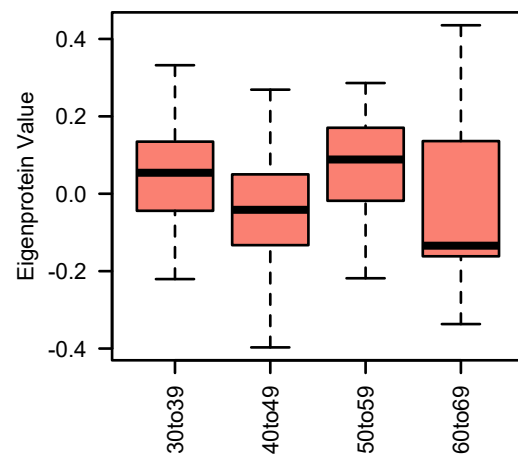
M13 salmon.Consensus



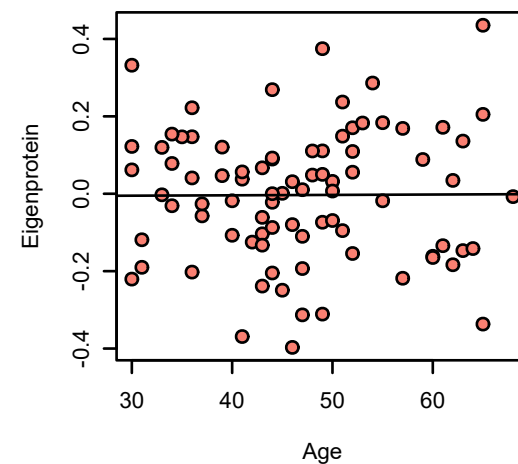
M13 salmon.Aging (Synthetic)
K-W ANOVA p: 0.89



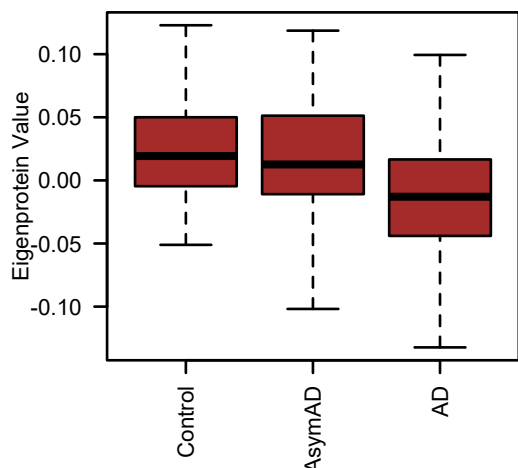
M13 salmon.Aging (Synthetic)
K-W ANOVA p: 0.065



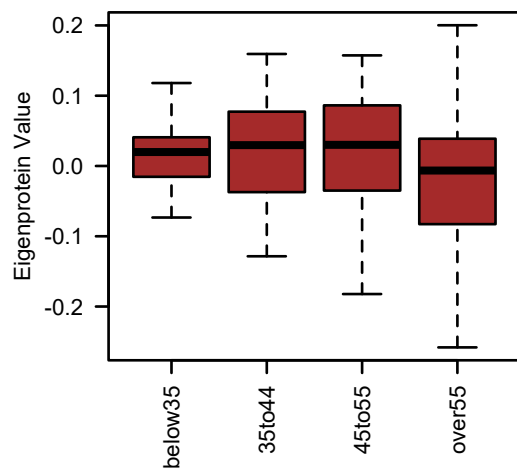
bicor=-0.002, p=0.99
cor=0.0057, p=0.96



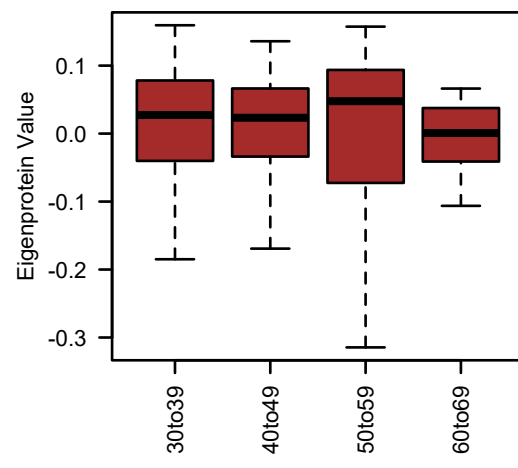
M3 brown.Consensus



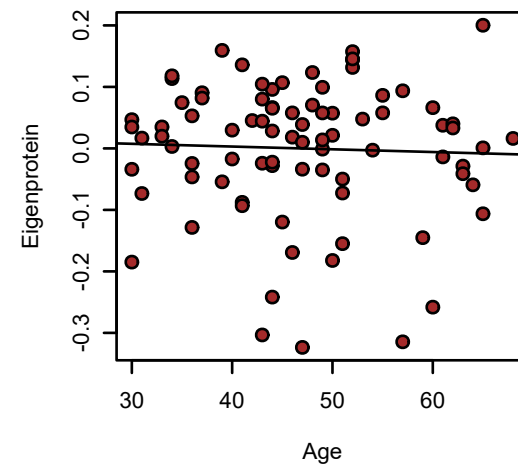
M3 brown.Aging (Synthetic)
K-W ANOVA p: 0.68



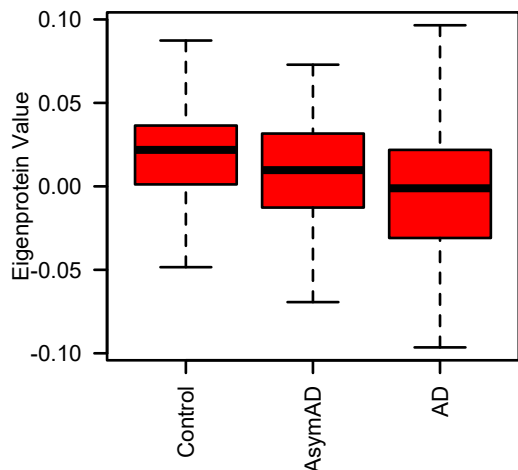
M3 brown.Aging (Synthetic)
K-W ANOVA p: 0.91



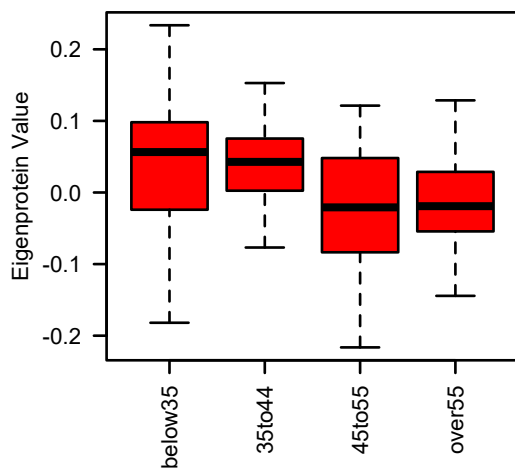
bicor=-0.028, p=0.8
cor=-0.04, p=0.72



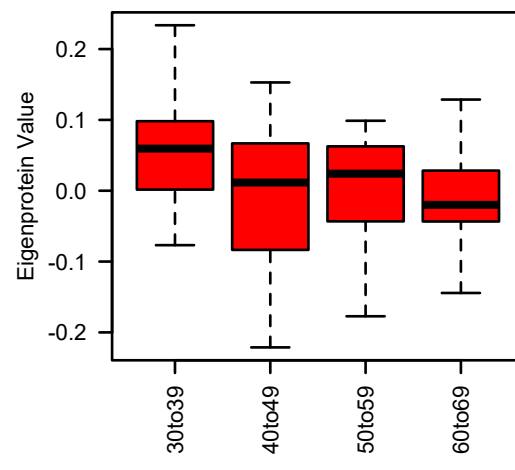
M6 red.Consensus



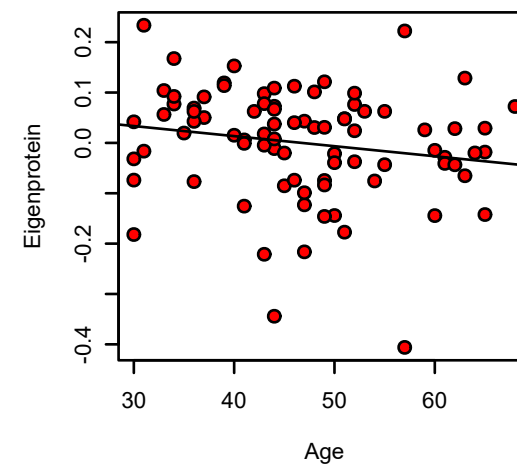
M6 red.Aging (Synthetic)
K-W ANOVA p: 0.24



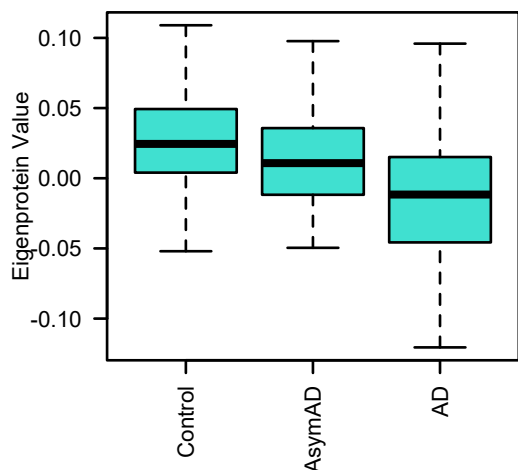
M6 red.Aging (Synthetic)
K-W ANOVA p: 0.17



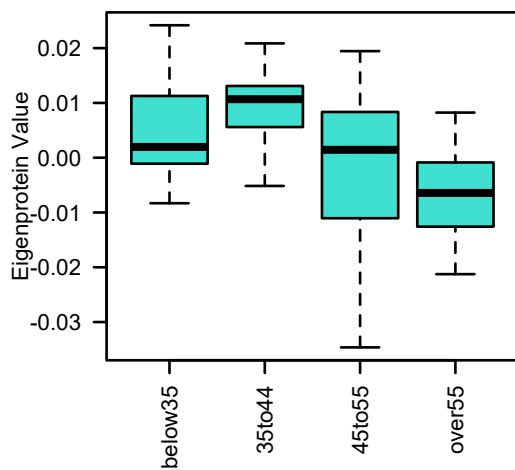
bicor=-0.21, p=0.055
cor=-0.18, p=0.1



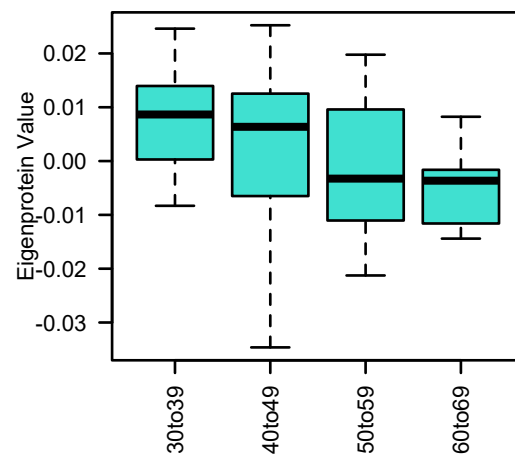
M1 turquoise.Consensus



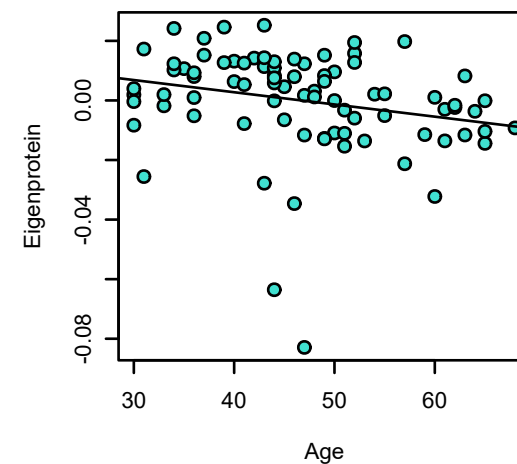
M1 turquoise.Aging (Synthetic)
K-W ANOVA p: 0.074



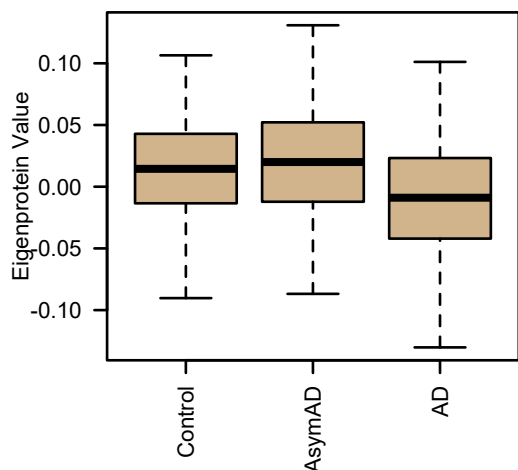
M1 turquoise.Aging (Synthetic)
K-W ANOVA p: 0.15



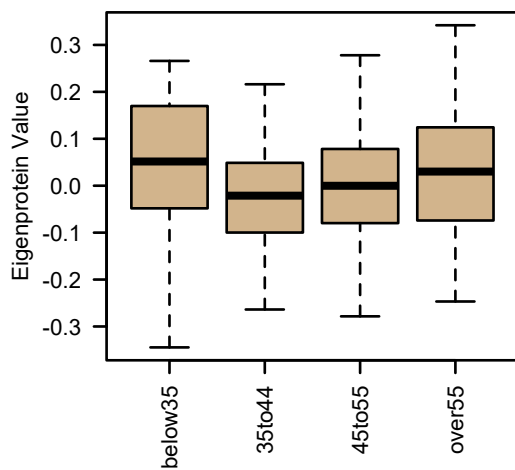
bicor=-0.35, p=0.001
cor=-0.23, p=0.035



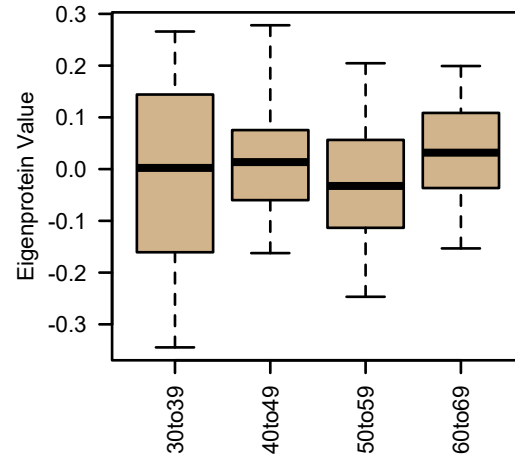
M12 tan.Consensus



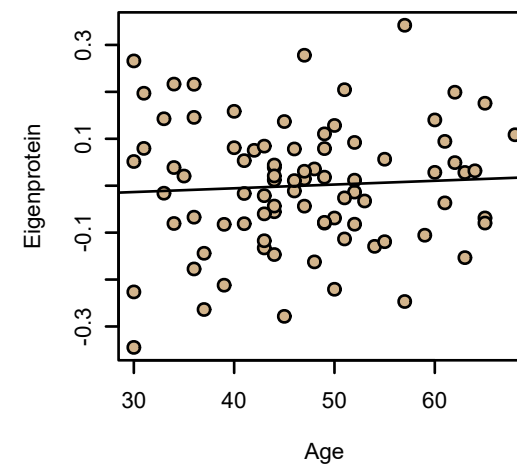
M12 tan.Aging (Synthetic)
K-W ANOVA p: 0.5



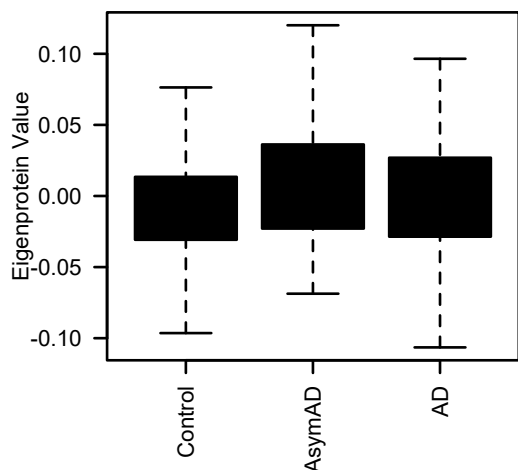
M12 tan.Aging (Synthetic)
K-W ANOVA p: 0.66



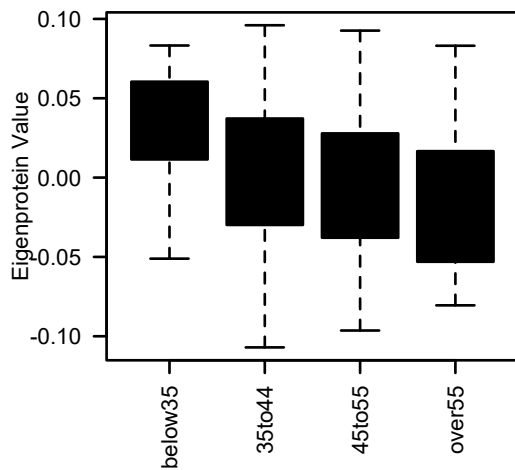
bicor=0.025, p=0.82
cor=0.059, p=0.59



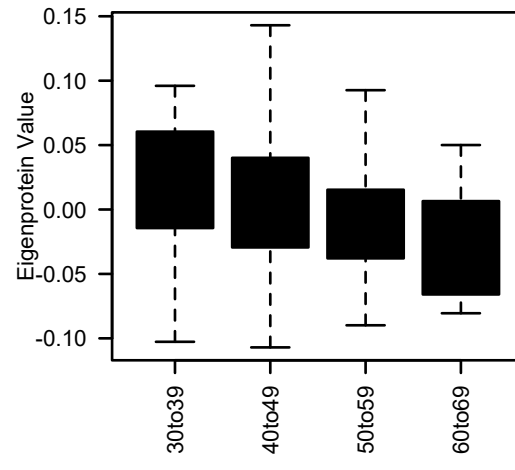
M7 black.Consensus



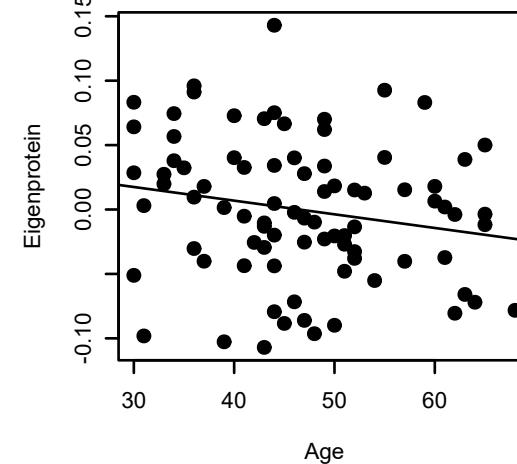
M7 black.Aging (Synthetic)
K-W ANOVA p: 0.3



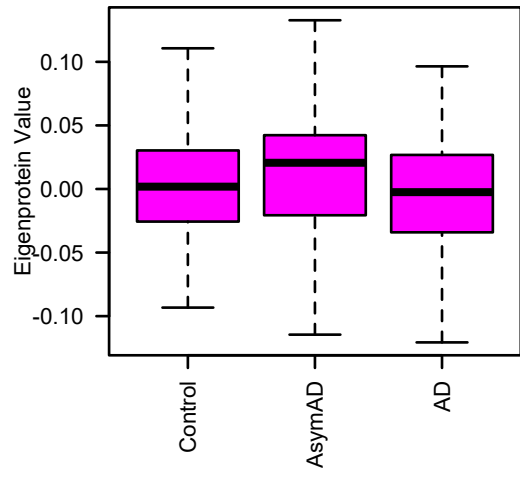
M7 black.Aging (Synthetic)
K-W ANOVA p: 0.33



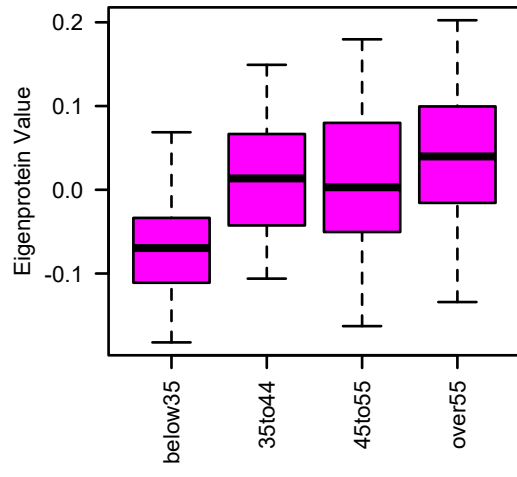
bicor=-0.2, p=0.071
cor=-0.19, p=0.083



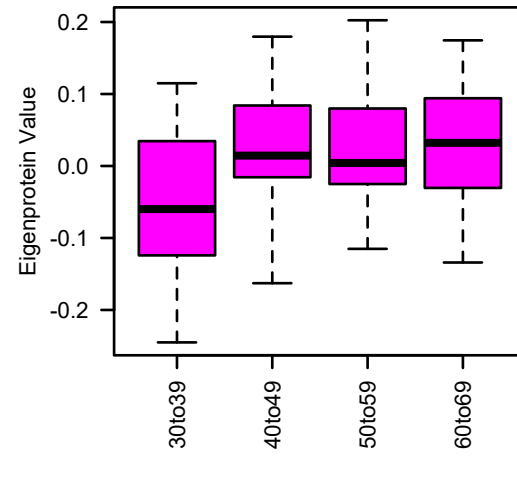
M9 magenta.Consensus



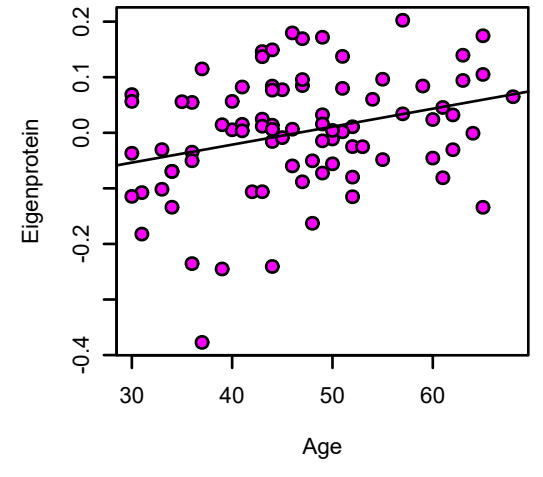
M9 magenta.Aging (Synthetic)
K-W ANOVA p: 0.045



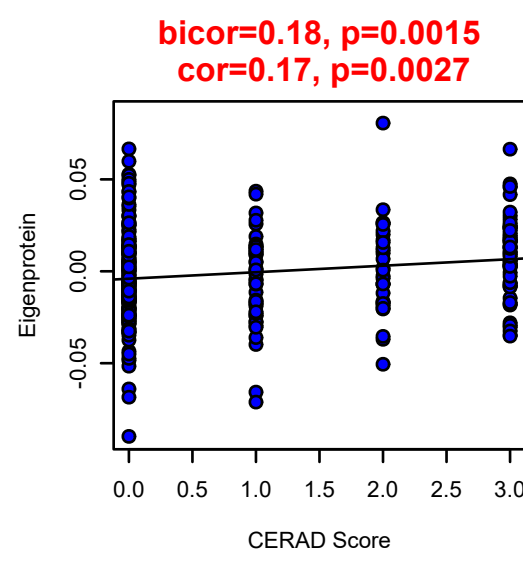
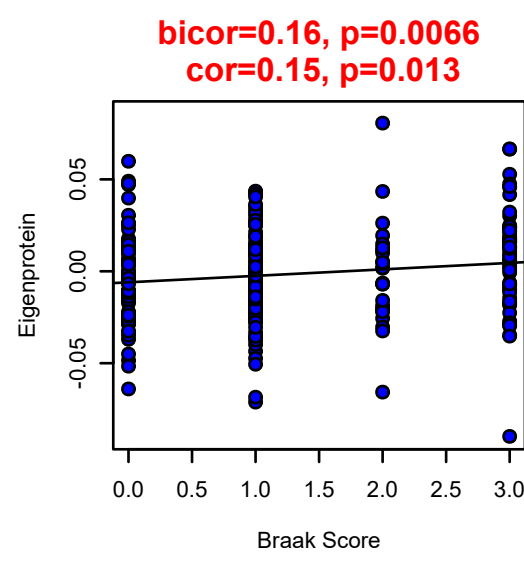
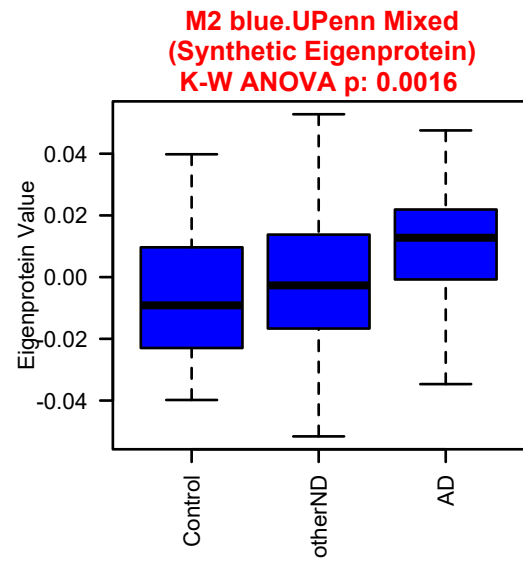
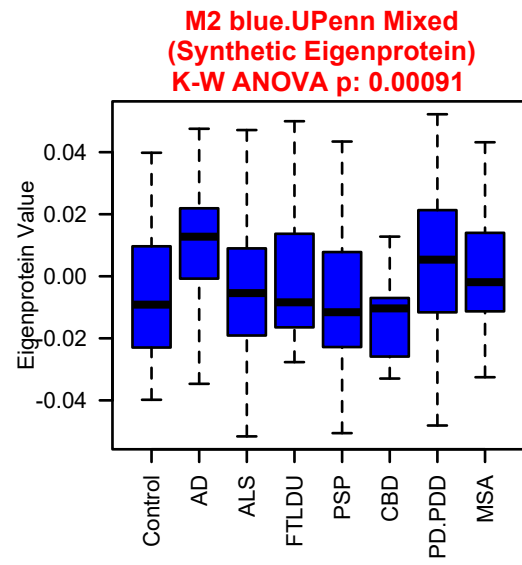
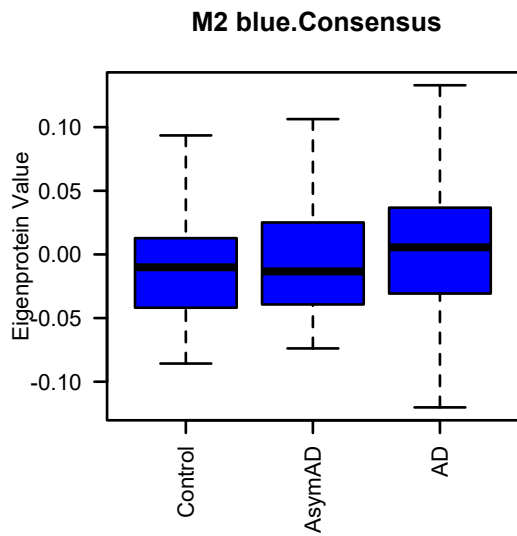
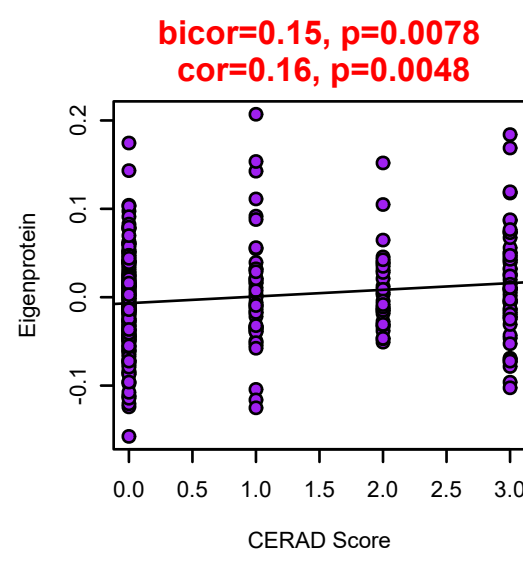
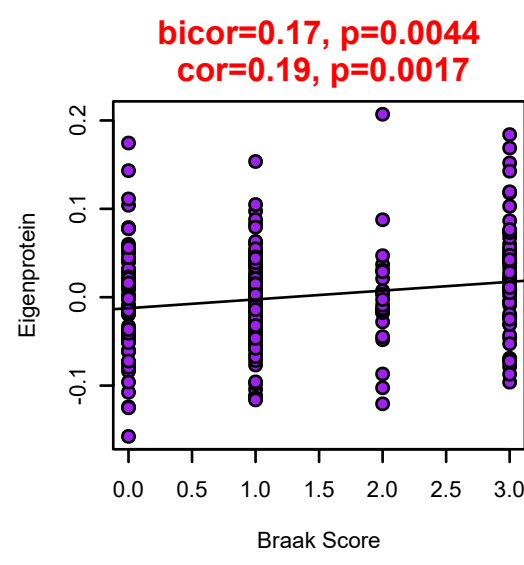
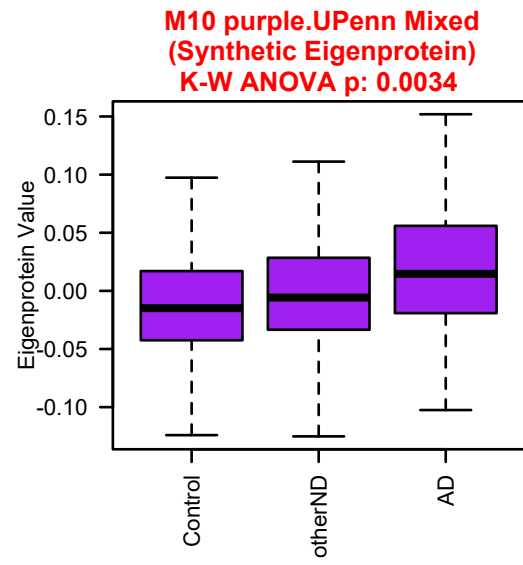
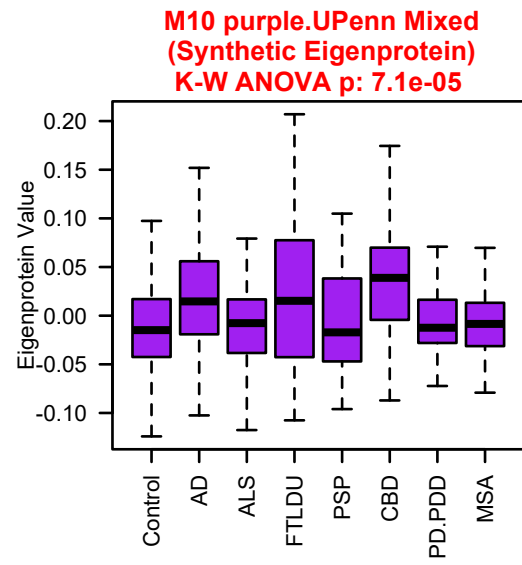
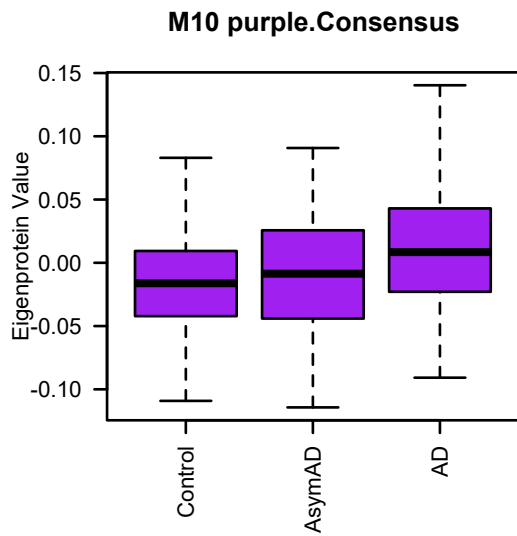
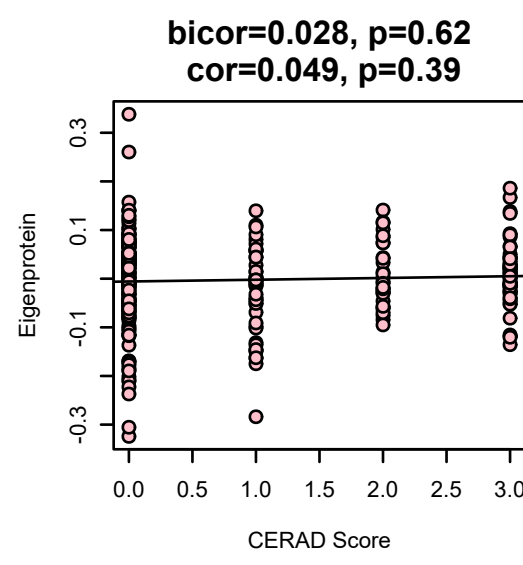
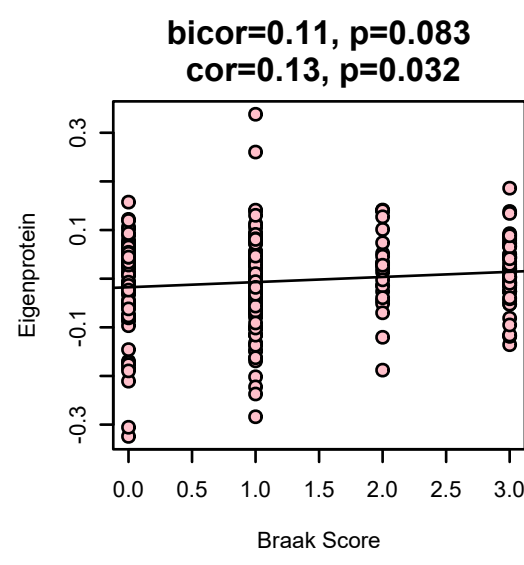
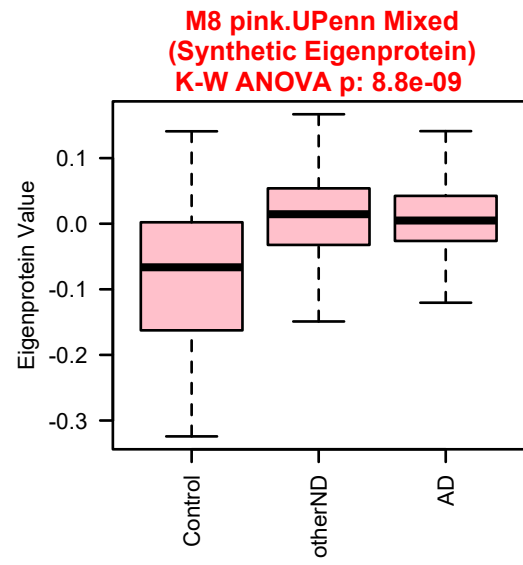
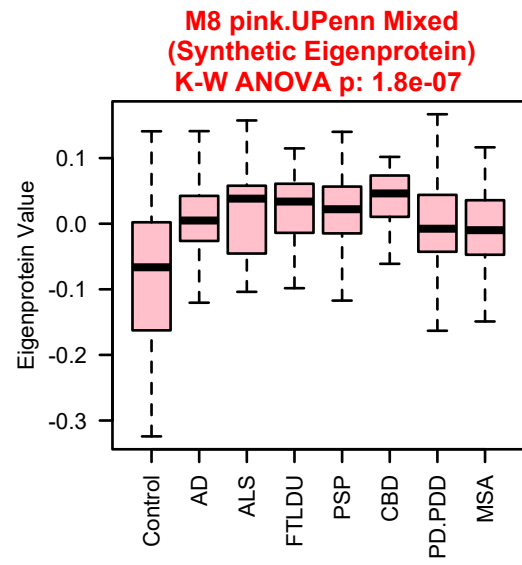
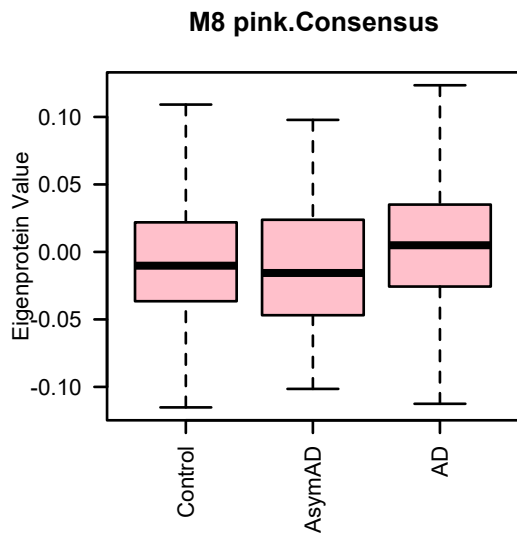
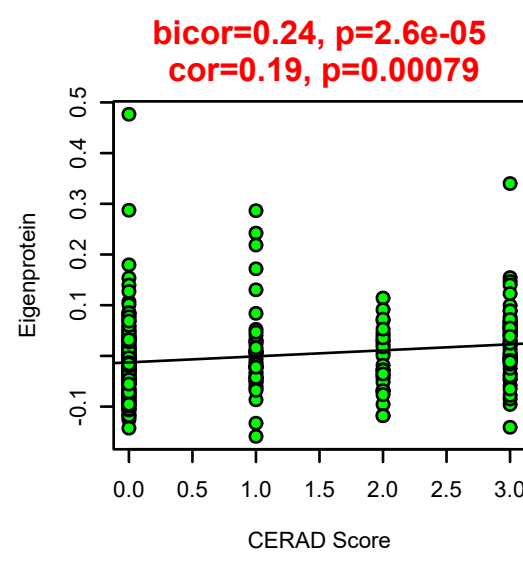
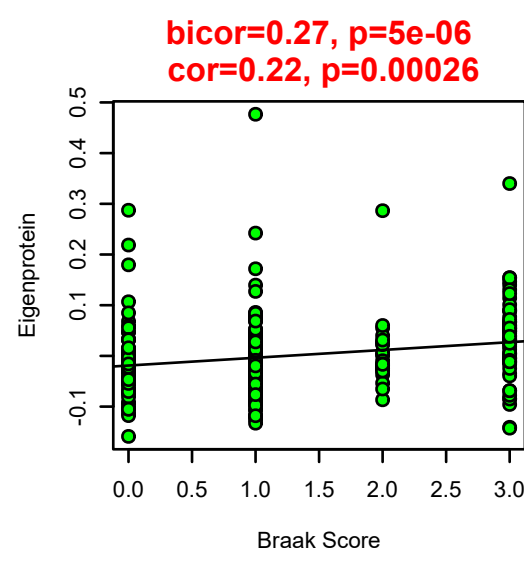
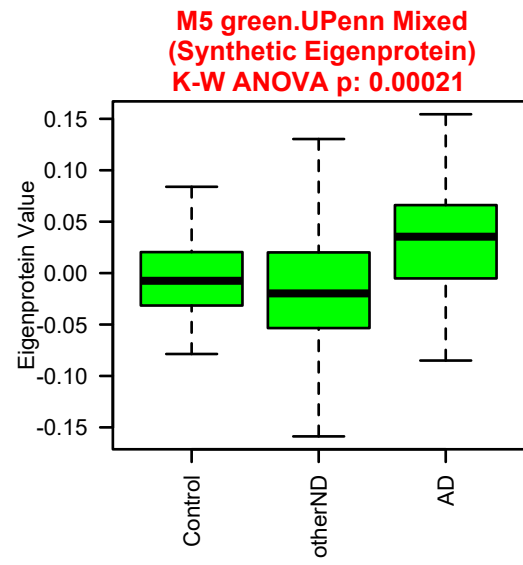
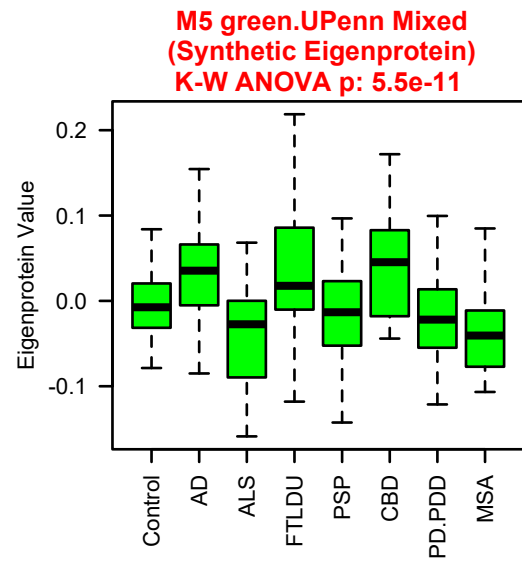
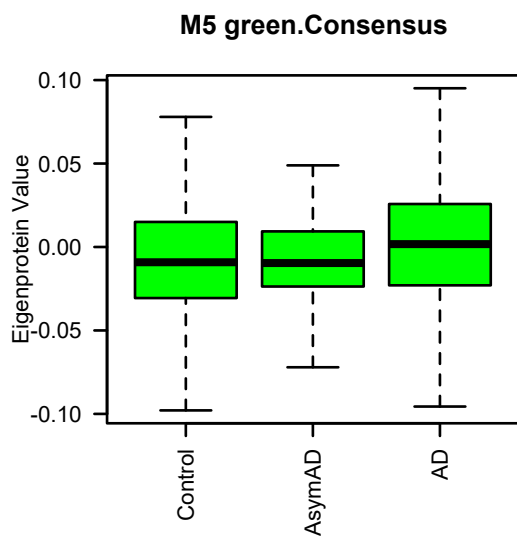
M9 magenta.Aging (Synthetic)
K-W ANOVA p: 0.0055



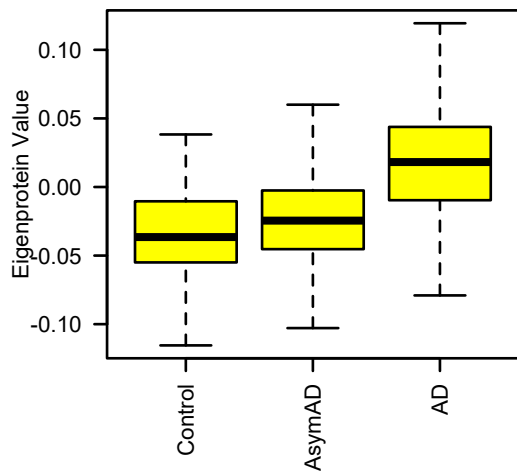
bicor=0.29, p=0.008
cor=0.3, p=0.0056



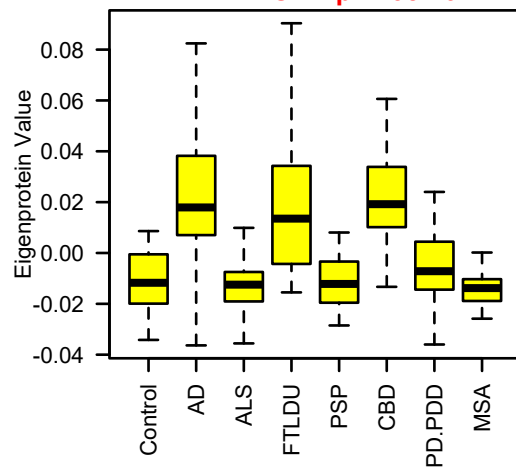
Supplementary Figure 9. Effect of Aging on AD Network Modules. The top 20% of proteins by kME value in each AD brain protein network module was used to create a synthetic eigenprotein, which was then measured by age grouping and correlated with age in the aging cohort from the Baltimore coroner's office ($n=84$ independent case samples). The first boxplot for each module is the AD network eigenprotein by case status, given as reference for the second and third boxplots, which is the synthetic eigenprotein in the BLSA precuneus cohort measured in two different age groupings (age below 35, $n=11$; age 35-44, $n=27$; age 45-55, $n=30$; age over 55, $n=16$; age 30-39, $n=20$; age 40-49, $n=34$; age 50-59, $n=17$; age 60-69, $n=13$;). Synthetic eigenproteins were also correlated directly with age, using both Pearson correlation (cor) and biweight midcorrelation ($bicor$), which is more robust to outliers. Synthetic eigenprotein differences by case status were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.



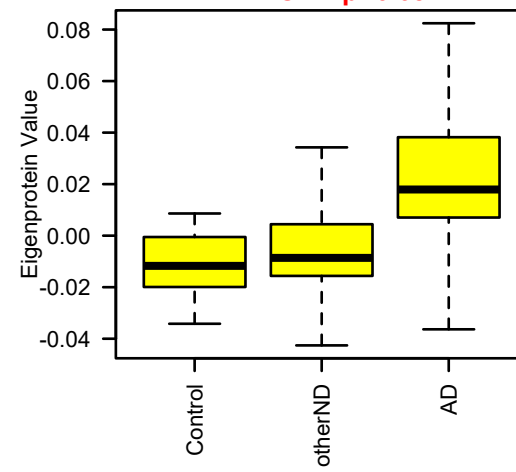
M4 yellow.Consensus



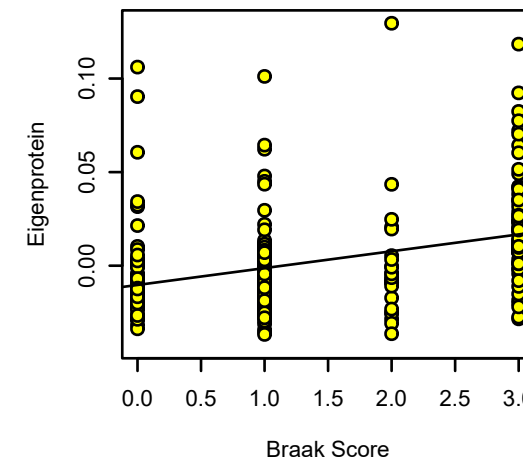
M4 yellow.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 4.3e-29



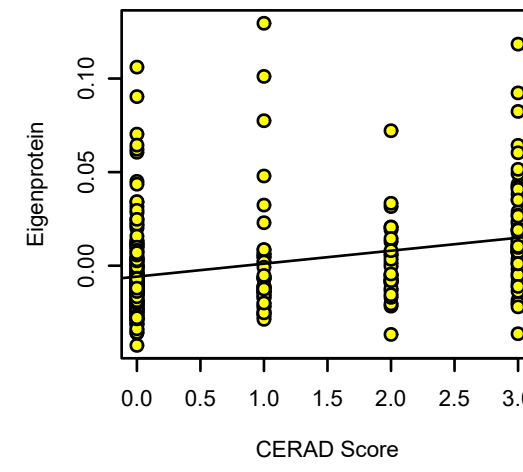
M4 yellow.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 6.6e-12



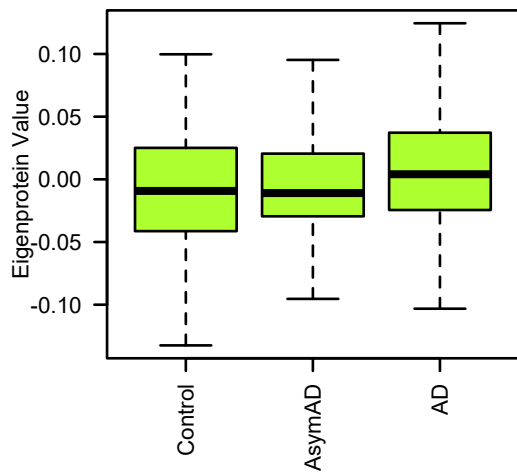
bicor=0.42, p=5.4e-13
cor=0.36, p=1e-09



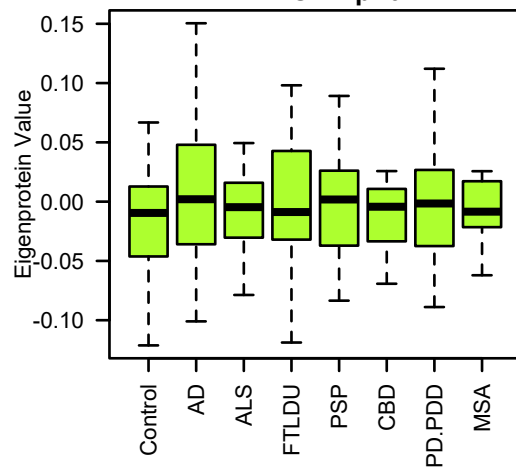
bicor=0.36, p=4.9e-11
cor=0.31, p=2.6e-08



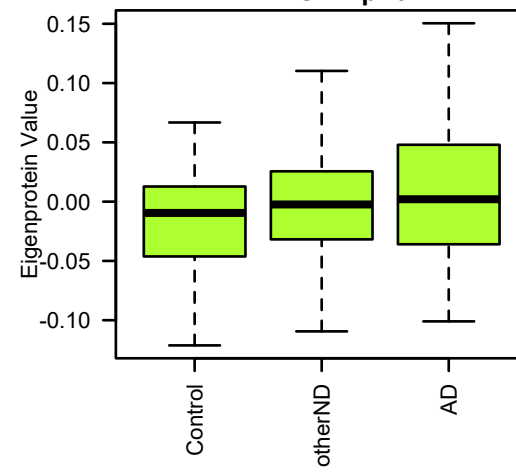
M11 greenyellow.Consensus



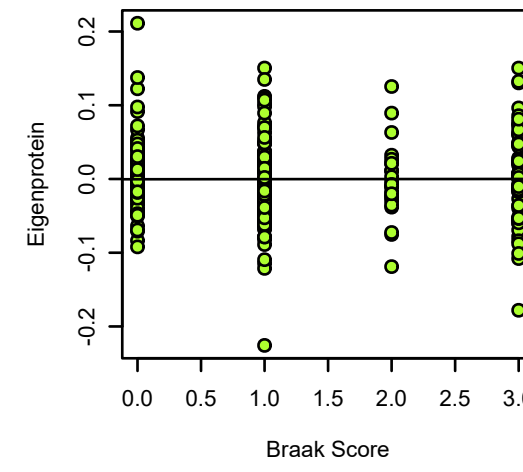
M11 greenyellow.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.42



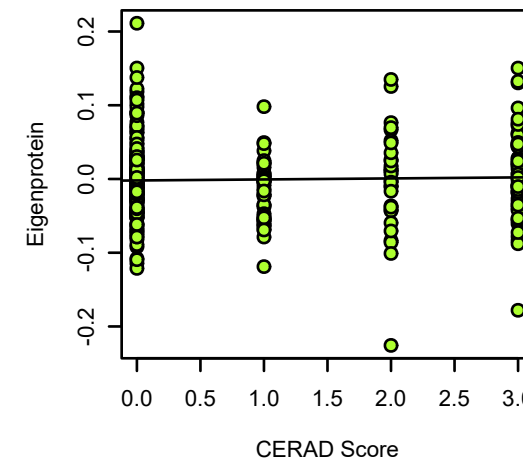
M11 greenyellow.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.24



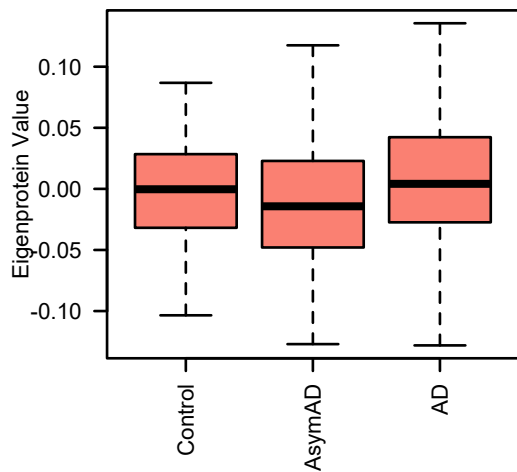
bicor=0.025, p=0.68
cor=0.0026, p=0.97



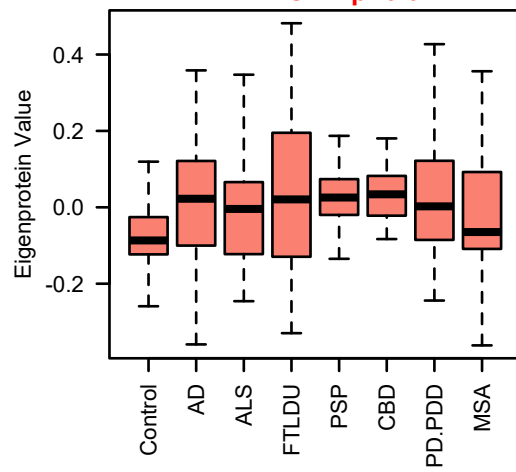
bicor=0.059, p=0.3
cor=0.03, p=0.6



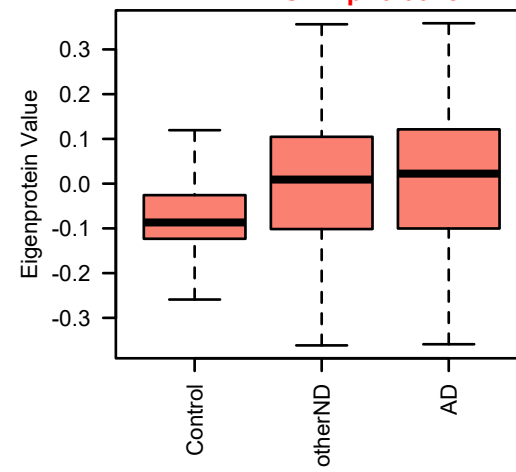
M13 salmon.Consensus



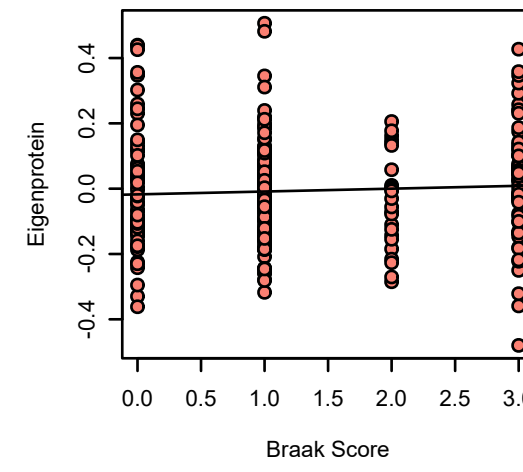
M13 salmon.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.021



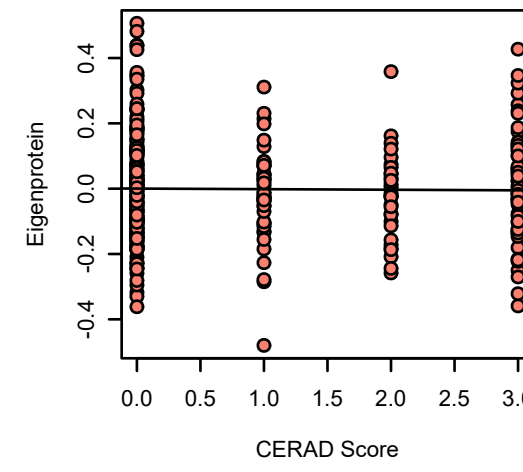
M13 salmon.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.0028



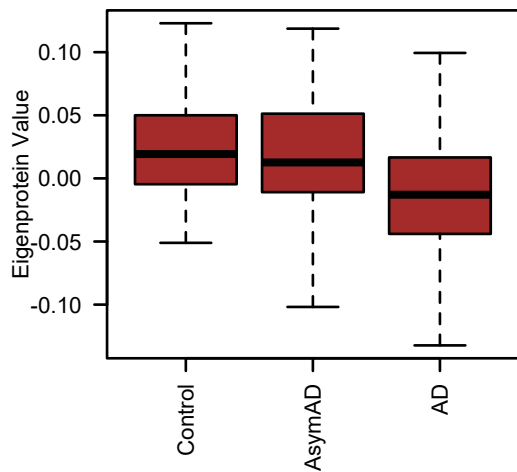
bicor=0.091, p=0.14
cor=0.058, p=0.34



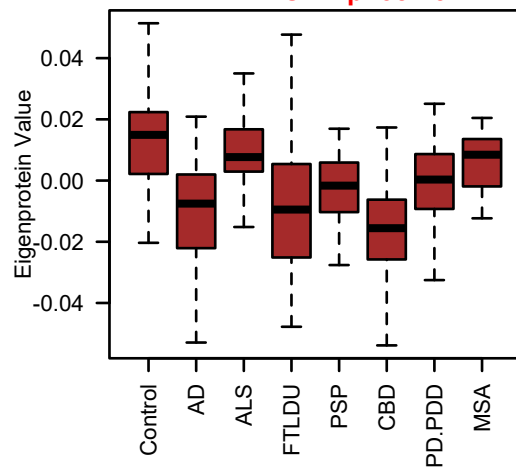
bicor=-0.001, p=0.99
cor=-0.013, p=0.82



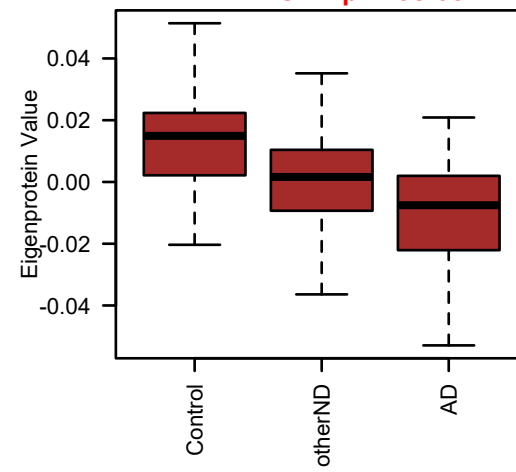
M3 brown.Consensus



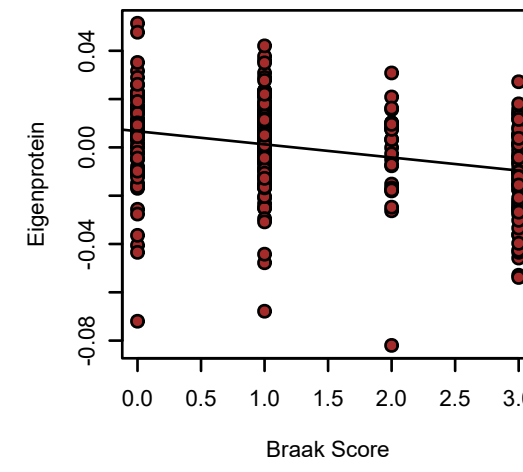
M3 brown.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 3e-15



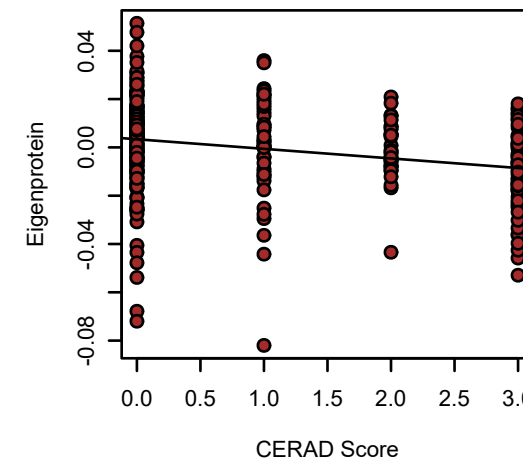
M3 brown.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 1.9e-08



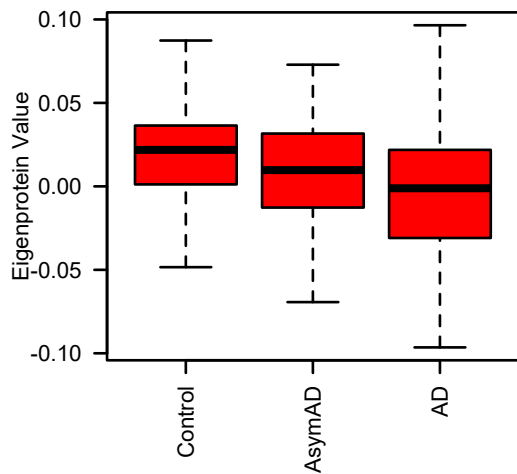
bicor=-0.33, p=1.8e-08
cor=-0.3, p=4.8e-07



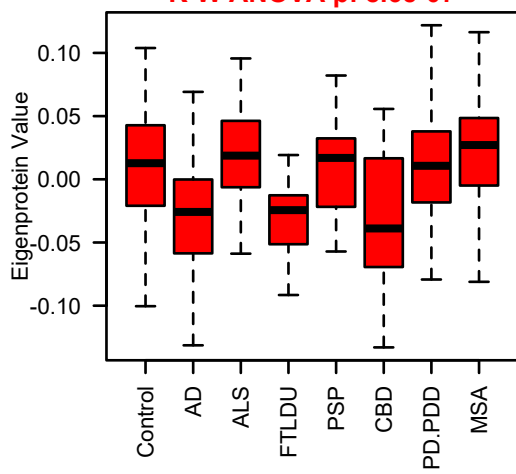
bicor=-0.29, p=3.2e-07
cor=-0.25, p=8.7e-06



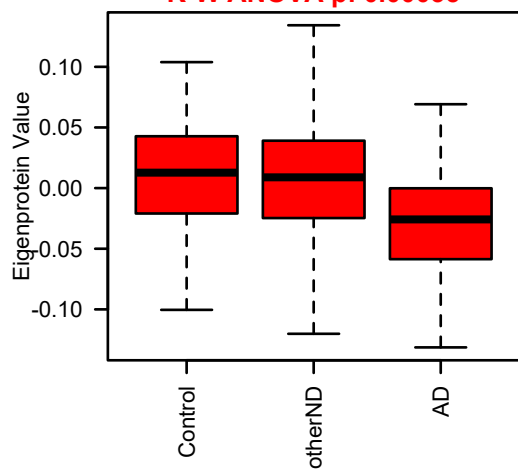
M6 red.Consensus



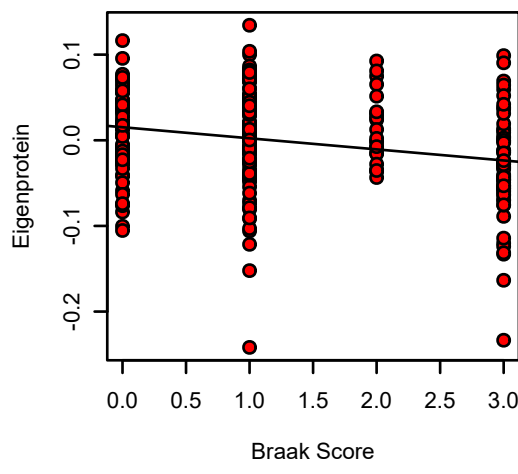
M6 red.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 8.6e-07



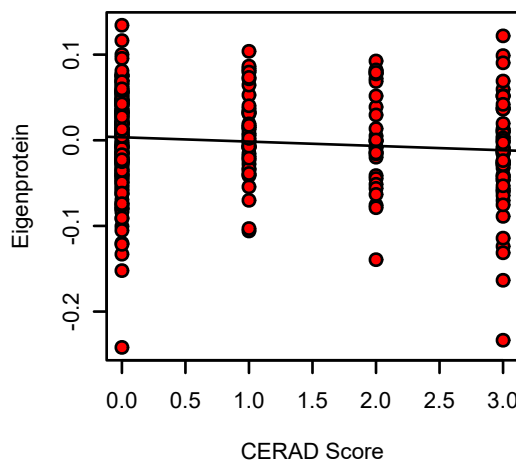
M6 red.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.00035



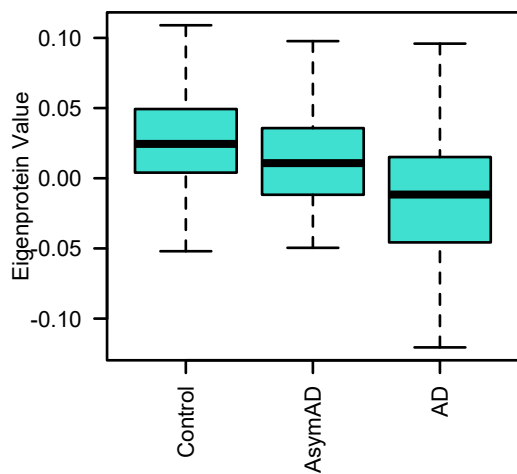
bicor=-0.25, p=4.3e-05
cor=-0.25, p=3.1e-05



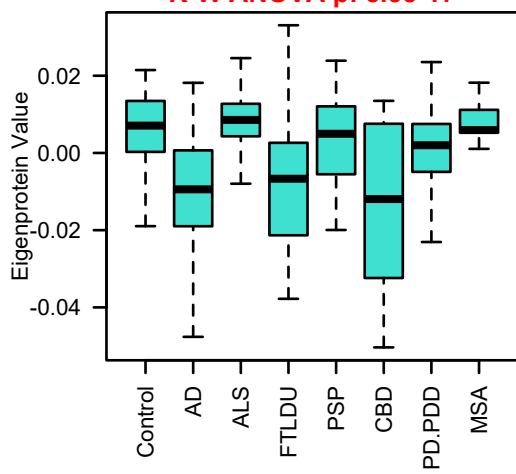
bicor=-0.11, p=0.062
cor=-0.11, p=0.053



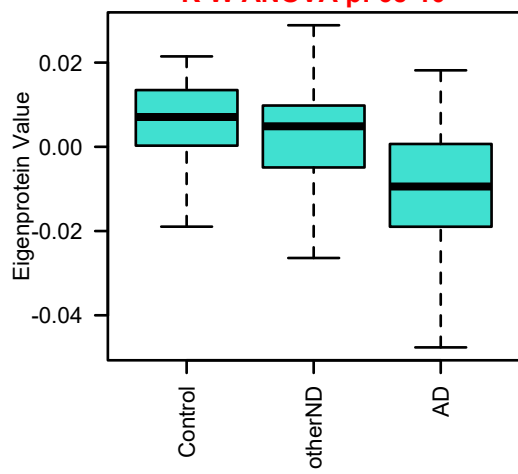
M1 turquoise.Consensus



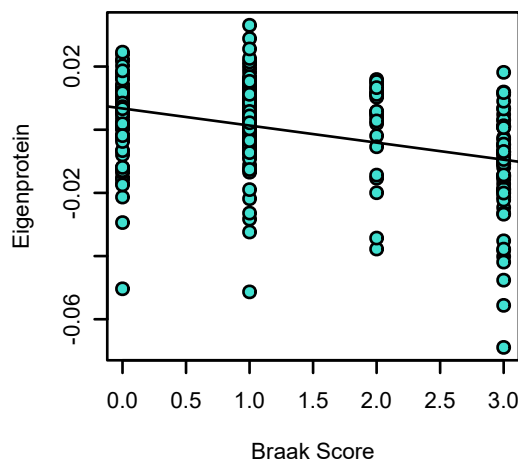
M1 turquoise.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 8.5e-17



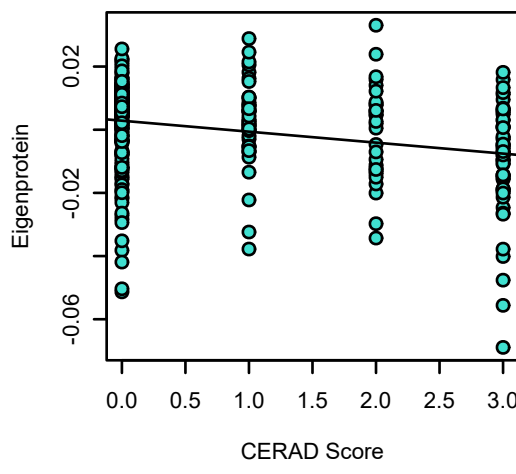
M1 turquoise.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 6e-10



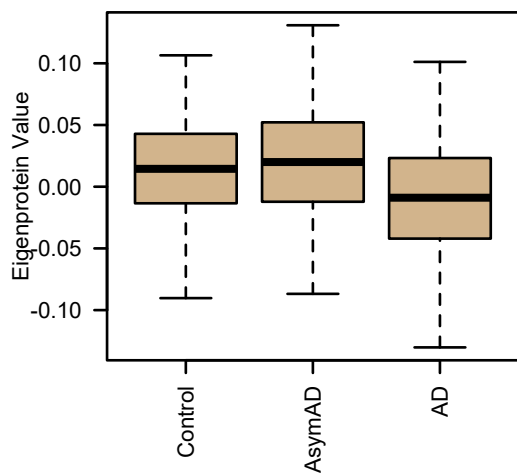
bicor=-0.39, p=2.9e-11
cor=-0.38, p=9.7e-11



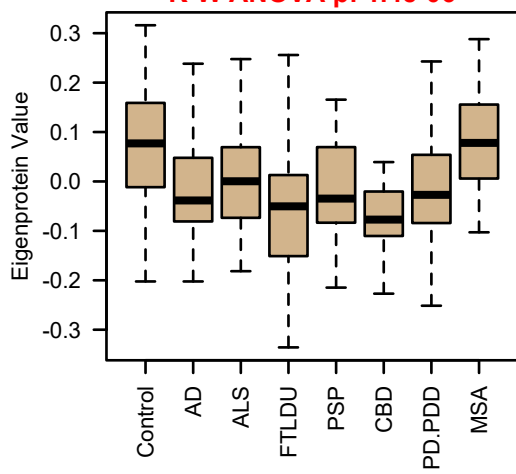
bicor=-0.28, p=6.9e-07
cor=-0.28, p=5.7e-07



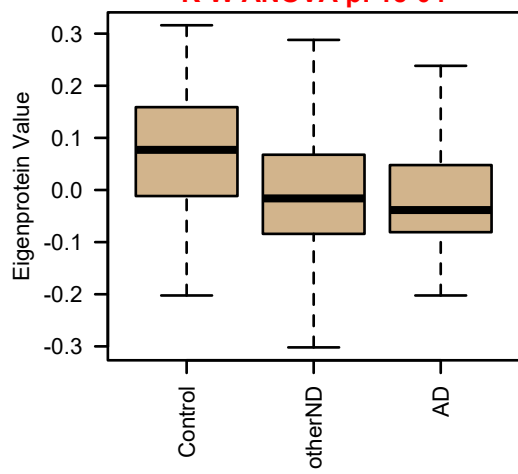
M12 tan.Consensus



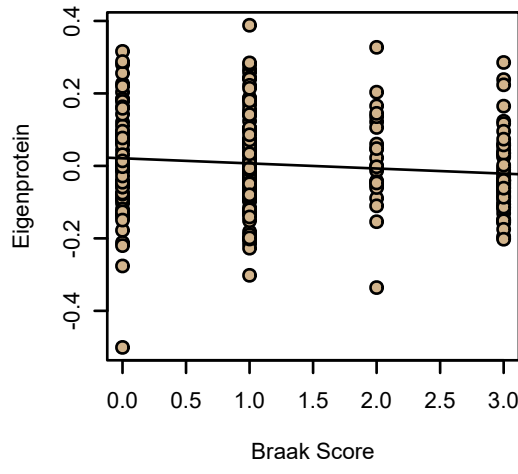
M12 tan.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 1.4e-06



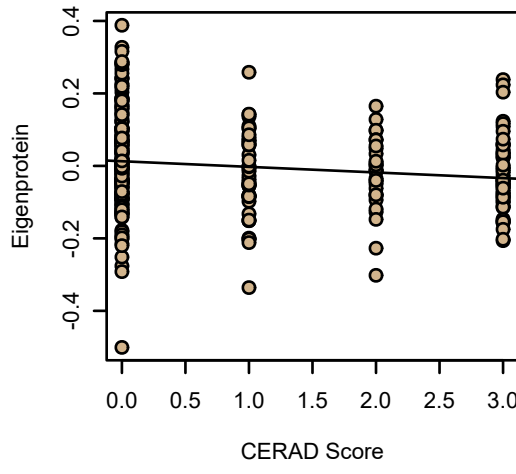
M12 tan.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 1e-04



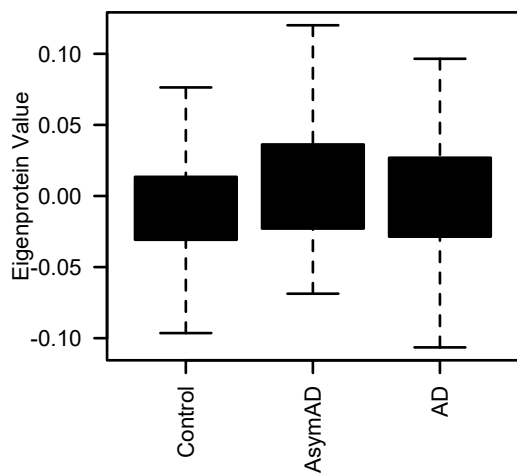
bicor=-0.12, p=0.056
cor=-0.12, p=0.048



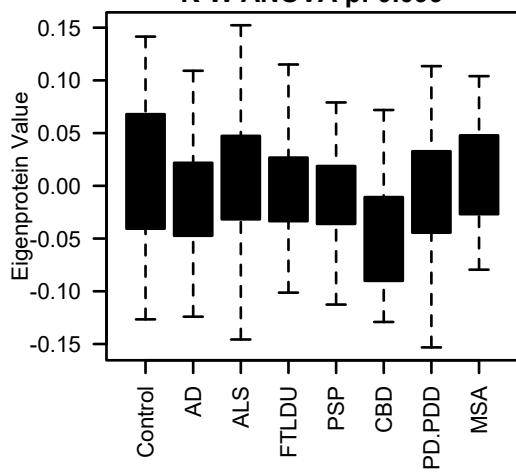
bicor=-0.15, p=0.0073
cor=-0.15, p=0.0083



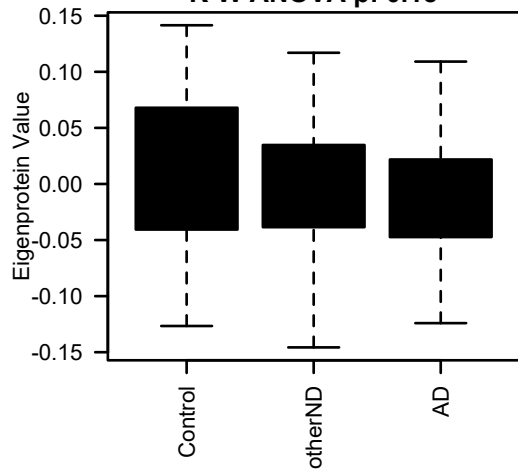
M7 black.Consensus



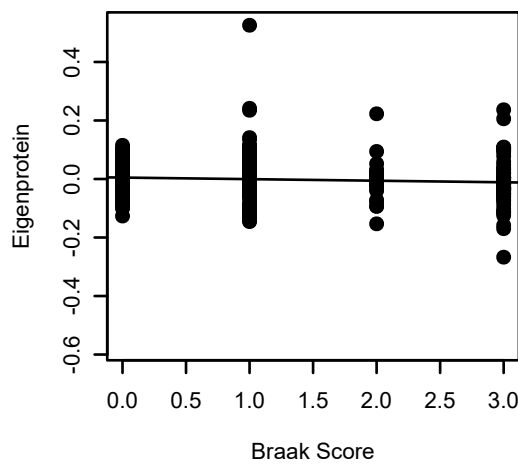
M7 black.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.099



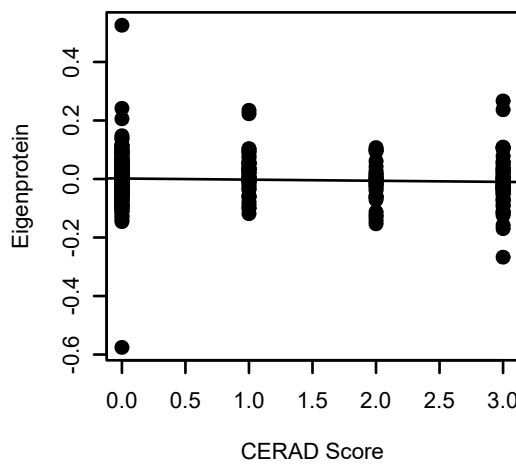
M7 black.UPenn Mixed (Synthetic Eigenprotein)
K-W ANOVA p: 0.18



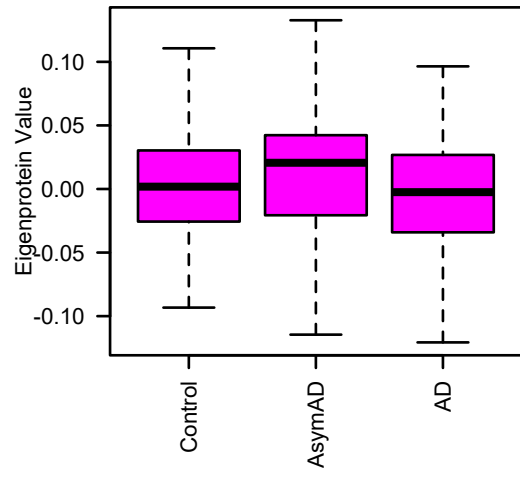
bicor=-0.08, p=0.19
cor=-0.075, p=0.22



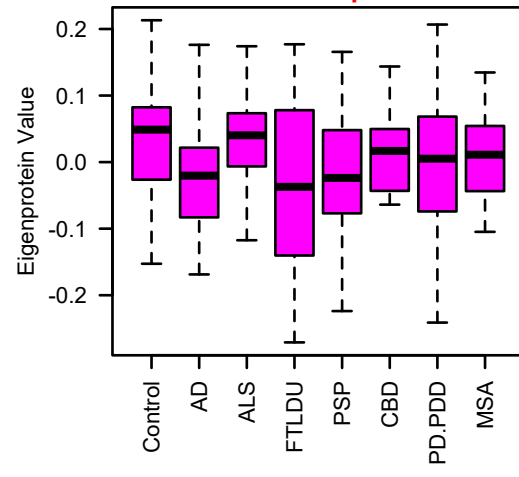
bicor=-0.072, p=0.21
cor=-0.054, p=0.34



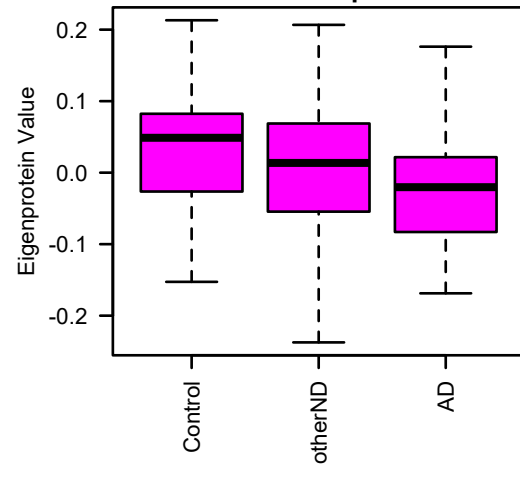
M9 magenta.Consensus



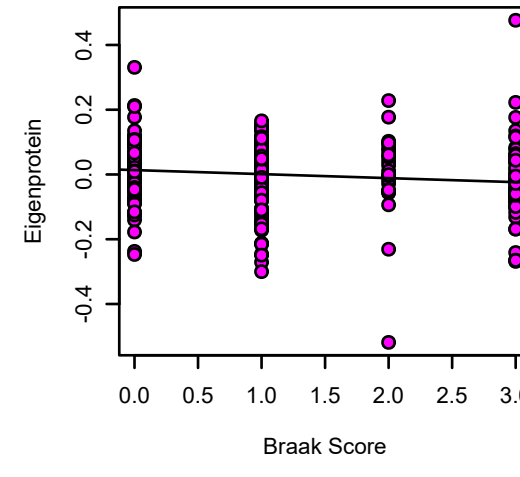
**M9 magenta.UPenn Mixed
(Synthetic Eigenprotein)
K-W ANOVA p: 0.017**



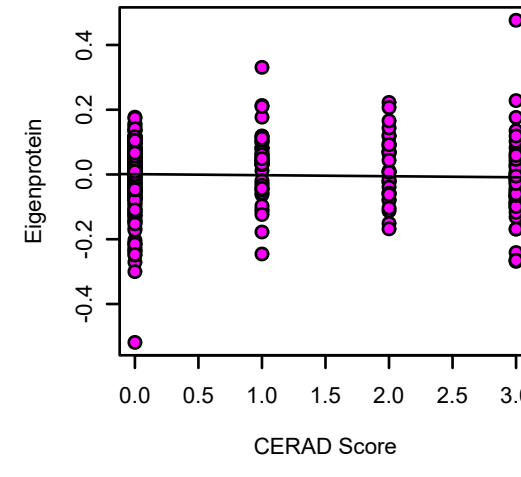
**M9 magenta.UPenn Mixed
(Synthetic Eigenprotein)
K-W ANOVA p: 0.073**



**bicor=-0.17, p=0.0055
cor=-0.12, p=0.048**

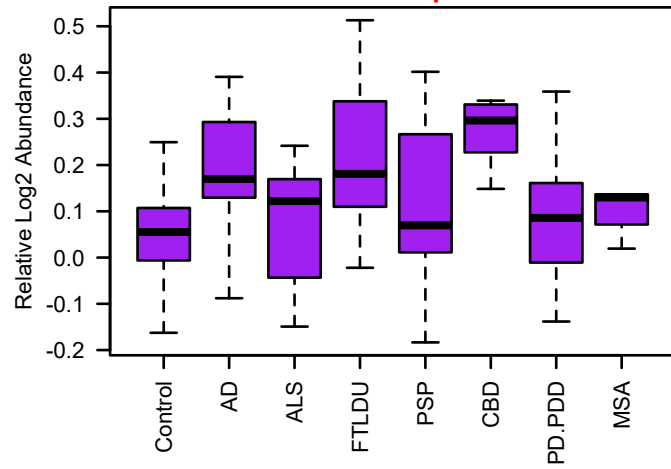


**bicor=-0.09, p=0.11
cor=-0.035, p=0.54**

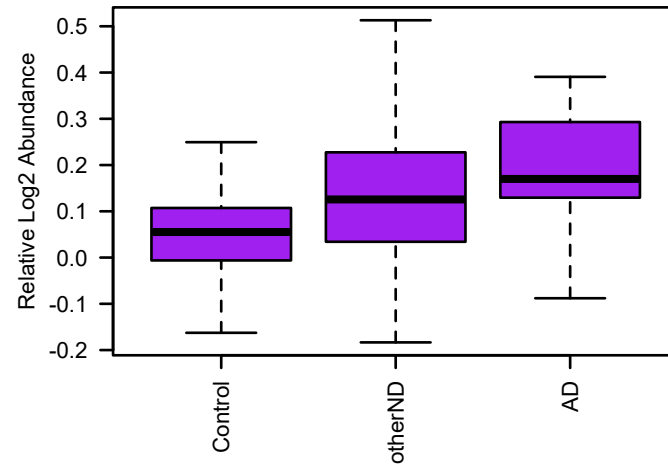


Supplementary Figure 10. AD Protein Network Module Changes in Other Neurodegenerative Diseases. The top 20% of proteins by kME value in each AD brain protein network module was used to create a synthetic eigenprotein, which was then measured in different neurodegenerative diseases in the UPenn cohort ($n=330$ independent case samples after network connectivity outlier removal). The first boxplot for each module is the AD network eigenprotein by case status, given as reference for the second and third boxplots (control $n=46$, AD $n=49$, amyotrophic lateral sclerosis (ALS) $n=59$, frontotemporal lobar degeneration with TAR DNA-binding protein 43 inclusions (FTLD-TDP) $n=29$, progressive supranuclear palsy (PSP) $n=27$, corticobasal degeneration (CBD) $n=17$, Parkinson's disease and Parkinson's disease dementia (PD/PDD) $n=80$, and multiple system atrophy (MSA) $n=23$). Other neurodegenerative diseases (otherND) include these non-AD diseases. Synthetic eigenproteins were also correlated with CERAD and Braak scores, using both Pearson correlation (cor) and biweight midcorrelation ($bicor$), which is more robust to outliers. Synthetic eigenprotein differences by case status were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Differences between AD and other case groups were assessed by two-sided Dunnett's test and are provided in **Supplementary Table 4**. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

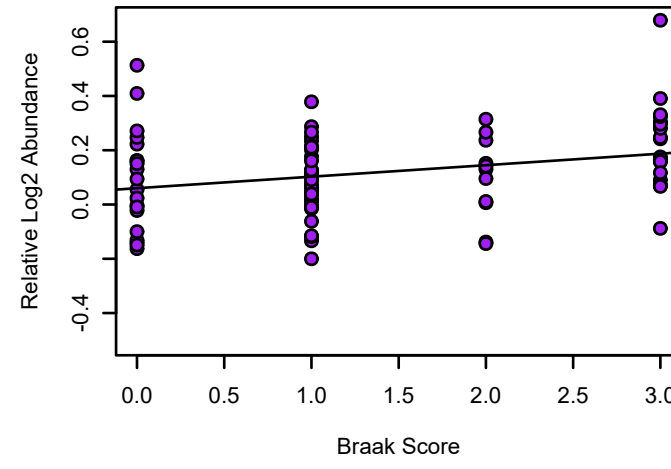
HDGFRP3 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.01



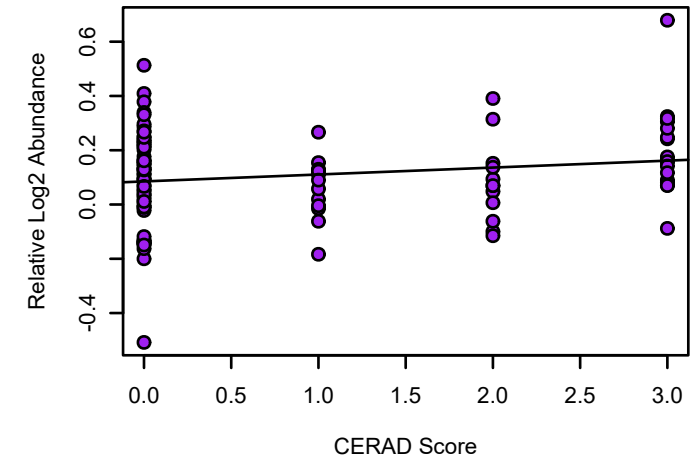
HDGFRP3 UPenn Mixed PRM
K-W ANOVA p: 0.02



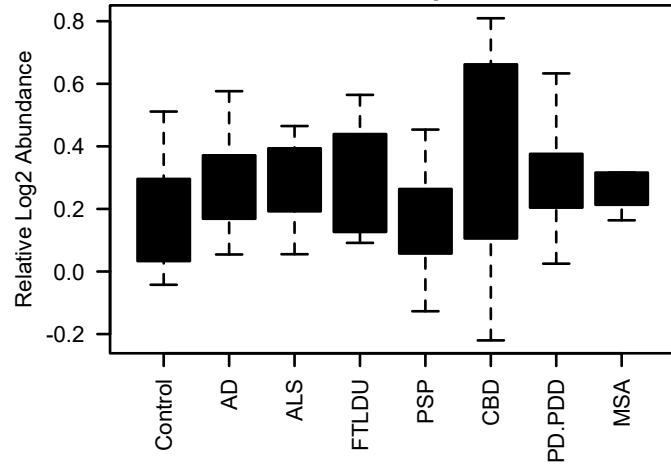
bicor=0.26, p=0.017
cor=0.28, p=0.0099



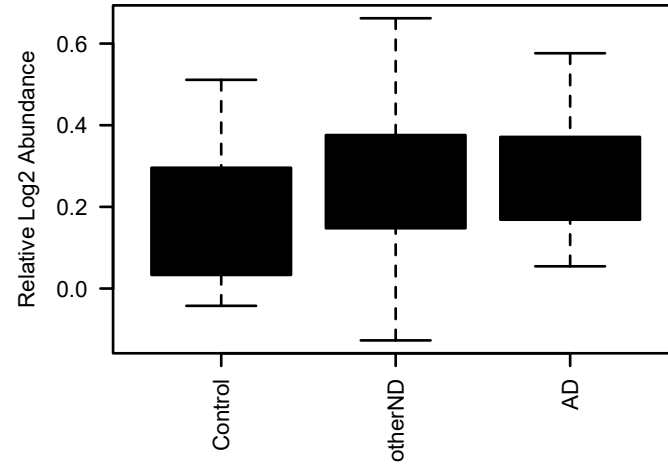
bicor=0.15, p=0.14
cor=0.18, p=0.073



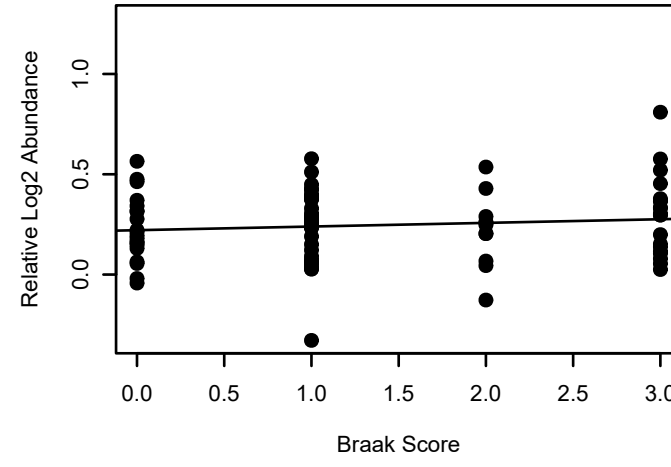
RPS9 UPenn Mixed PRM
M7 black MEGA module member
K-W ANOVA p: 0.19



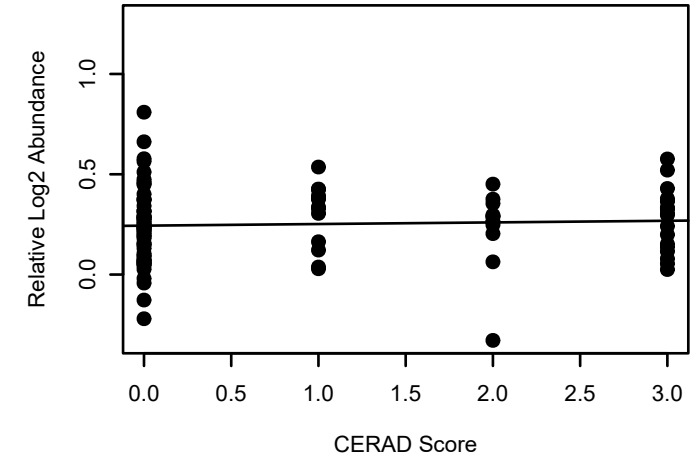
RPS9 UPenn Mixed PRM
K-W ANOVA p: 0.47



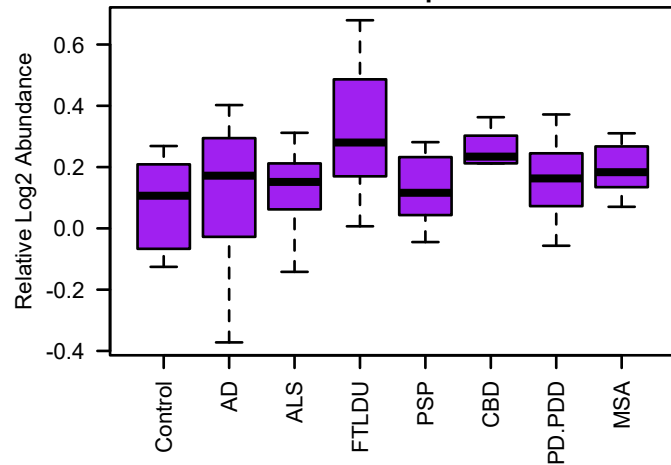
bicor=0.075, p=0.5
cor=0.11, p=0.32



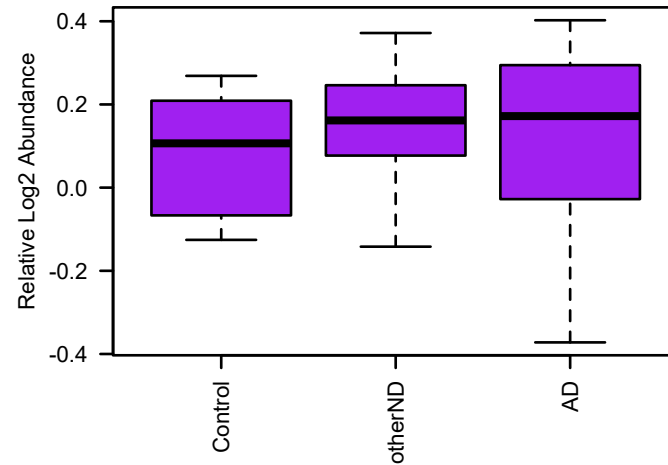
bicor=0.084, p=0.41
cor=0.054, p=0.59



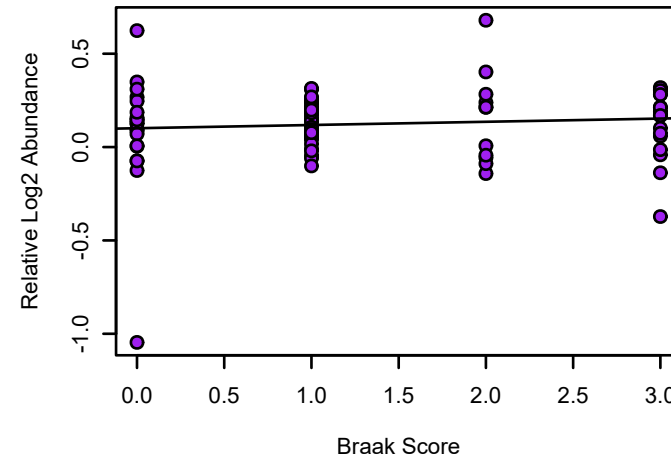
KHSRP UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.054



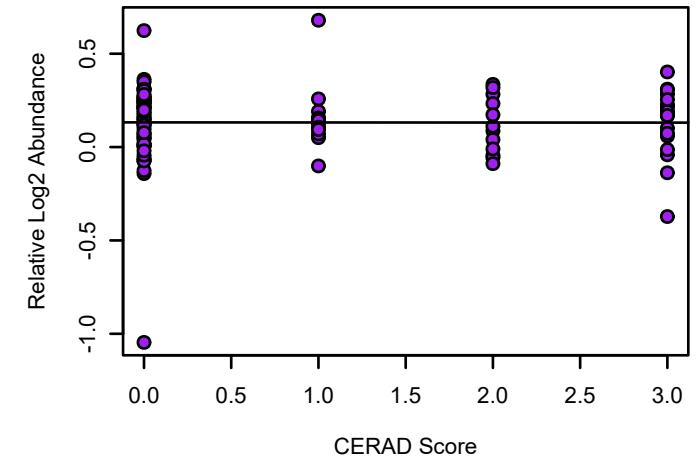
KHSRP UPenn Mixed PRM
K-W ANOVA p: 0.37



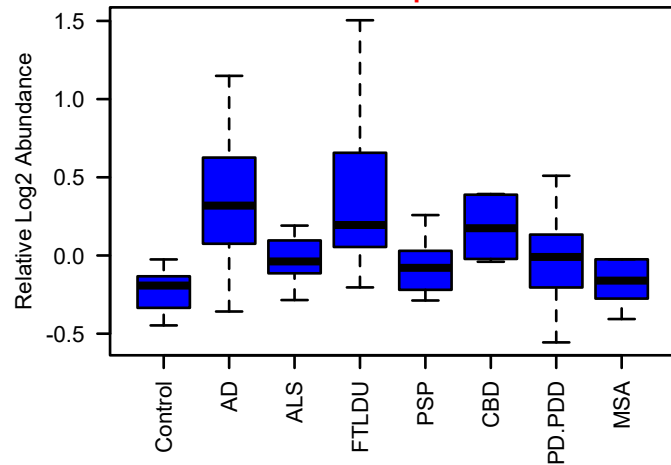
bicor=0.034, p=0.76
cor=0.09, p=0.42



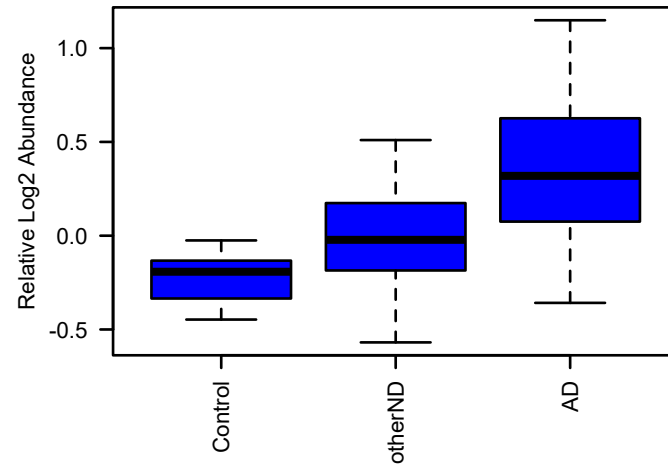
bicor=-0.027, p=0.79
cor=-0.0026, p=0.98



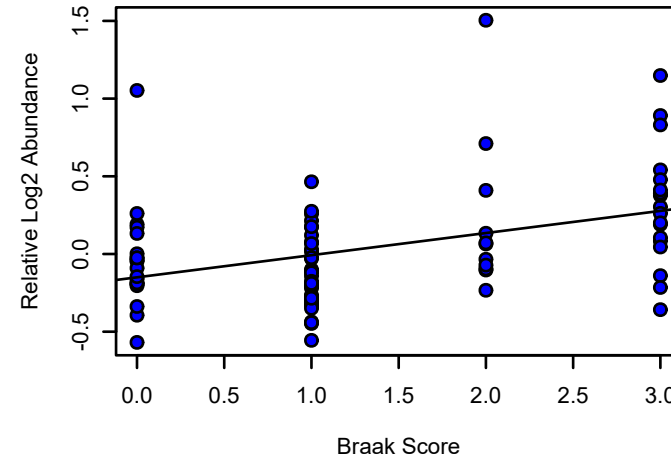
LLGL1 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 3.9e-05



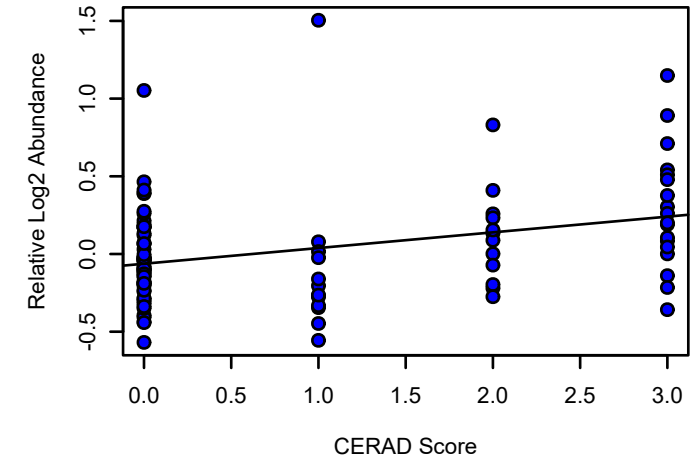
LLGL1 UPenn Mixed PRM
K-W ANOVA p: 3.3e-05



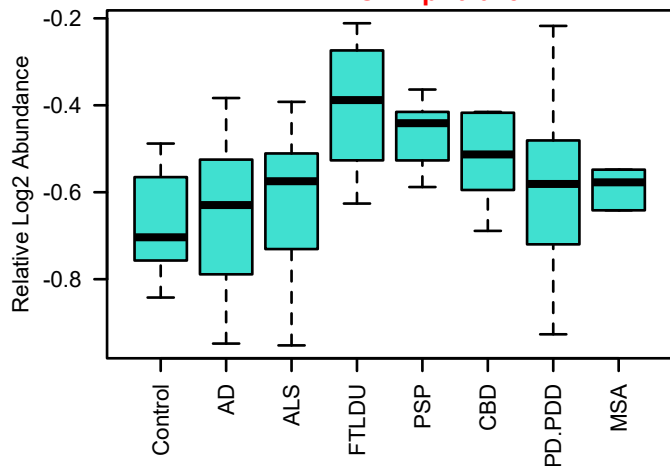
bicor=0.44, p=2.3e-05
cor=0.41, p=0.00011



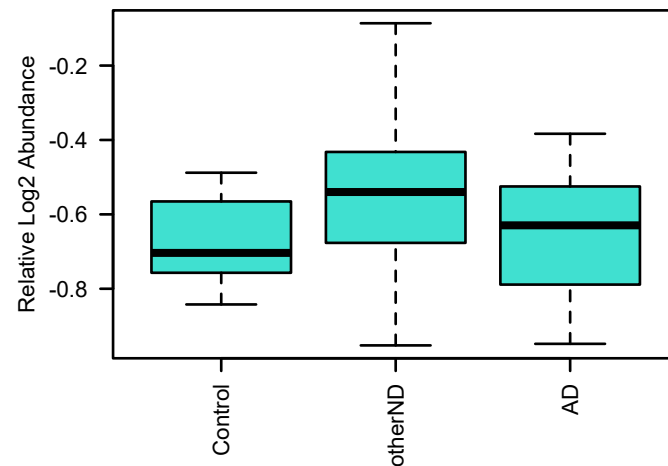
bicor=0.36, p=0.00027
cor=0.34, p=0.00054



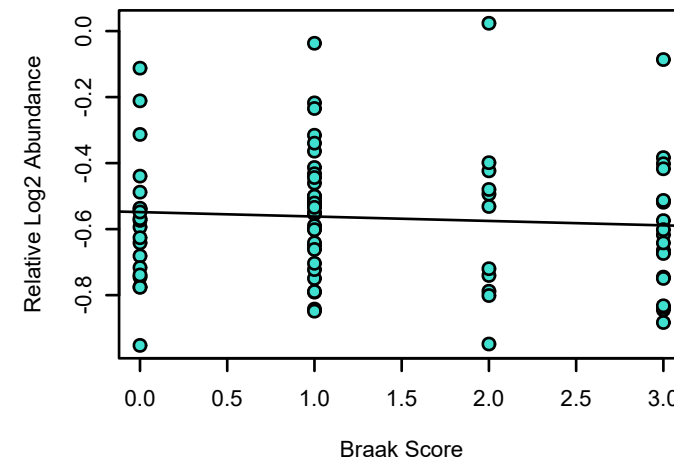
SYN2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.015



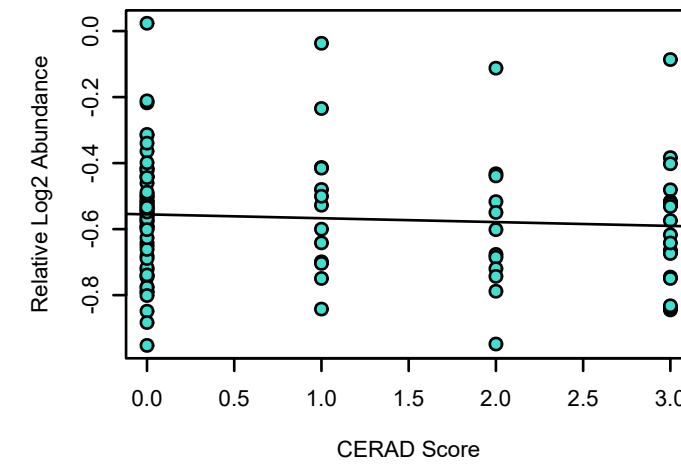
SYN2 UPenn Mixed PRM
K-W ANOVA p: 0.0095



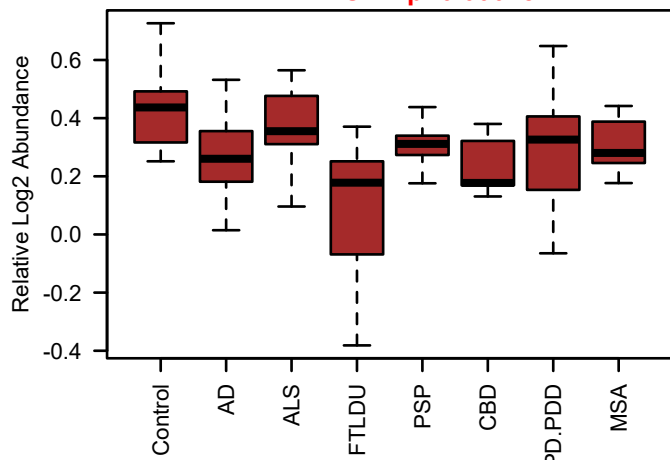
bicor=-0.096, p=0.39
cor=-0.072, p=0.52



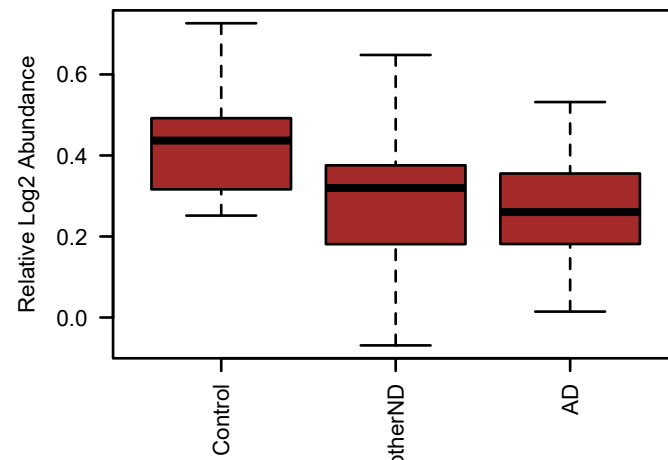
bicor=-0.088, p=0.39
cor=-0.074, p=0.46



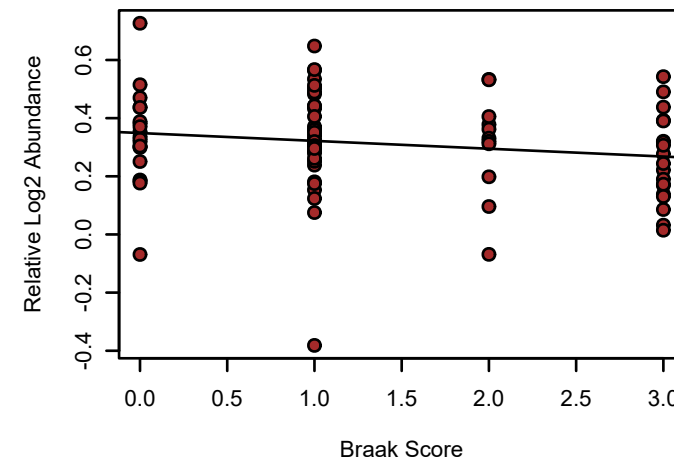
NDUFA10 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.00018



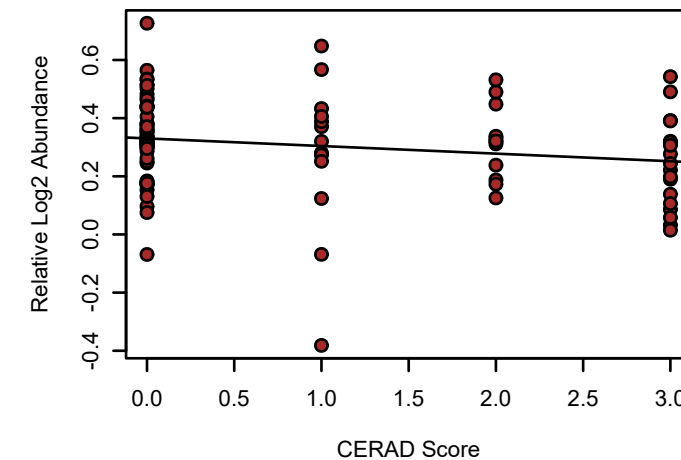
NDUFA10 UPenn Mixed PRM
K-W ANOVA p: 0.0065



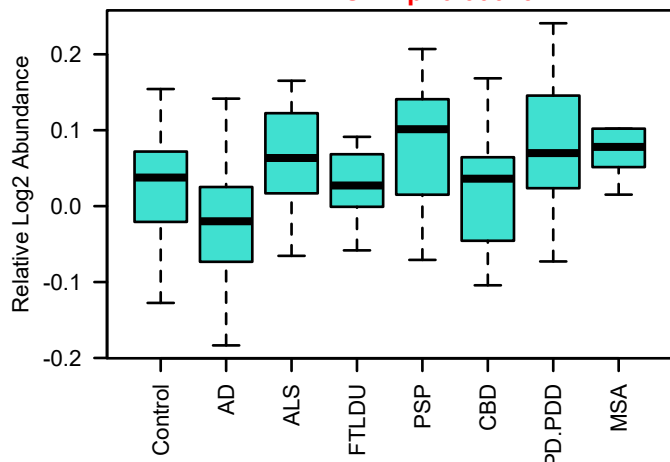
bicor=-0.19, p=0.082
cor=-0.17, p=0.12



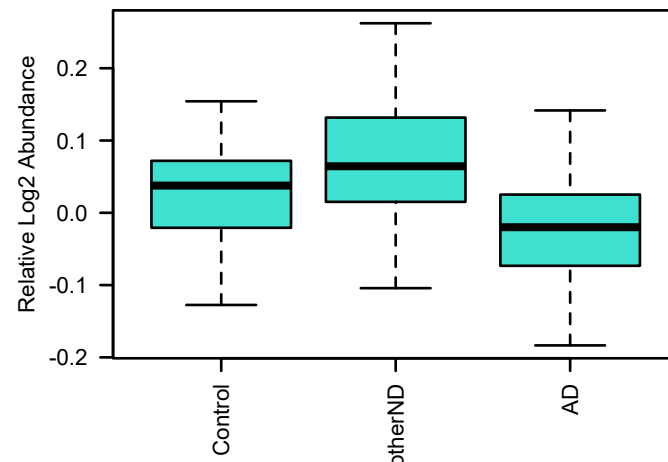
bicor=-0.21, p=0.033
cor=-0.19, p=0.058



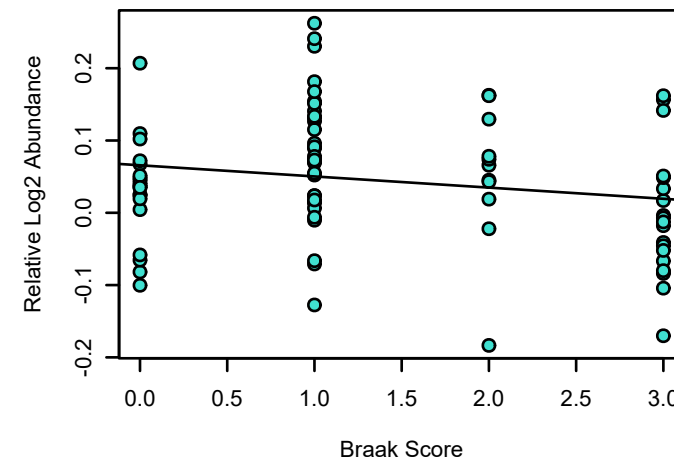
AP2M1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00079



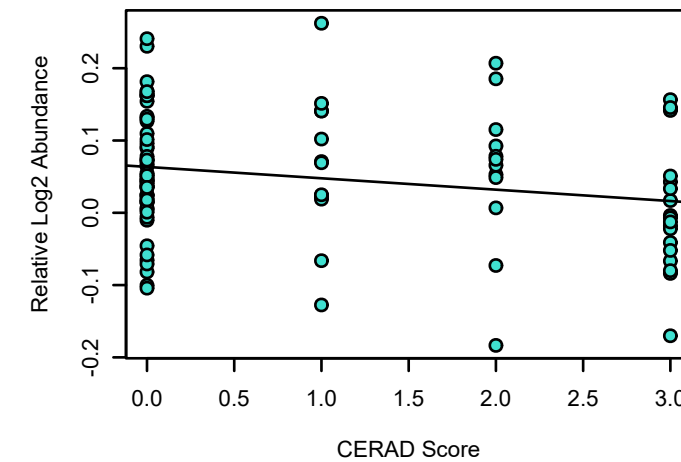
AP2M1 UPenn Mixed PRM
K-W ANOVA p: 5e-05



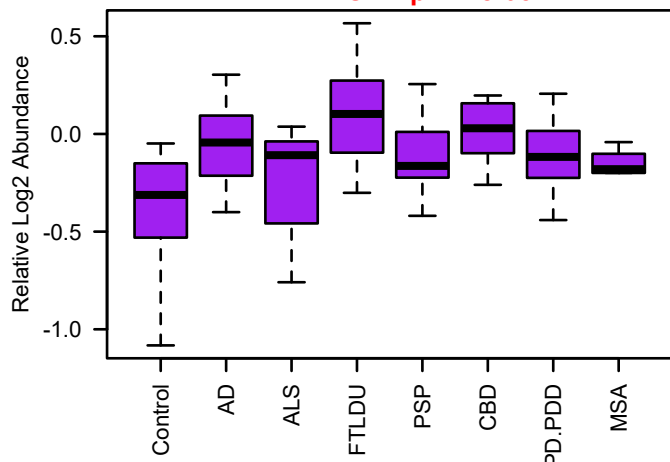
bicor=-0.16, p=0.14
cor=-0.19, p=0.083



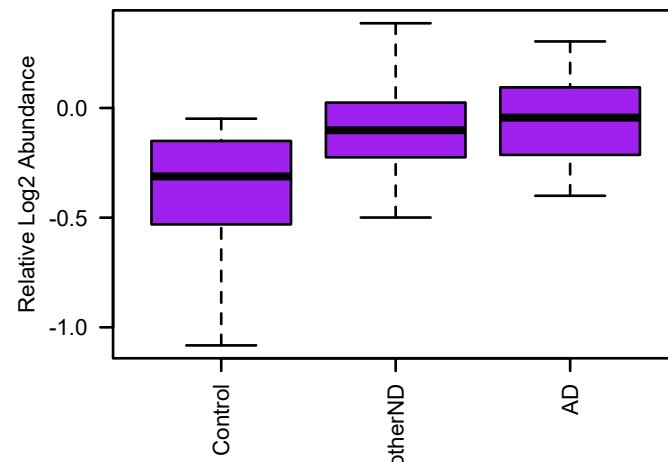
bicor=-0.21, p=0.037
cor=-0.21, p=0.036



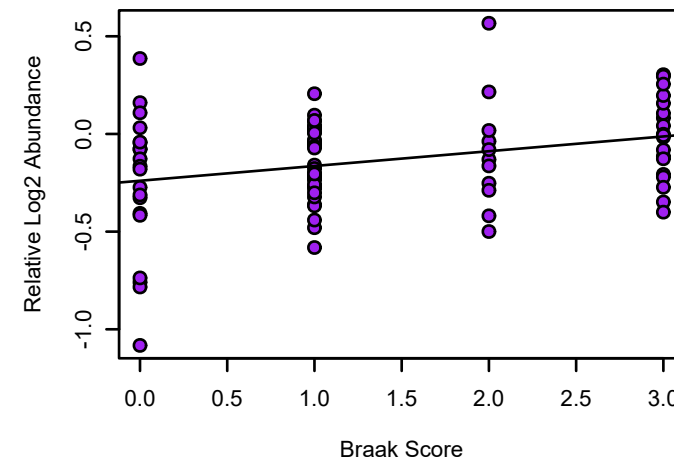
HNRNPM UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 4.7e-05



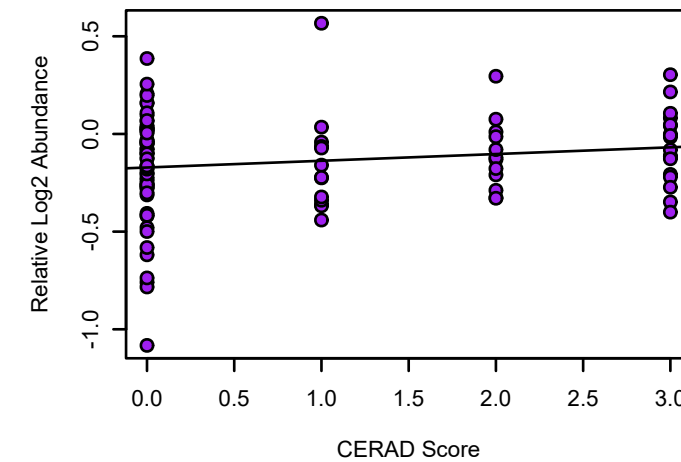
HNRNPM UPenn Mixed PRM
K-W ANOVA p: 8.1e-05

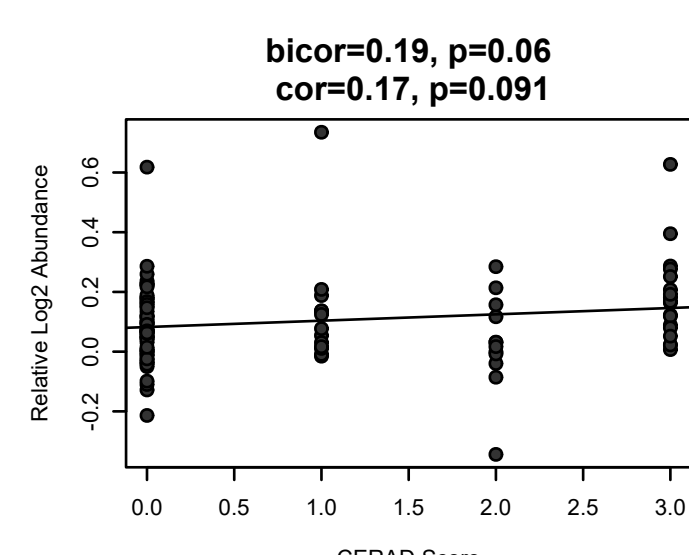
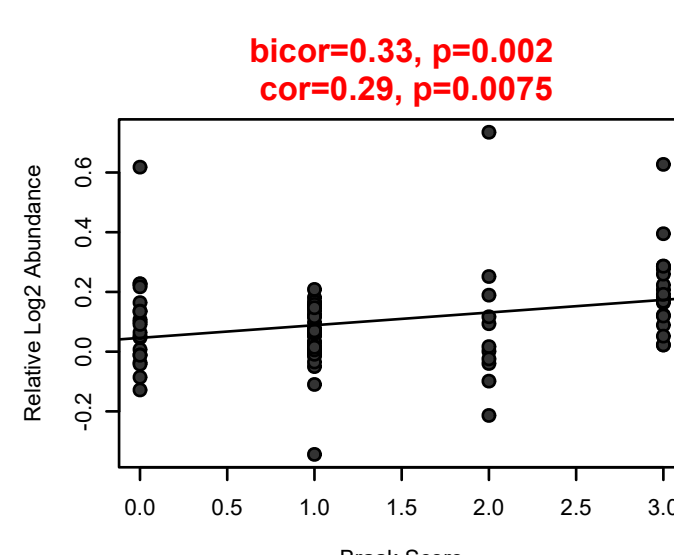
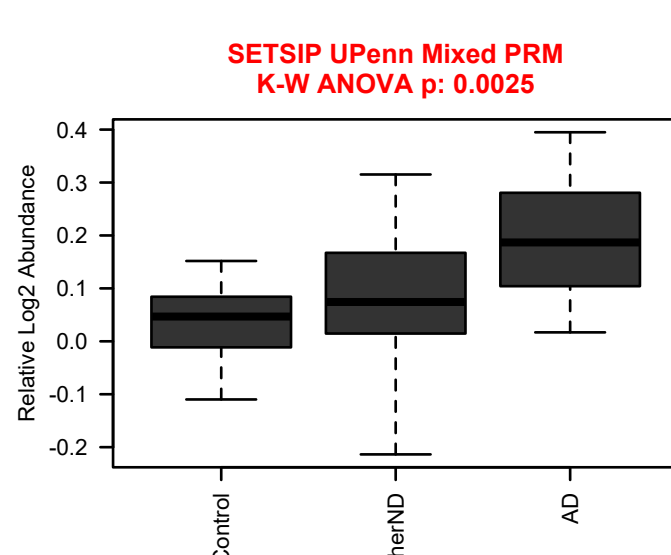
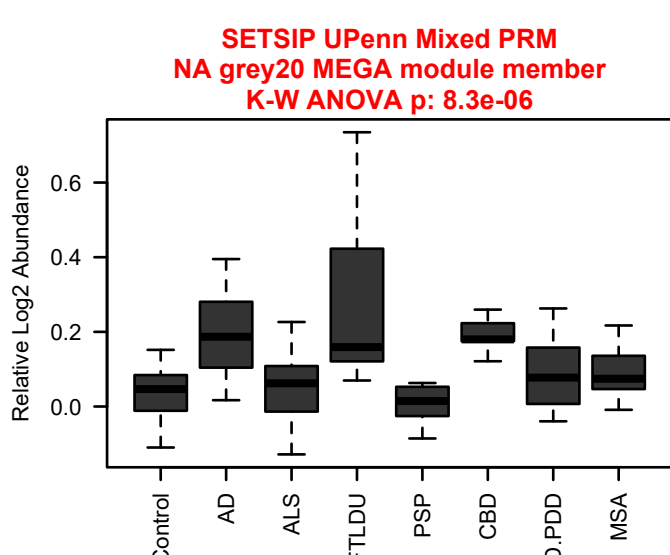
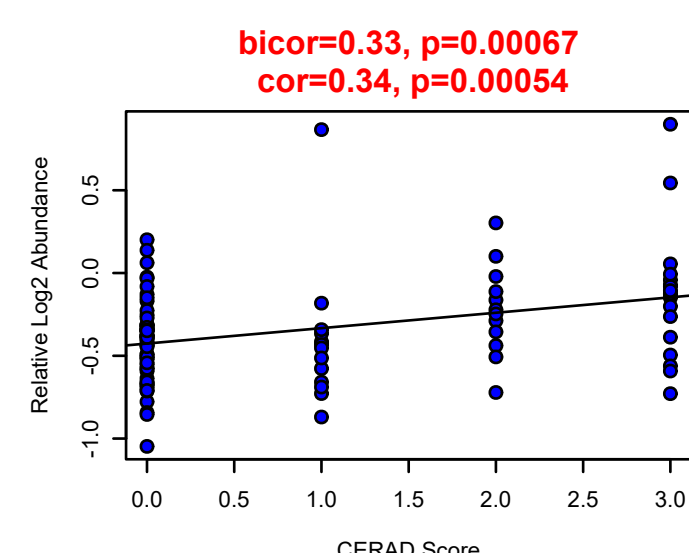
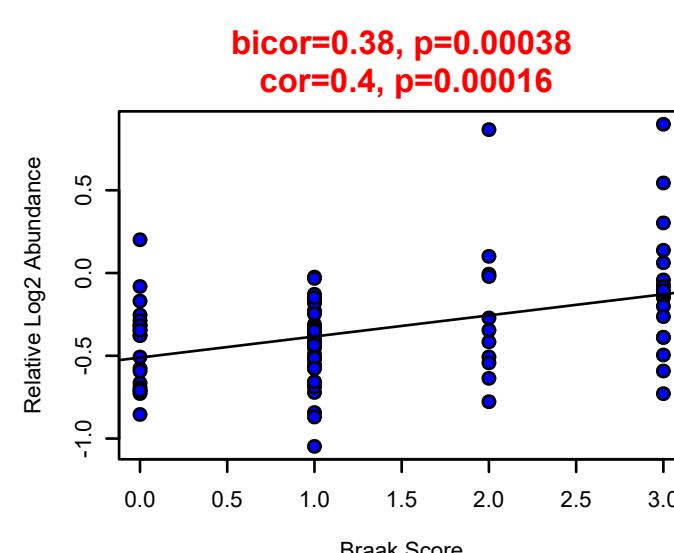
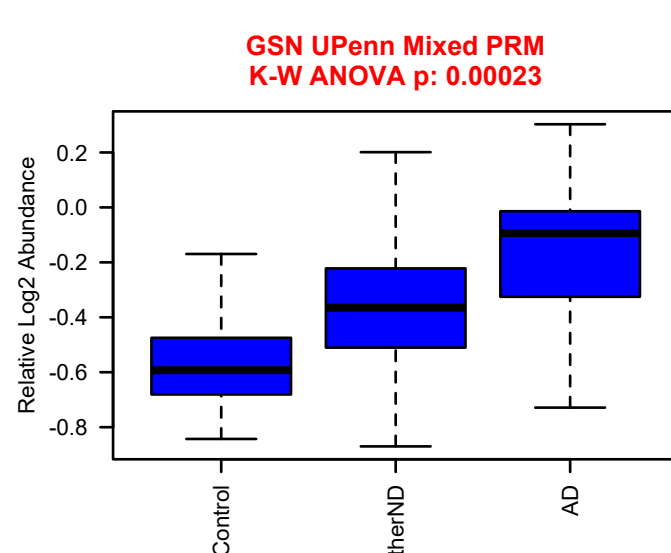
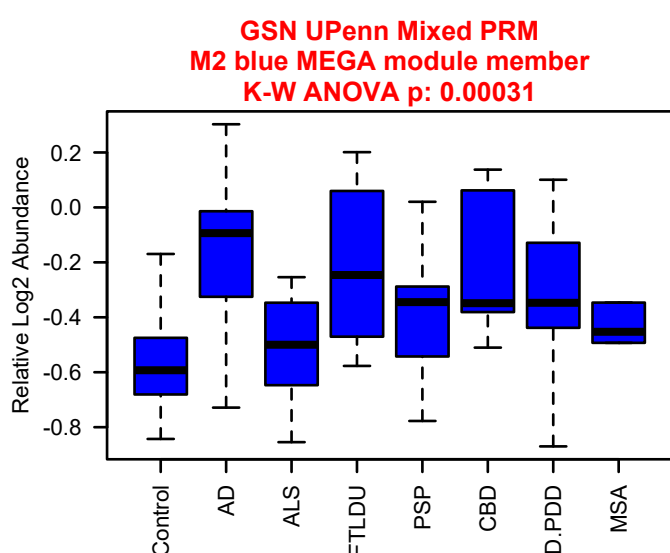
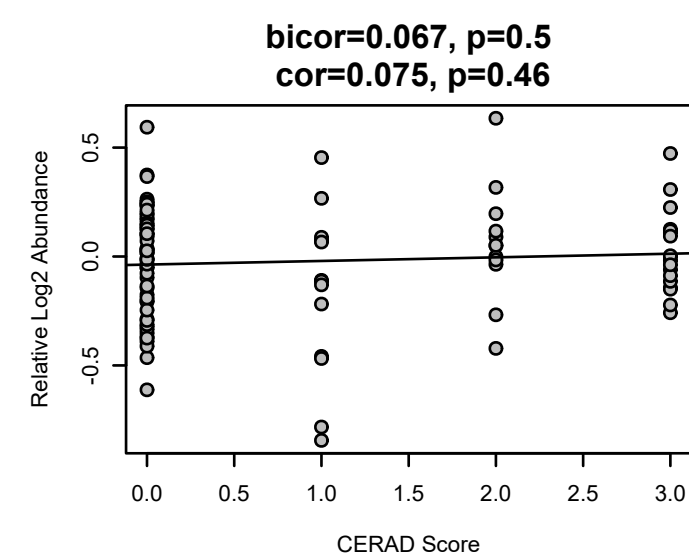
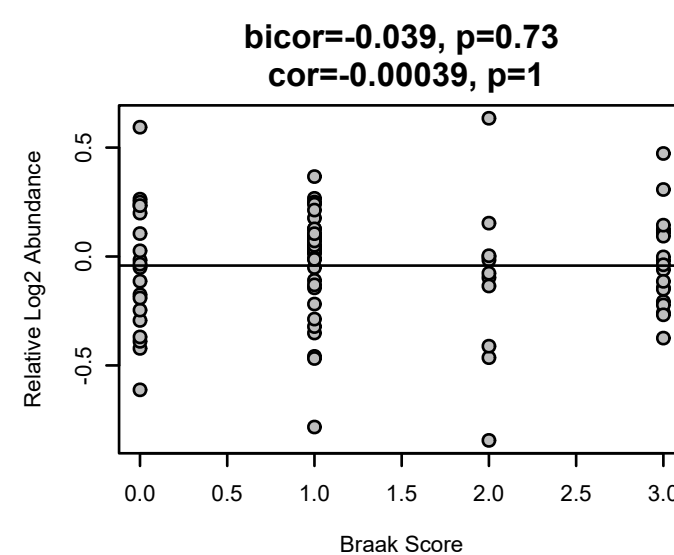
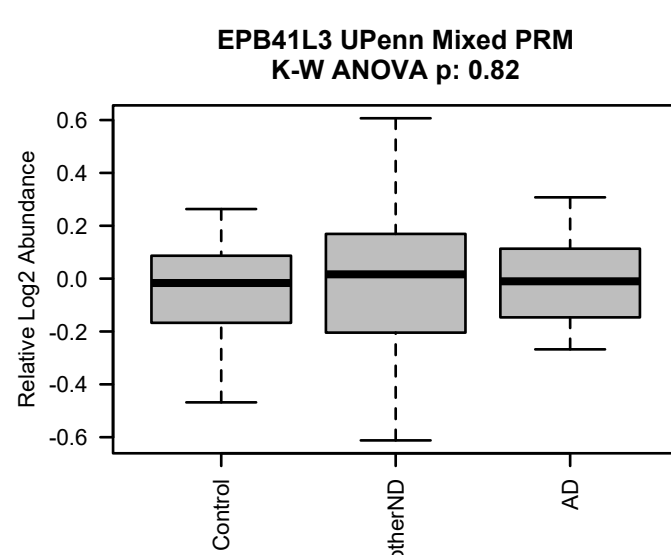
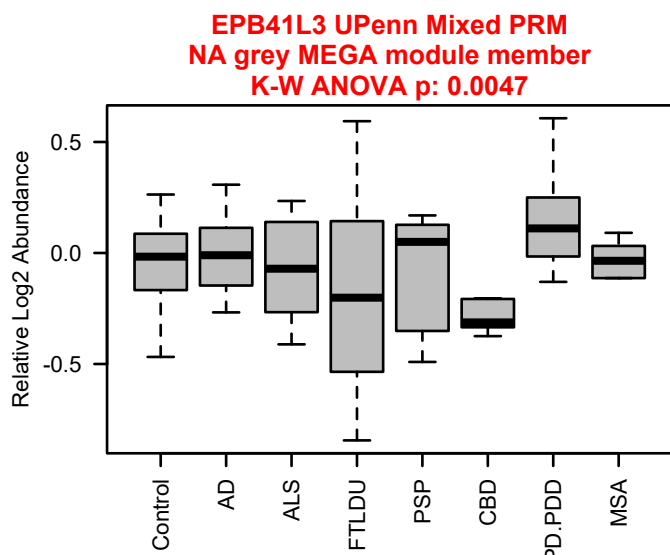
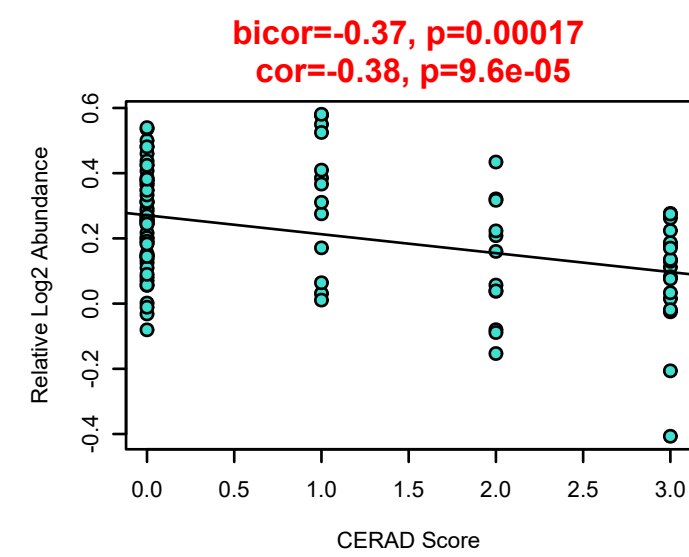
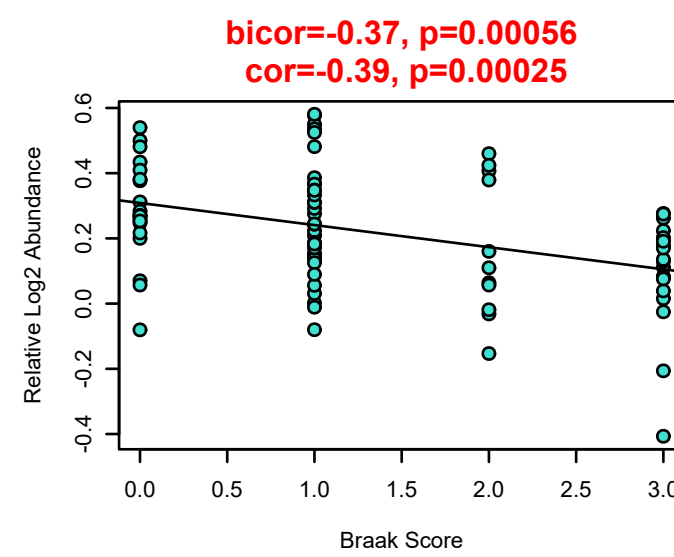
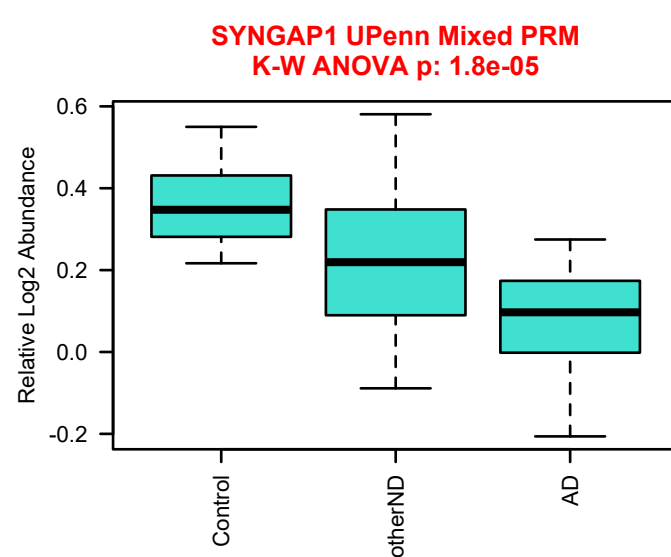
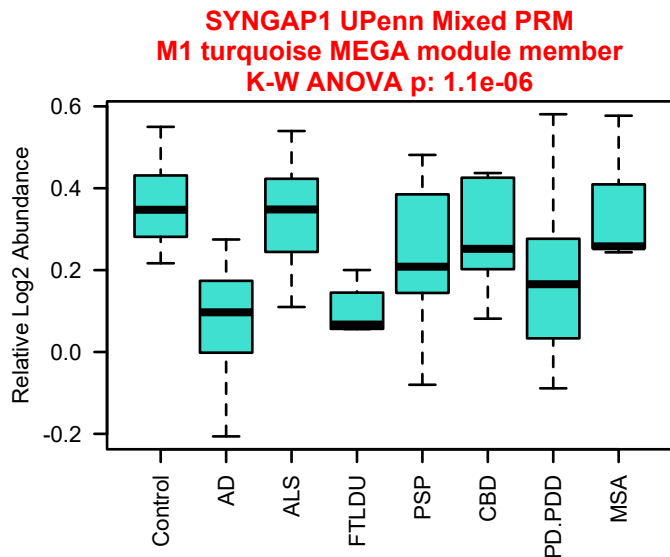


bicor=0.25, p=0.021
cor=0.31, p=0.0041

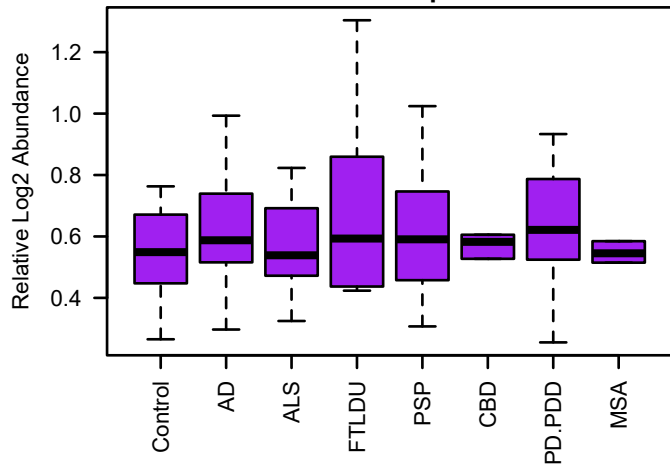


bicor=0.13, p=0.18
cor=0.16, p=0.11

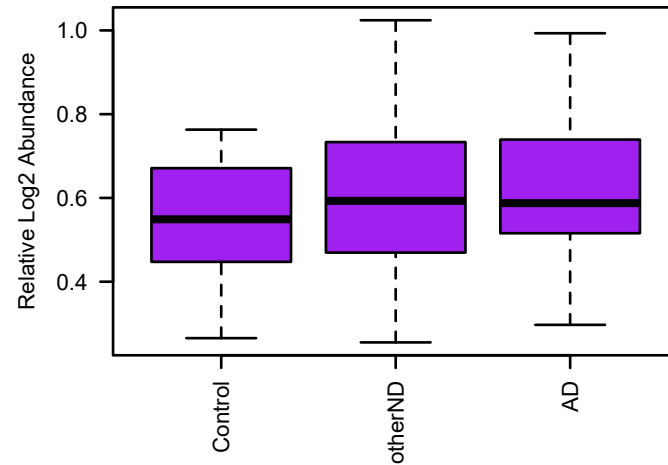




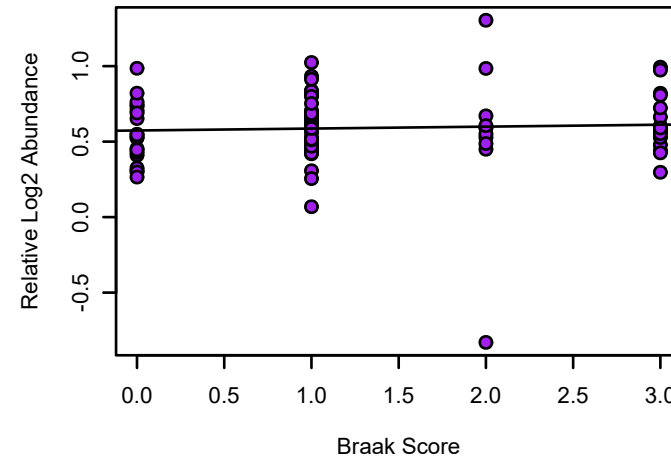
SET UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.76



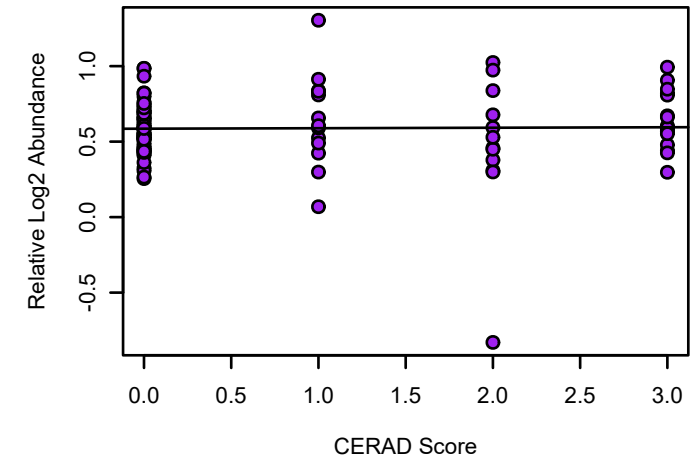
SET UPenn Mixed PRM
K-W ANOVA p: 0.32



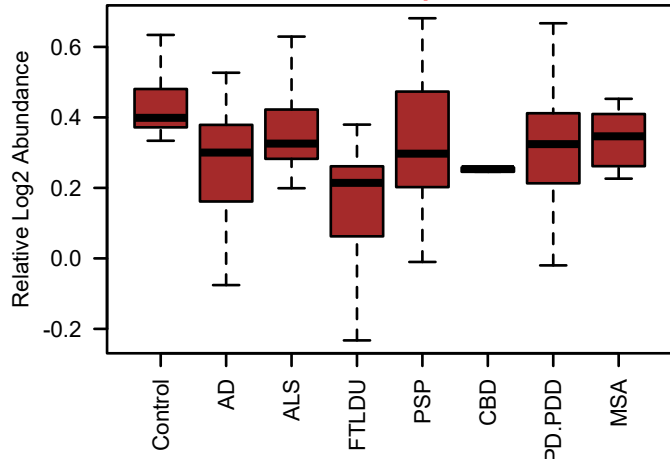
bicor=0.12, p=0.28
cor=0.054, p=0.63



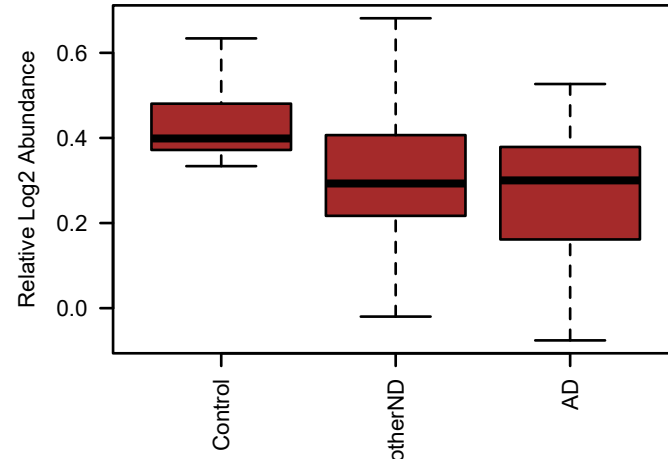
bicor=0.082, p=0.41
cor=0.015, p=0.88



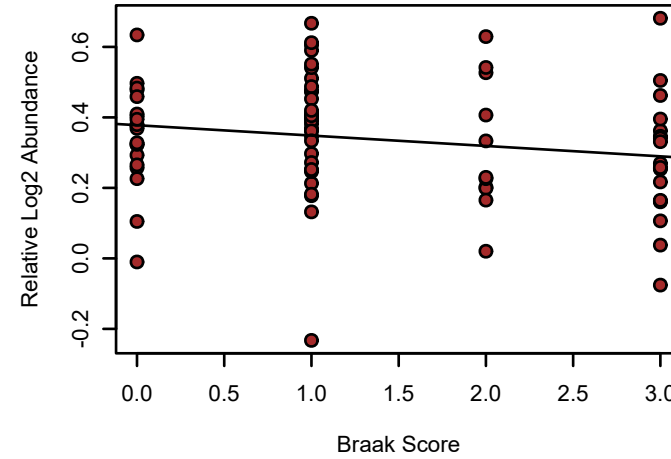
NDUFA6 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.005



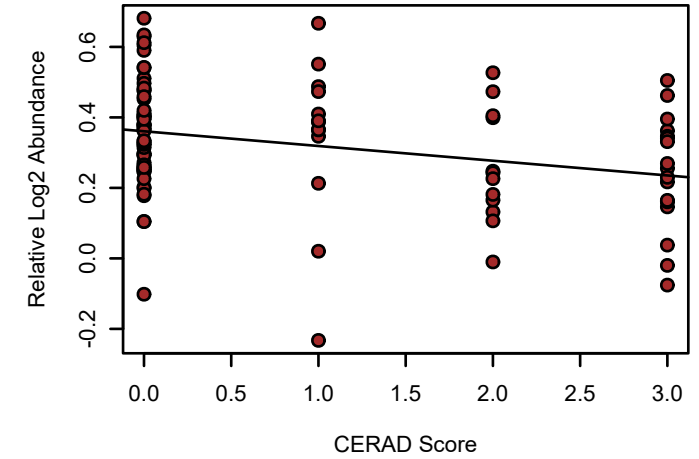
NDUFA6 UPenn Mixed PRM
K-W ANOVA p: 0.014



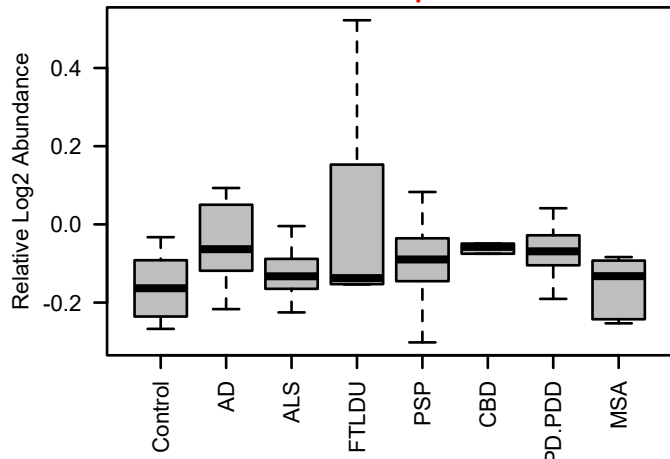
bicor=-0.22, p=0.043
cor=-0.19, p=0.083



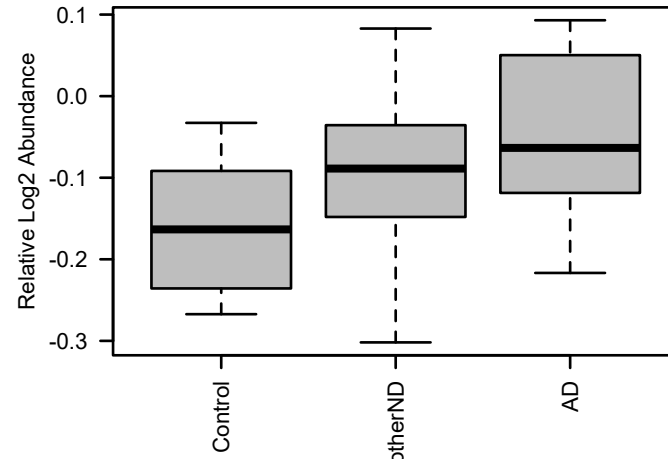
bicor=-0.3, p=0.0023
cor=-0.29, p=0.0034



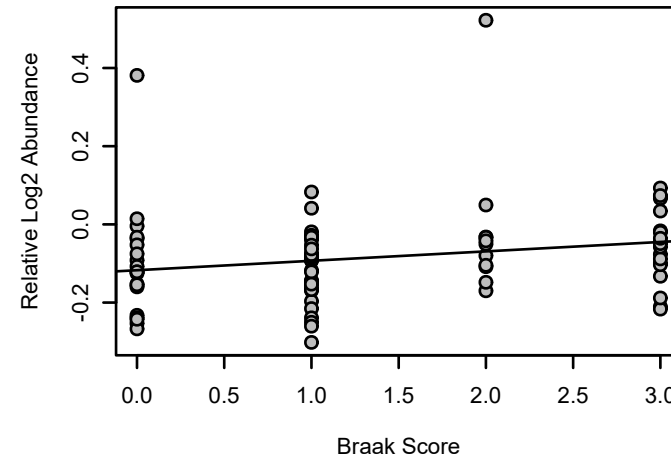
SPTAN1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.0062



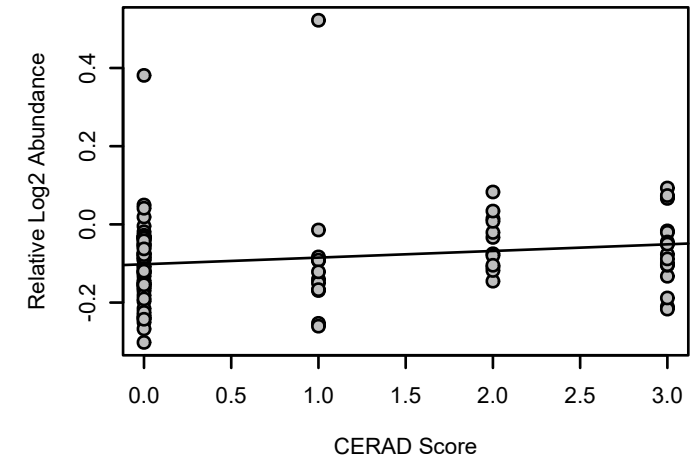
SPTAN1 UPenn Mixed PRM
K-W ANOVA p: 0.027



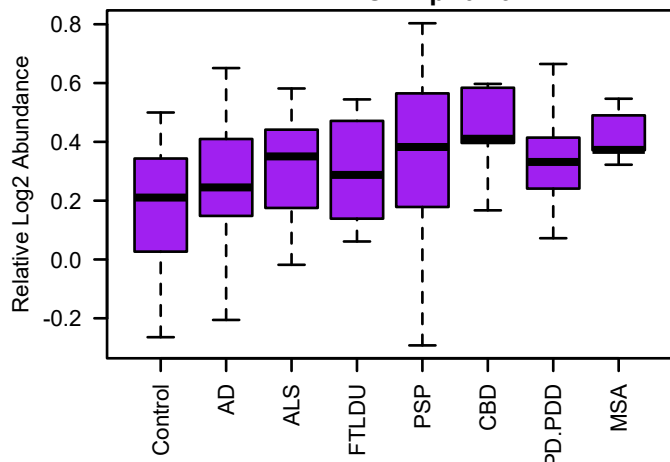
bicor=0.27, p=0.012
cor=0.21, p=0.055



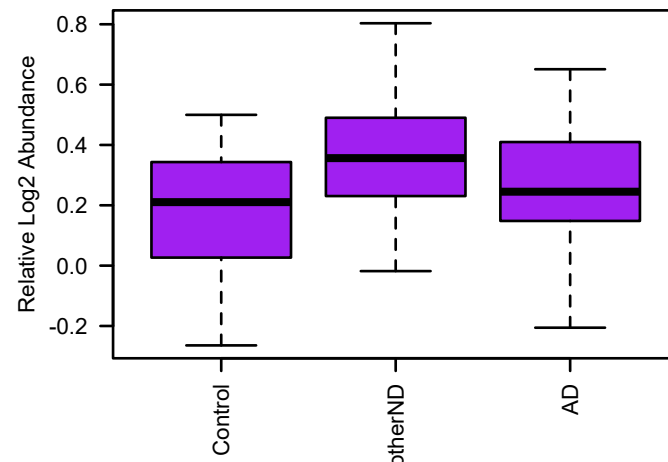
bicor=0.26, p=0.0094
cor=0.18, p=0.073



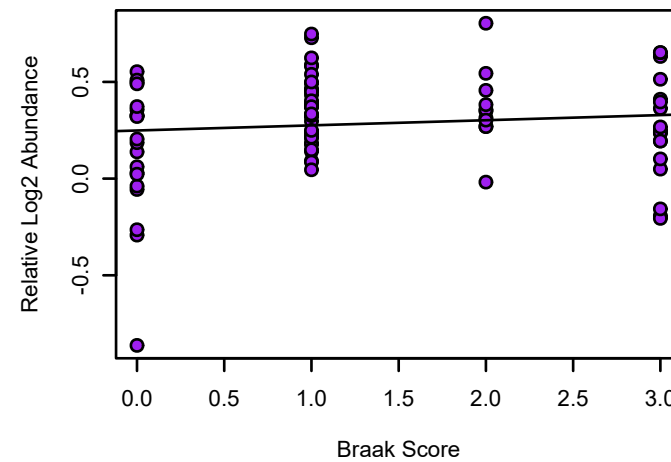
MATR3 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.29



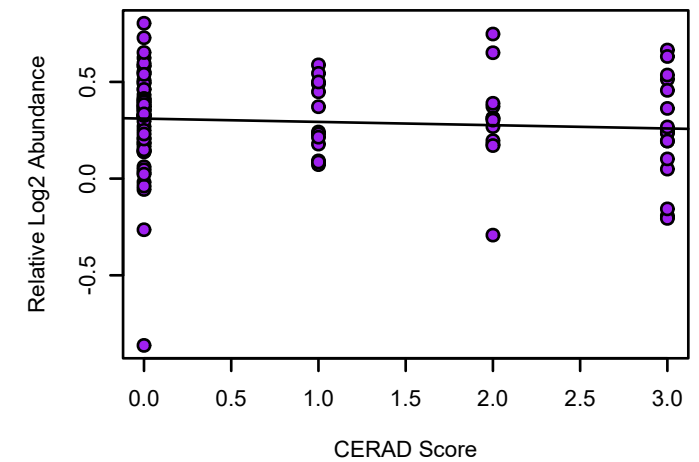
MATR3 UPenn Mixed PRM
K-W ANOVA p: 0.068



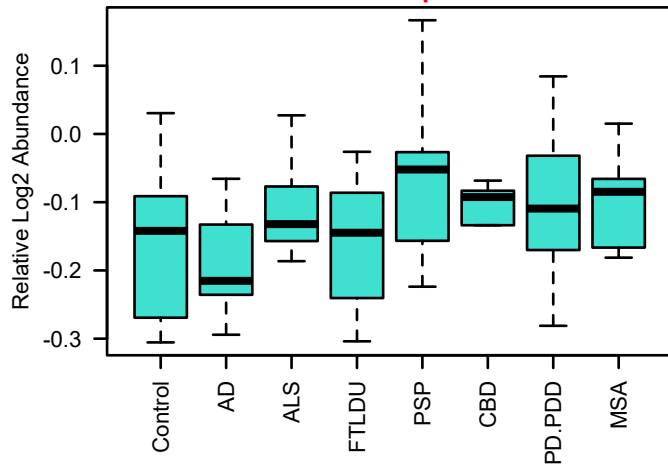
bicor=0.026, p=0.82
cor=0.11, p=0.32



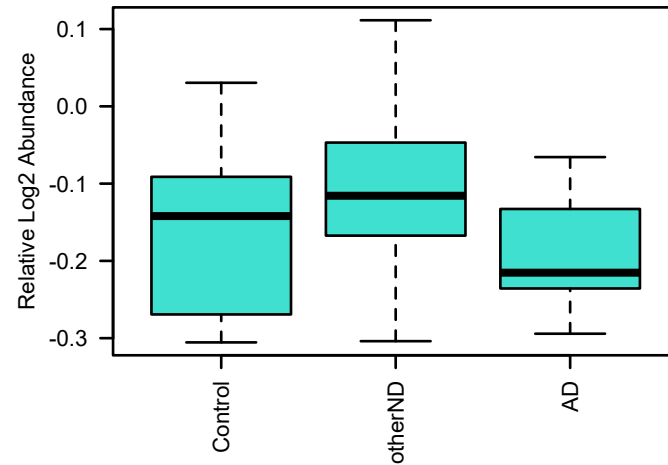
bicor=-0.12, p=0.23
cor=-0.081, p=0.42



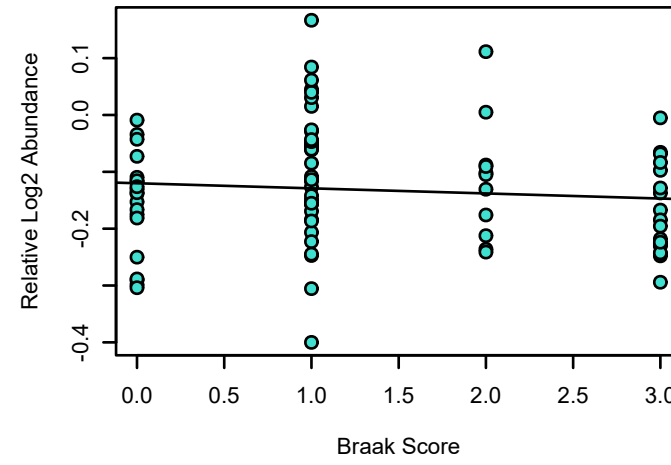
DNM1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.022



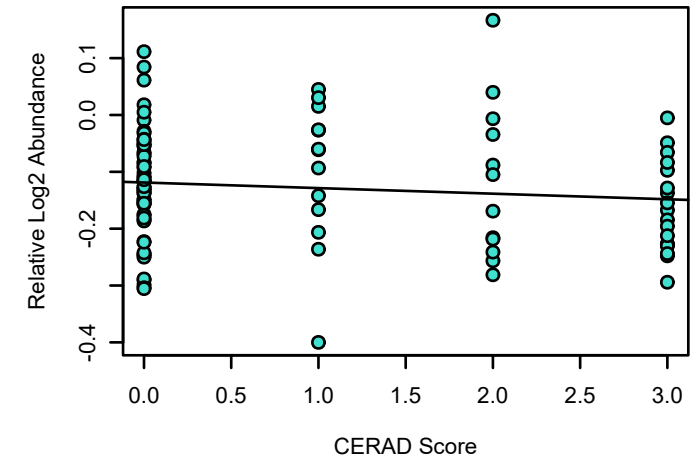
DNM1 UPenn Mixed PRM
K-W ANOVA p: 0.0033



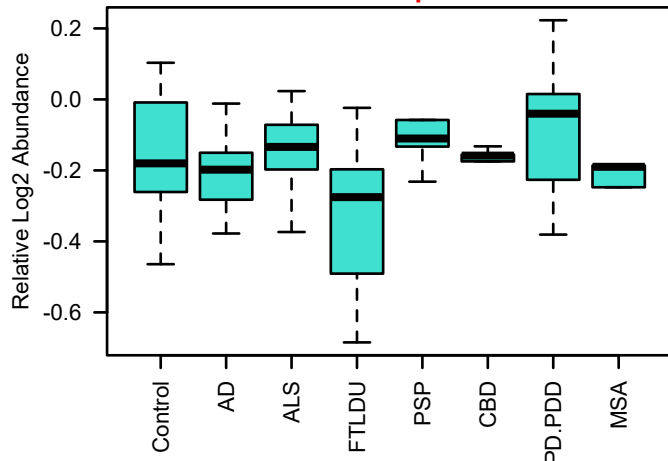
bicor=-0.094, p=0.39
cor=-0.092, p=0.41



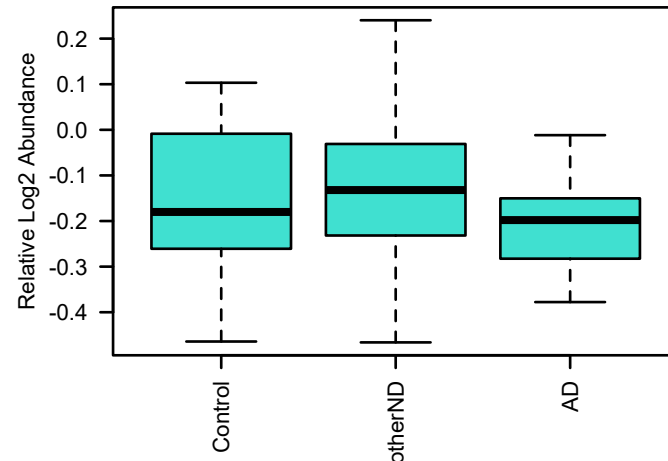
bicor=-0.13, p=0.2
cor=-0.11, p=0.28



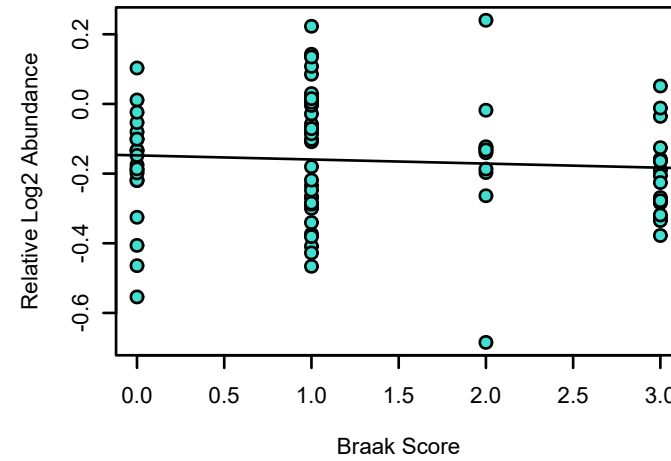
STXBP1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0046



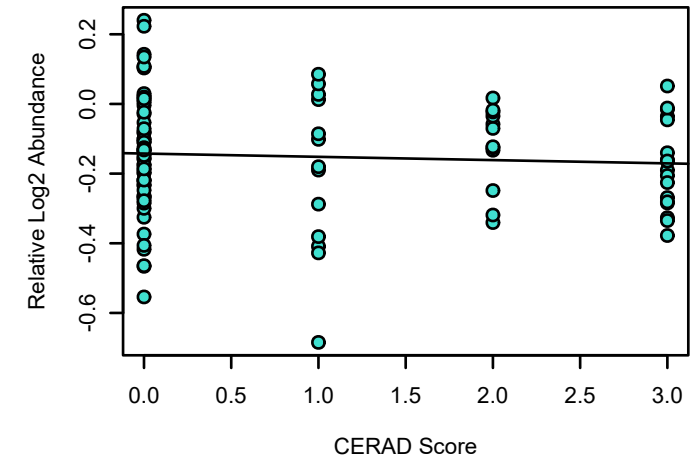
STXBP1 UPenn Mixed PRM
K-W ANOVA p: 0.4



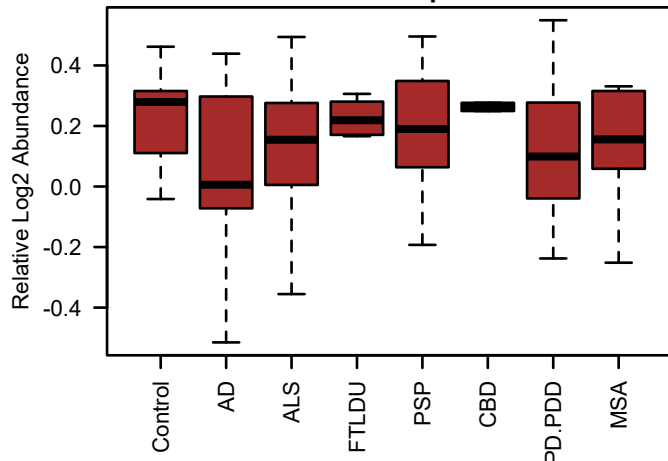
bicor=-0.083, p=0.45
cor=-0.075, p=0.5



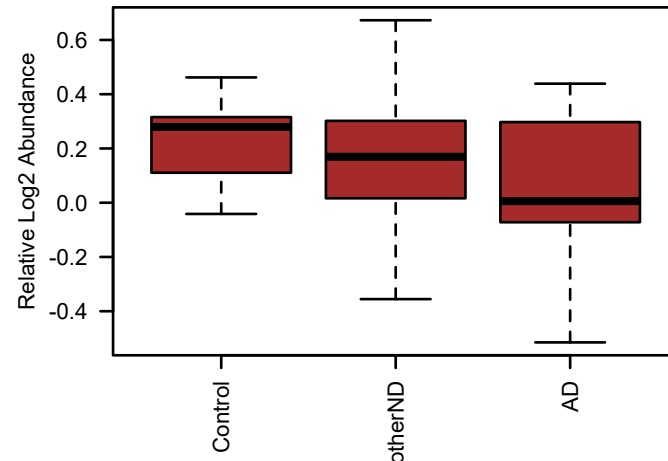
bicor=-0.07, p=0.49
cor=-0.067, p=0.51



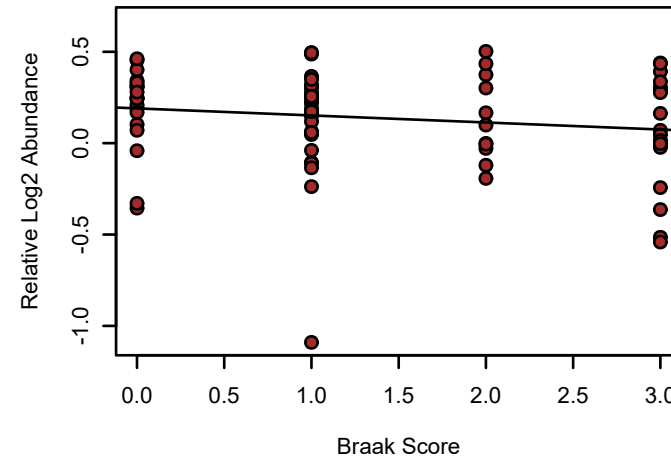
GABRA1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.37



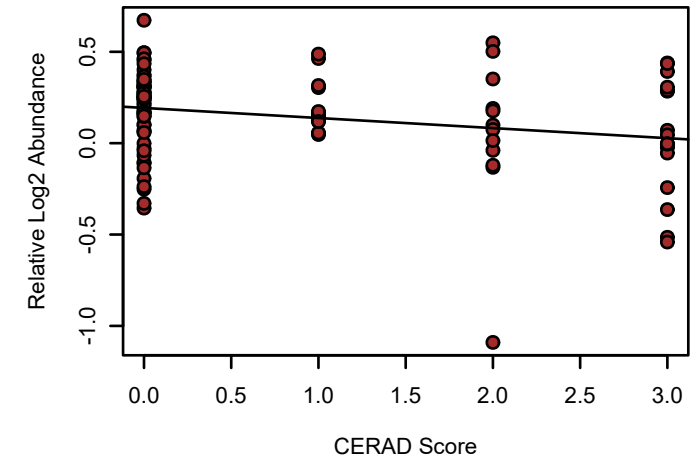
GABRA1 UPenn Mixed PRM
K-W ANOVA p: 0.24



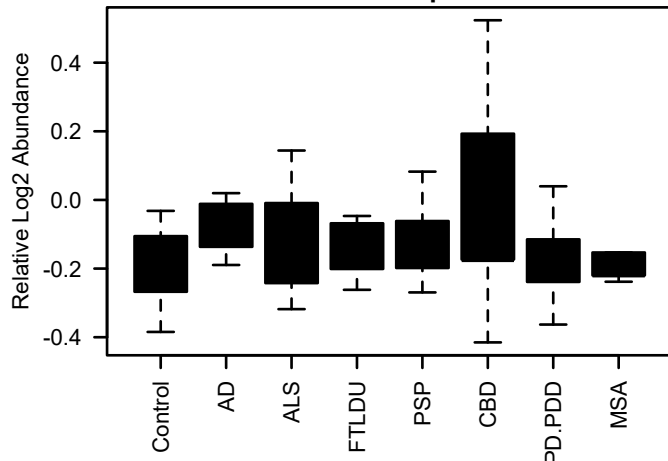
bicor=-0.18, p=0.095
cor=-0.16, p=0.15



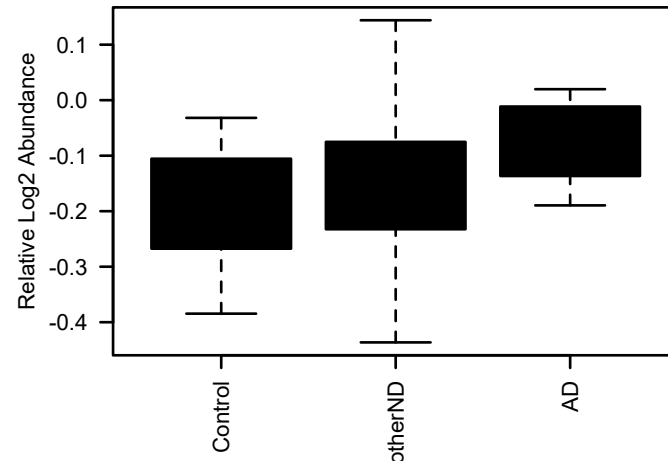
bicor=-0.21, p=0.035
cor=-0.25, p=0.012



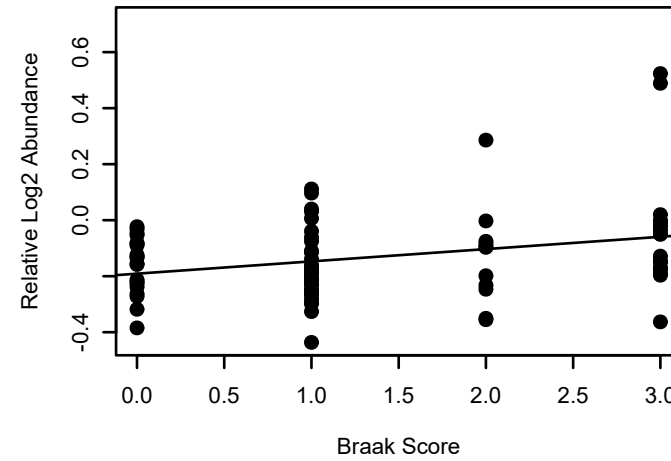
RPL7 UPenn Mixed PRM
M7 black MEGA module member
K-W ANOVA p: 0.24



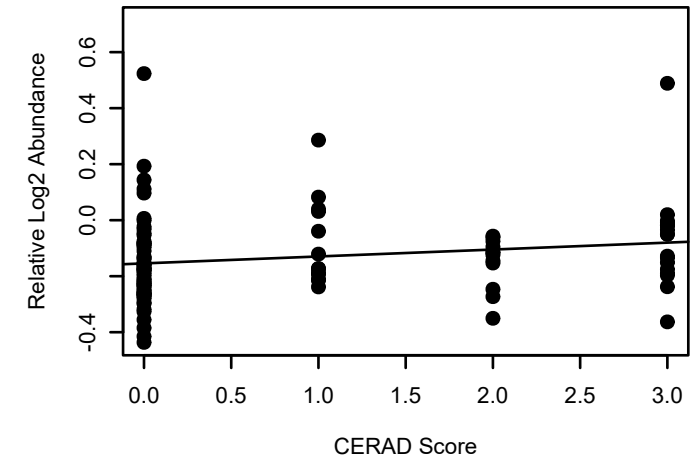
RPL7 UPenn Mixed PRM
K-W ANOVA p: 0.046



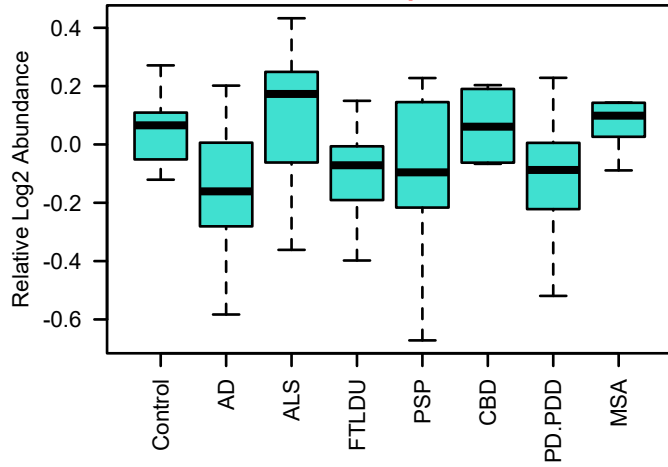
bicor=0.22, p=0.048
cor=0.3, p=0.0056



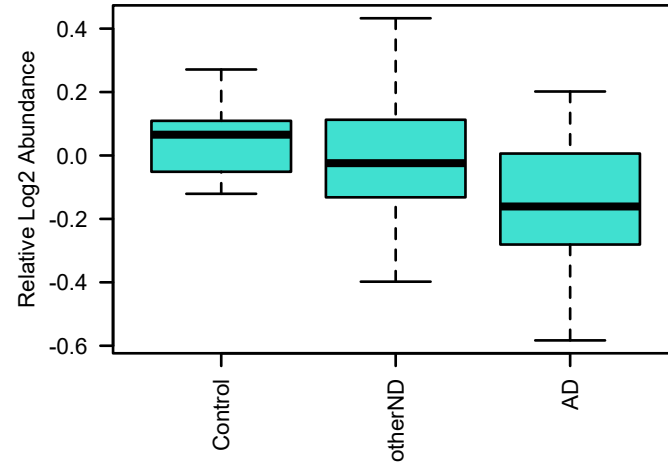
bicor=0.22, p=0.025
cor=0.19, p=0.058



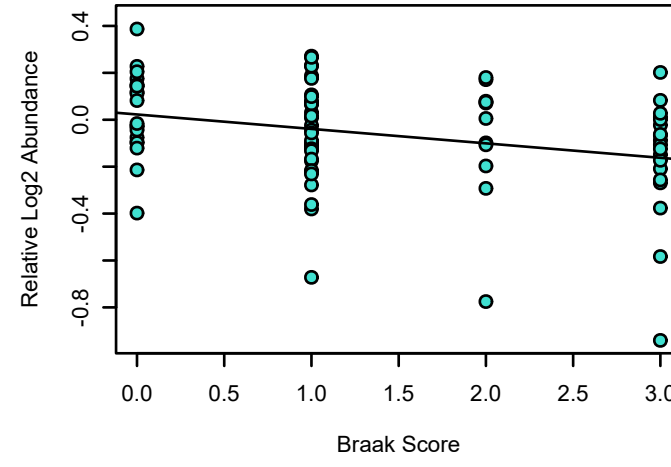
DLGAP1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00061



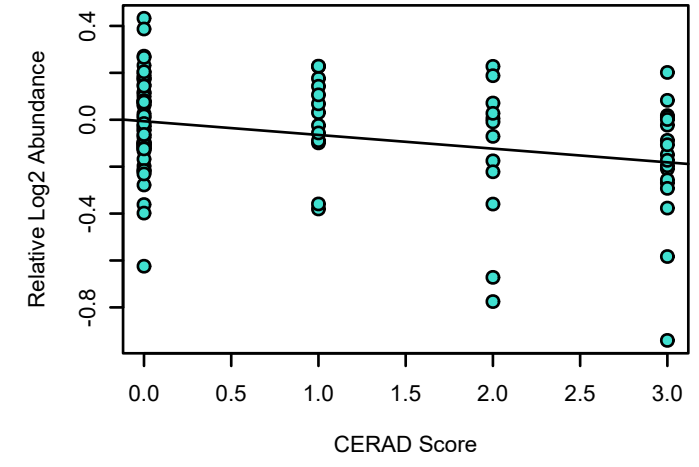
DLGAP1 UPenn Mixed PRM
K-W ANOVA p: 0.0037



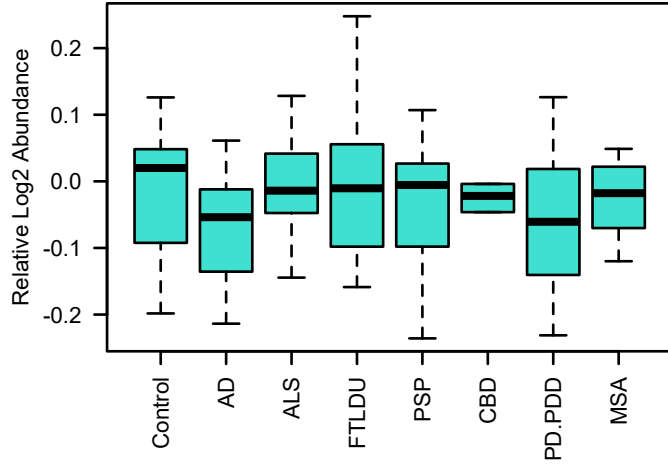
bicor=-0.25, p=0.024
cor=-0.29, p=0.0075



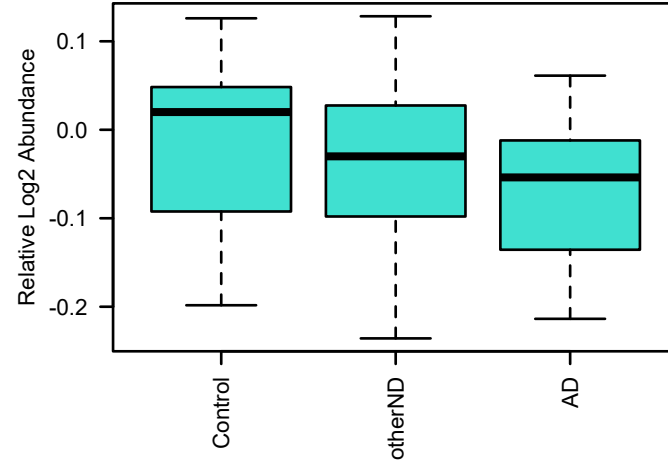
bicor=-0.25, p=0.011
cor=-0.3, p=0.0024



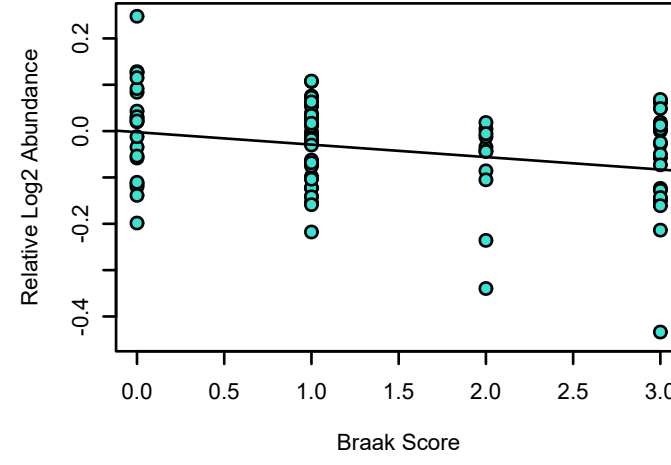
SEPT6 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.26



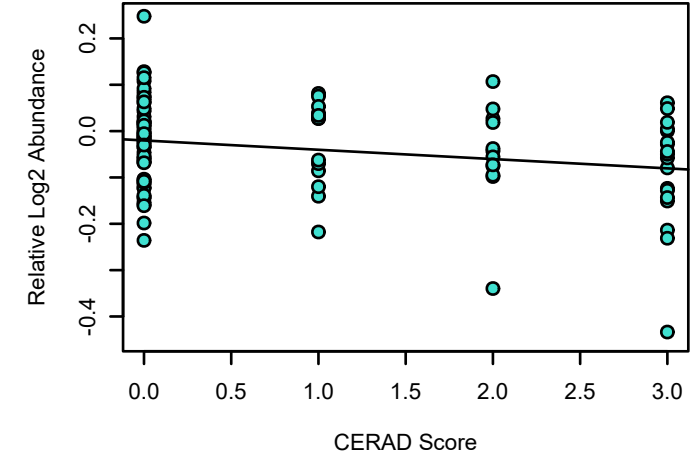
SEPT6 UPenn Mixed PRM
K-W ANOVA p: 0.074



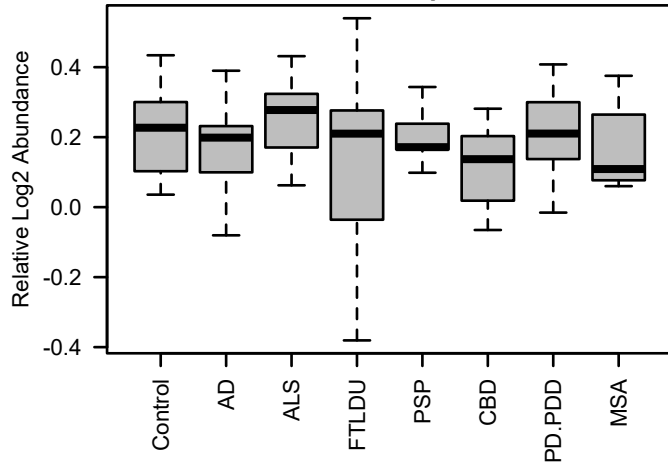
bicor=-0.24, p=0.026
cor=-0.27, p=0.013



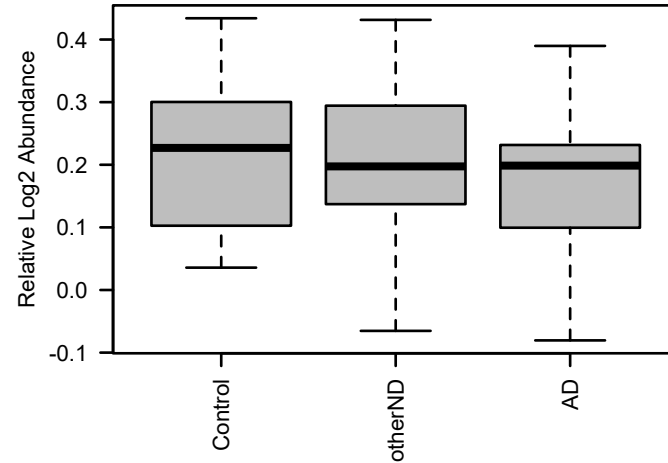
bicor=-0.19, p=0.064
cor=-0.23, p=0.021



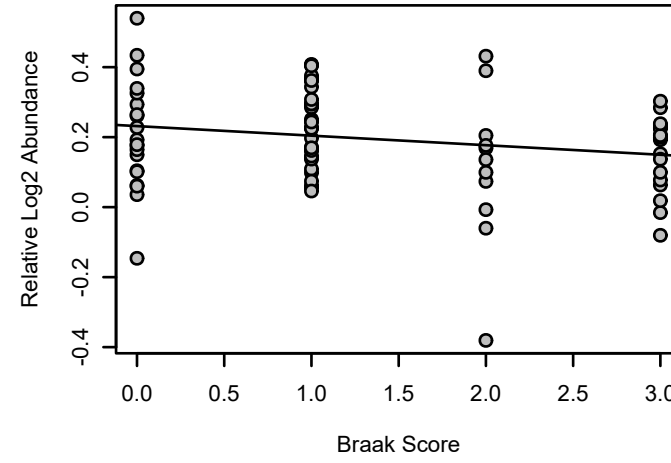
CS UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.49



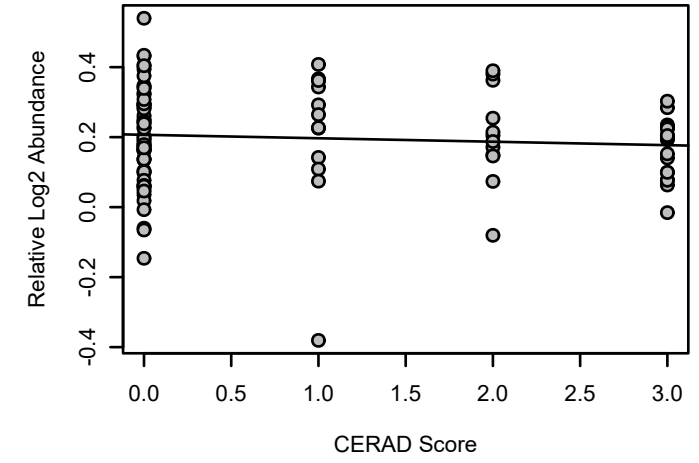
CS UPenn Mixed PRM
K-W ANOVA p: 0.76



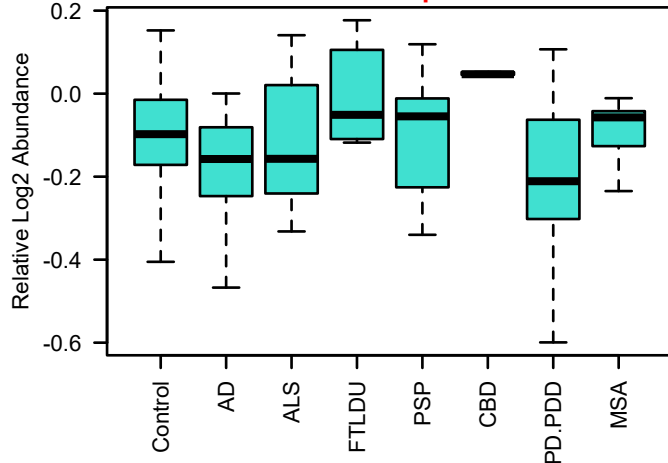
bicor=-0.19, p=0.086
cor=-0.2, p=0.068



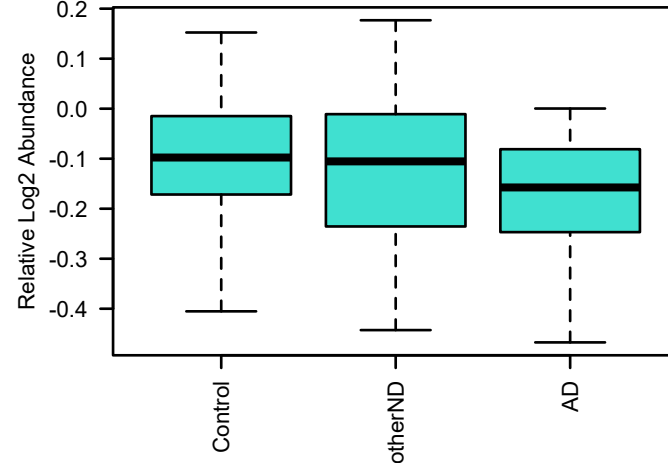
bicor=-0.093, p=0.36
cor=-0.084, p=0.41



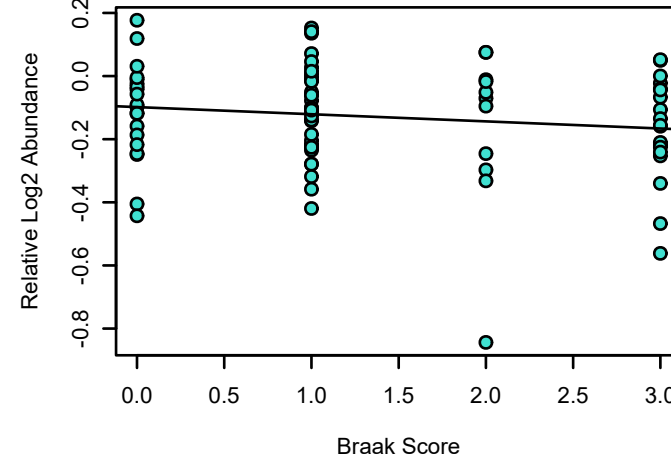
PSD3 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.014



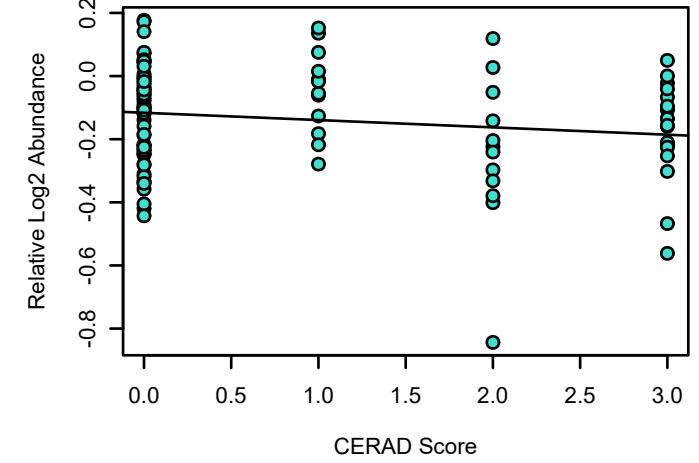
PSD3 UPenn Mixed PRM
K-W ANOVA p: 0.088



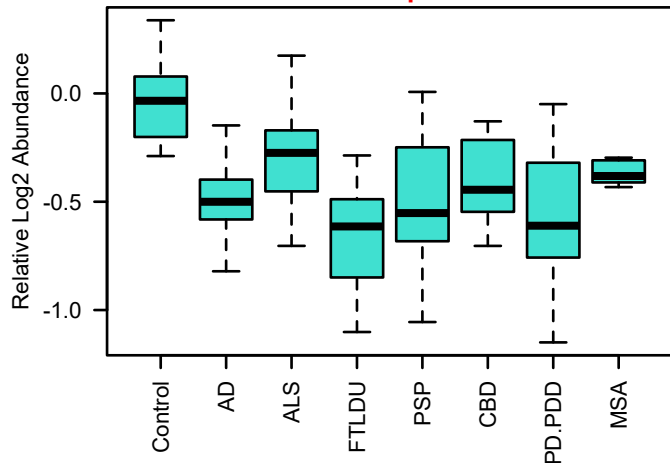
bicor=-0.14, p=0.21
cor=-0.14, p=0.2



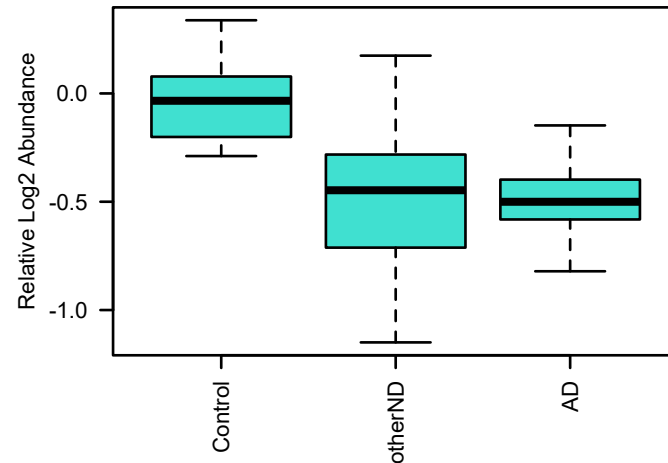
bicor=-0.13, p=0.2
cor=-0.16, p=0.11



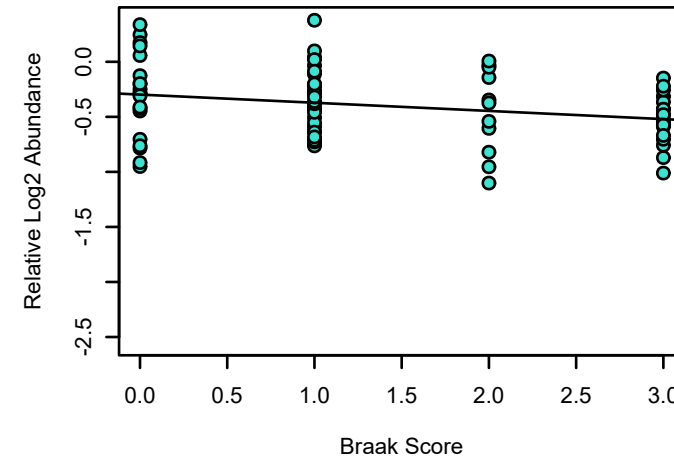
DGKB UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0025



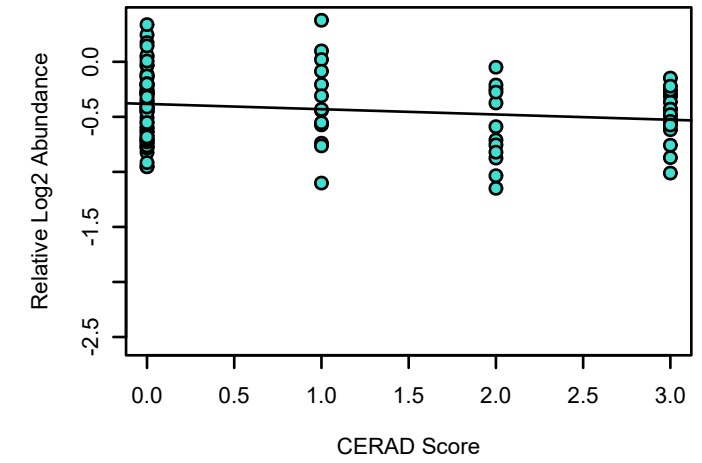
DGKB UPenn Mixed PRM
K-W ANOVA p: 8.3e-05



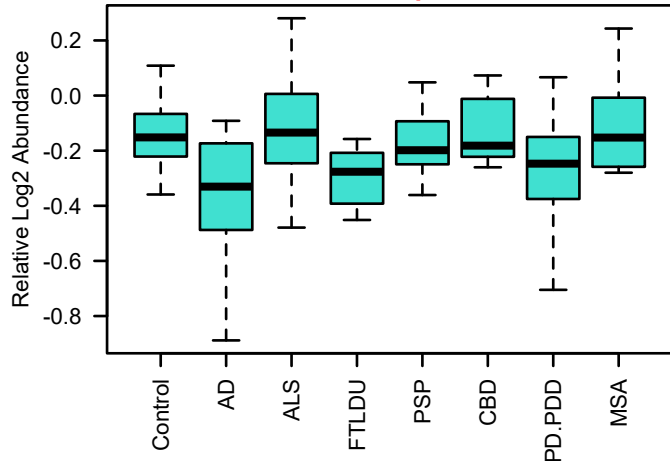
bicor=-0.23, p=0.039
cor=-0.25, p=0.022



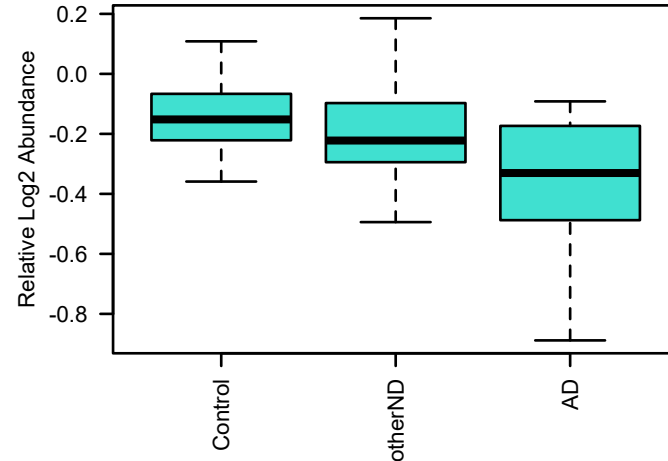
bicor=-0.17, p=0.089
cor=-0.18, p=0.073



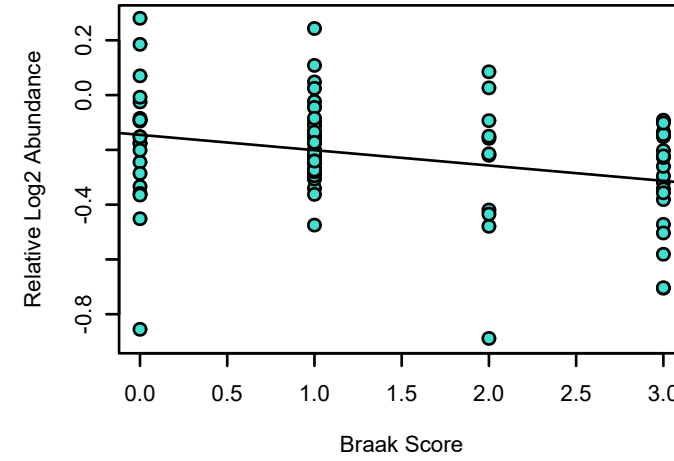
SYNGR1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0048



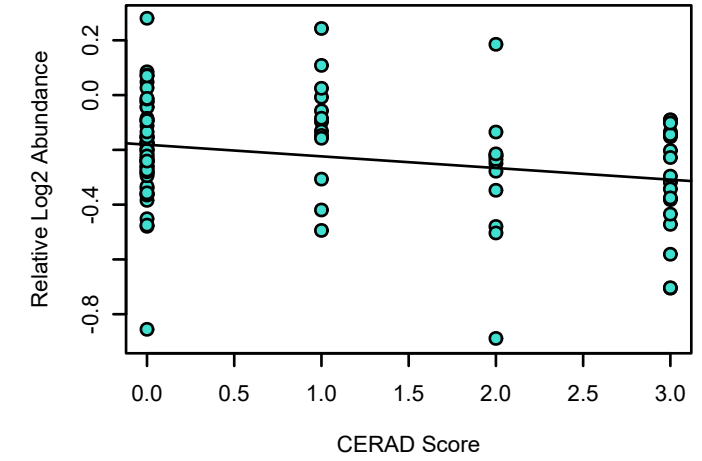
SYNGR1 UPenn Mixed PRM
K-W ANOVA p: 0.0073



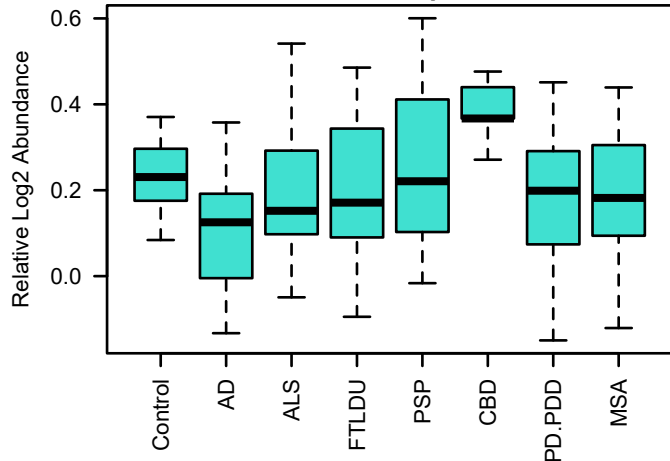
bicor=-0.29, p=0.0078
cor=-0.29, p=0.0075



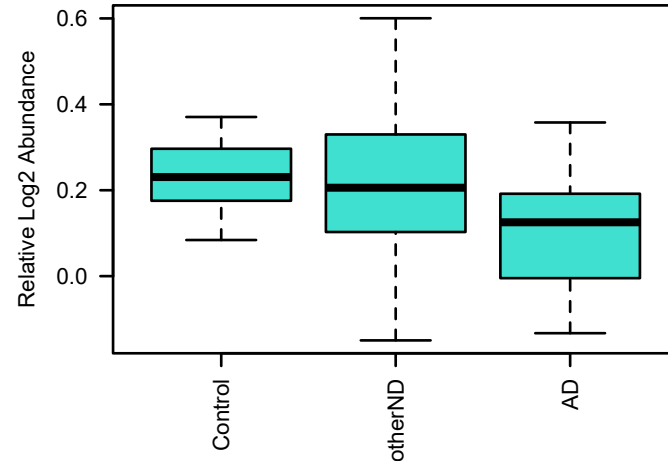
bicor=-0.25, p=0.011
cor=-0.25, p=0.012



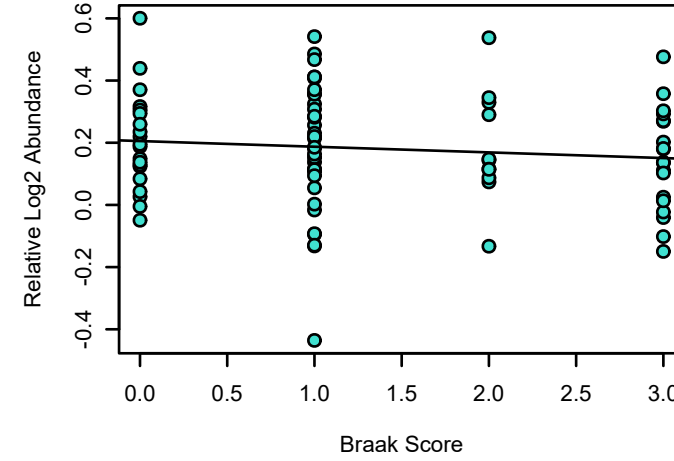
GPM6B UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.13



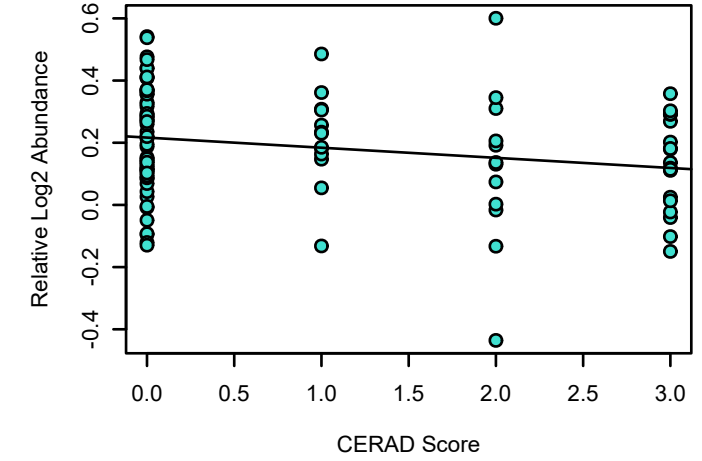
GPM6B UPenn Mixed PRM
K-W ANOVA p: 0.094



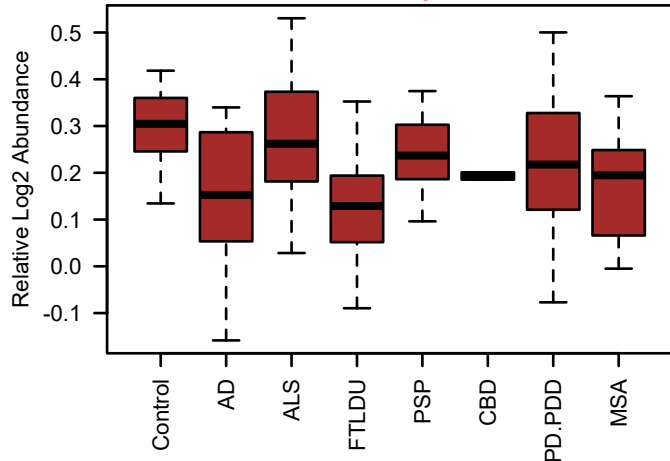
bicor=-0.1, p=0.35
cor=-0.11, p=0.32



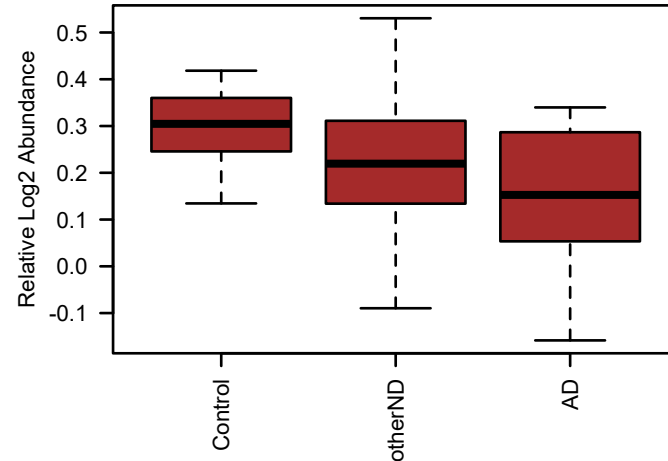
bicor=-0.21, p=0.033
cor=-0.22, p=0.028



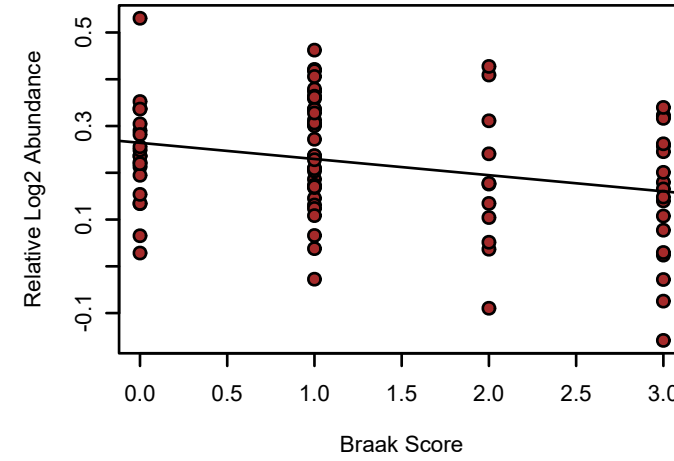
STXBP5L UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.024



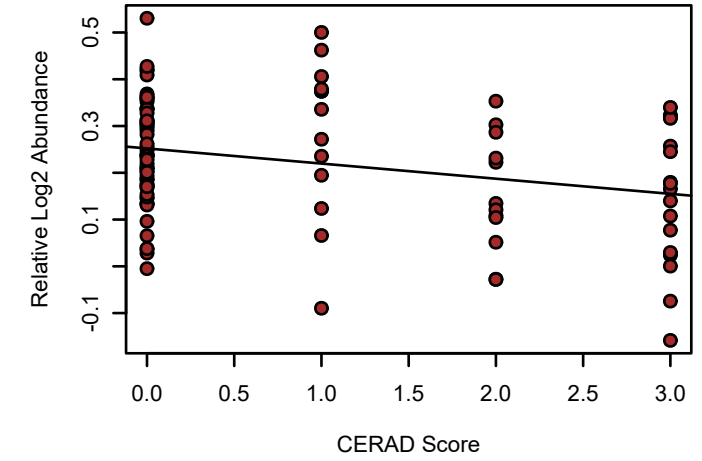
STXBP5L UPenn Mixed PRM
K-W ANOVA p: 0.008



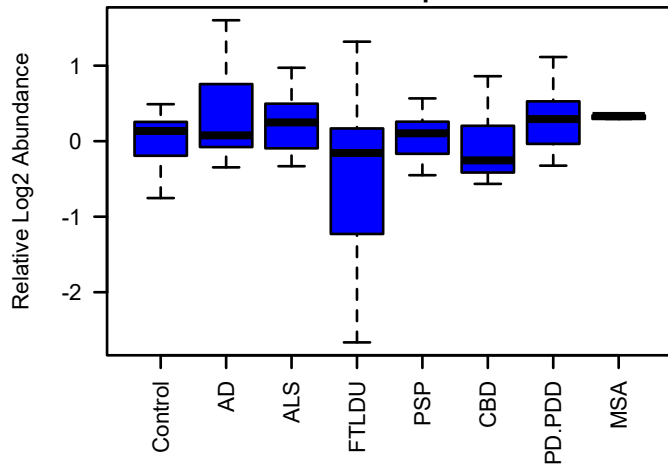
bicor=-0.26, p=0.019
cor=-0.28, p=0.0099



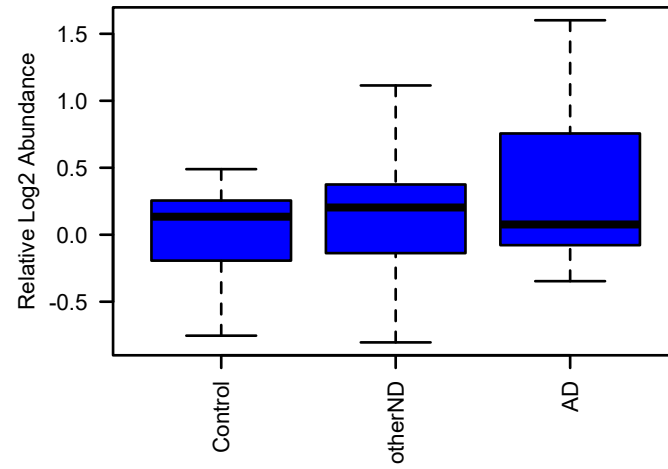
bicor=-0.27, p=0.0071
cor=-0.29, p=0.0034



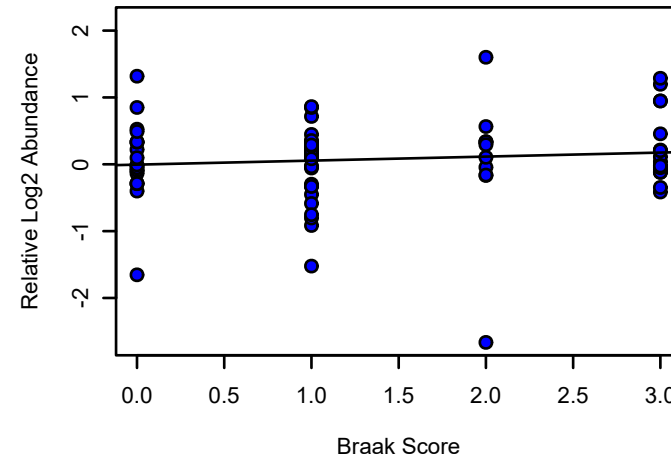
MOG UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.052



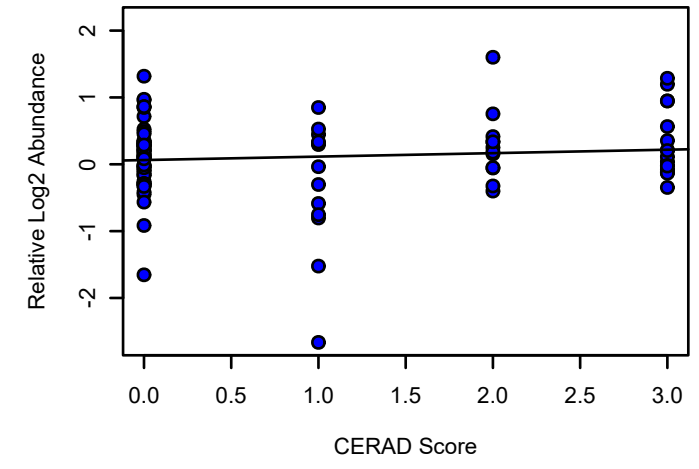
MOG UPenn Mixed PRM
K-W ANOVA p: 0.32



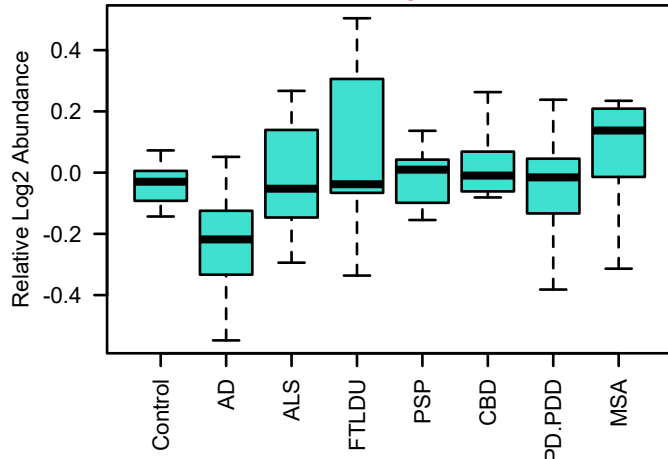
bicor=0.077, p=0.49
cor=0.11, p=0.32



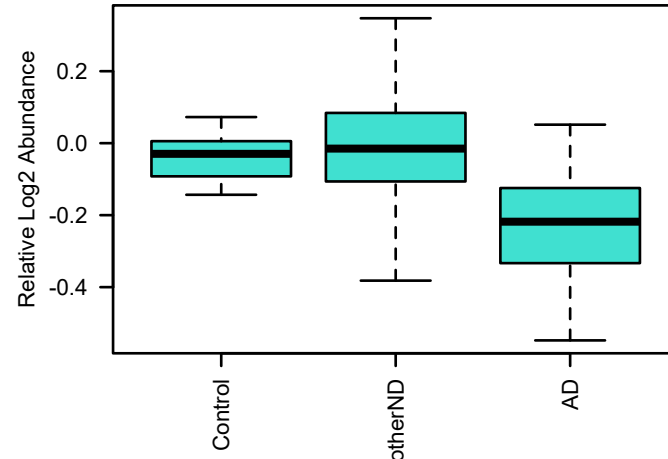
bicor=0.072, p=0.48
cor=0.1, p=0.32



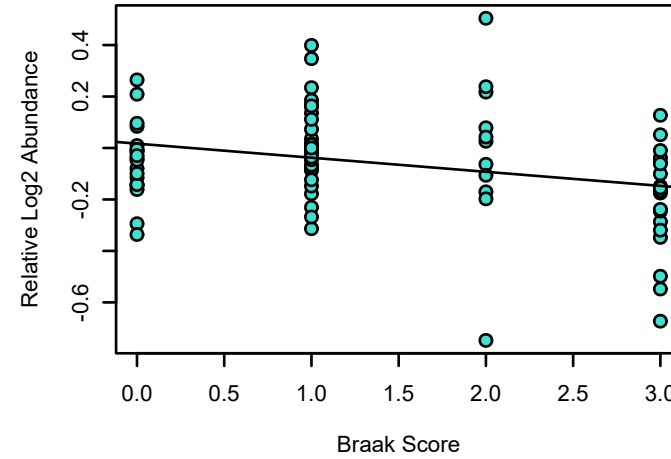
PCDH1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00041



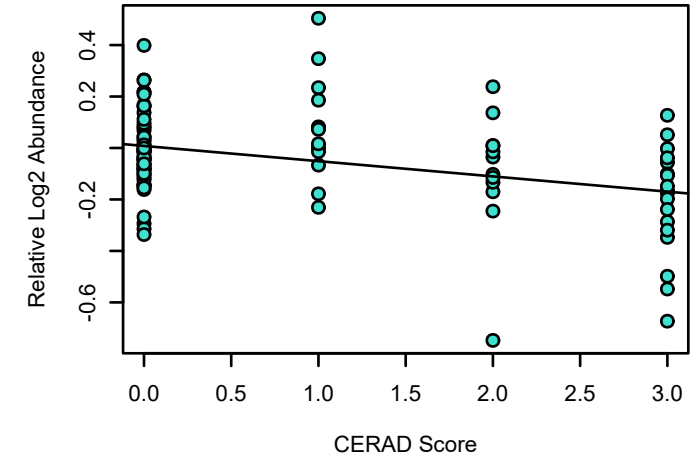
PCDH1 UPenn Mixed PRM
K-W ANOVA p: 9.4e-06



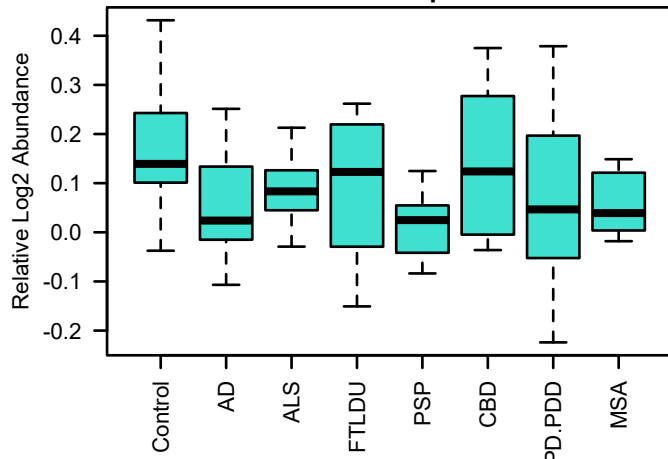
bicor=-0.25, p=0.021
cor=-0.29, p=0.0075



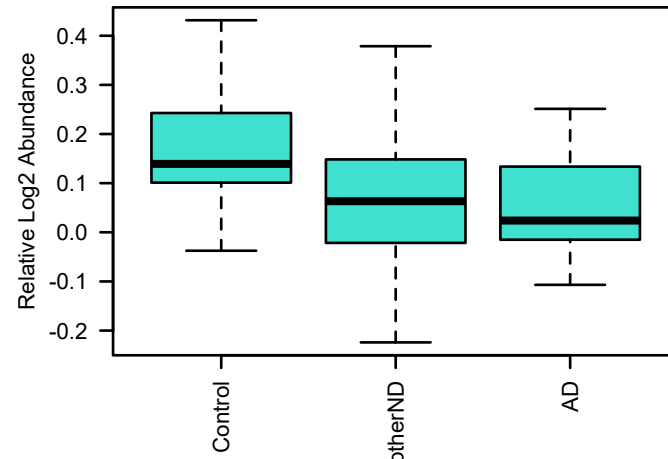
bicor=-0.33, p=0.00093
cor=-0.36, p=0.00023



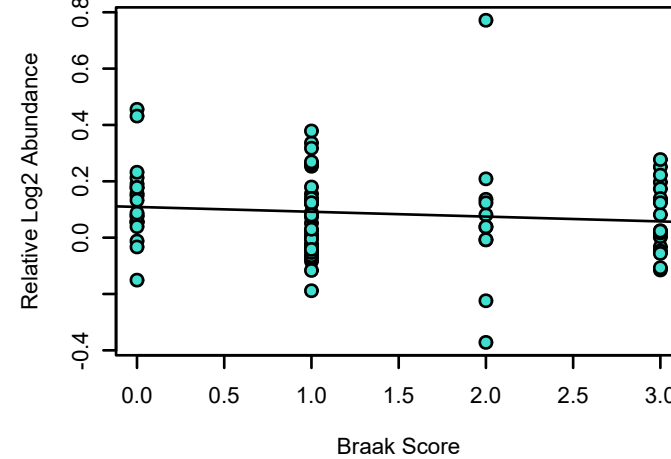
SEPT11 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.06



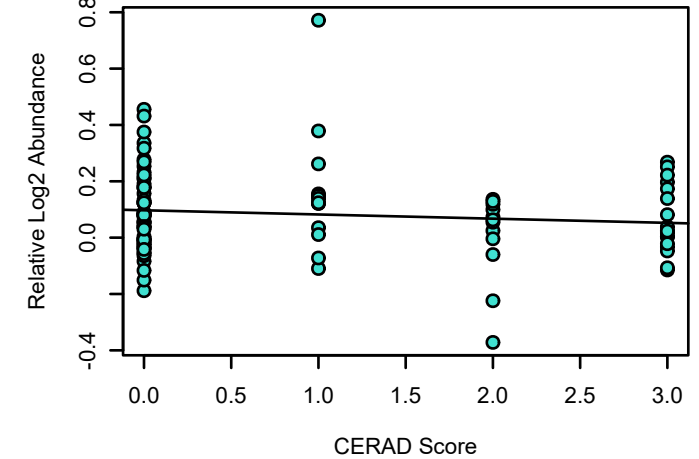
SEPT11 UPenn Mixed PRM
K-W ANOVA p: 0.027



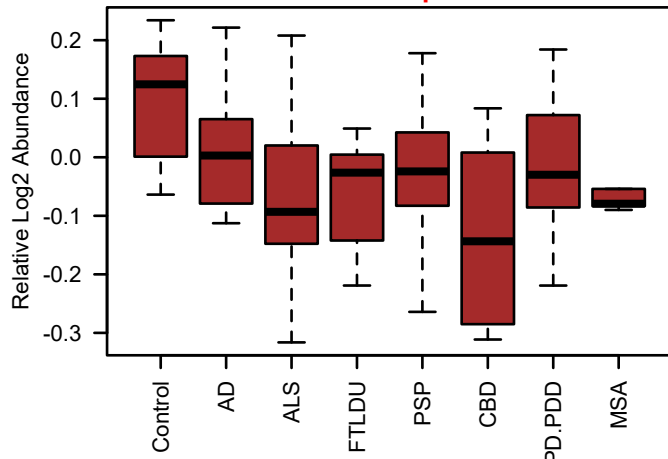
bicor=-0.14, p=0.19
cor=-0.12, p=0.28



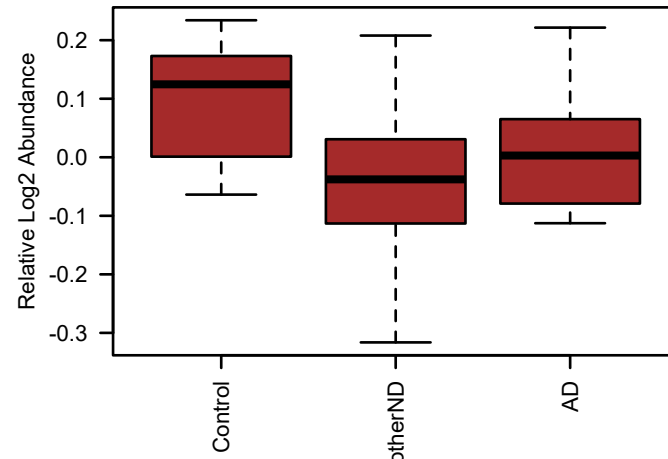
bicor=-0.11, p=0.3
cor=-0.11, p=0.28



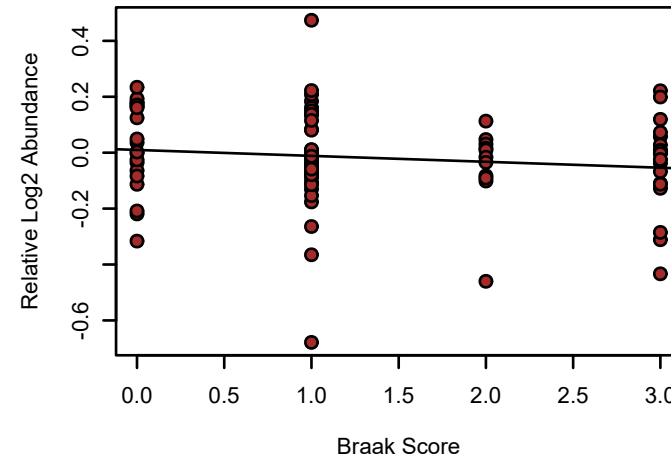
DNM3 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.015



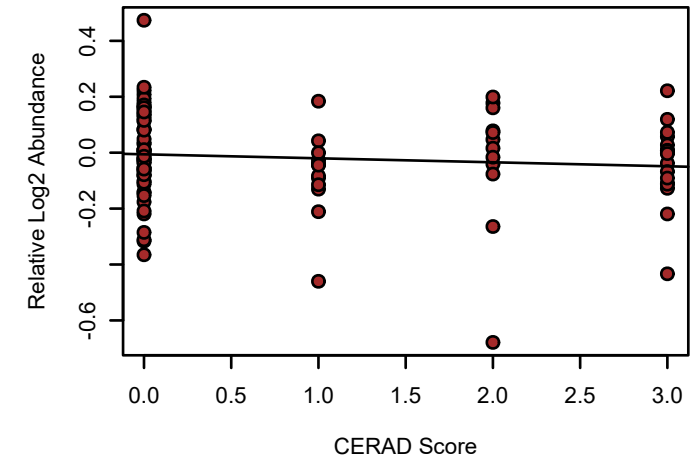
DNM3 UPenn Mixed PRM
K-W ANOVA p: 0.00075



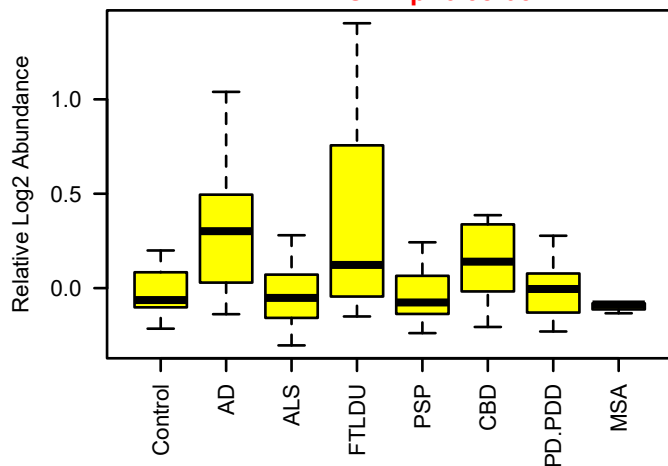
bicor=-0.13, p=0.26
cor=-0.13, p=0.24



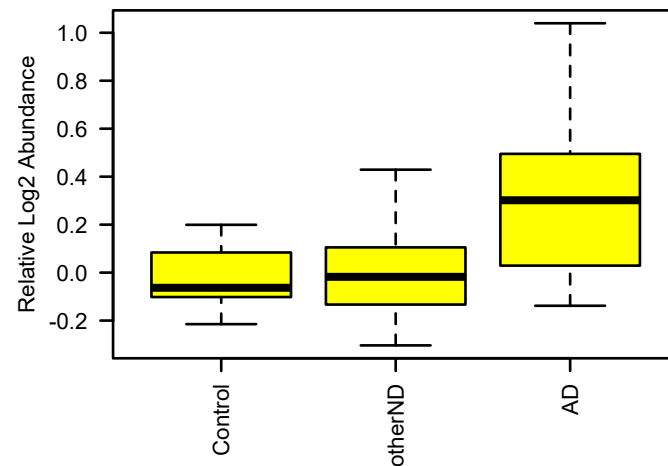
bicor=-0.058, p=0.57
cor=-0.1, p=0.32



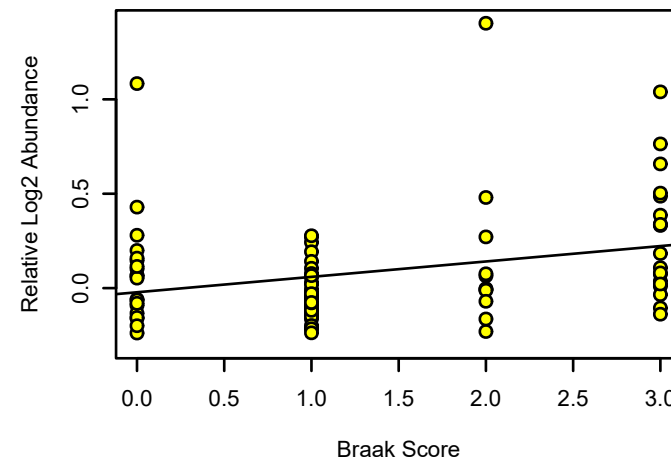
ERLIN2 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 6.3e-05



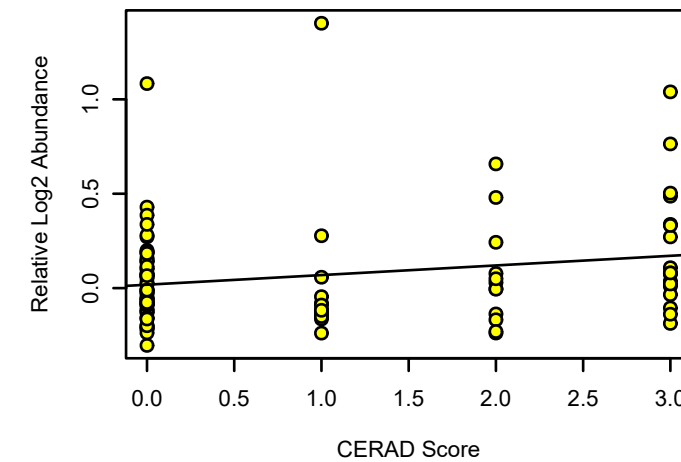
ERLIN2 UPenn Mixed PRM
K-W ANOVA p: 0.00073



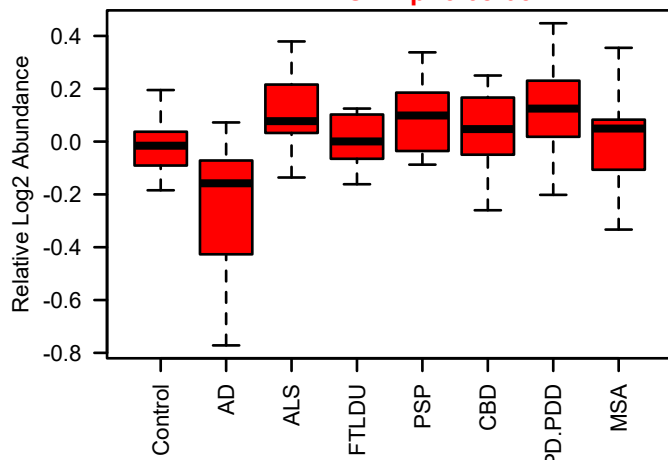
bicor=0.32, p=0.0027
cor=0.3, p=0.0056



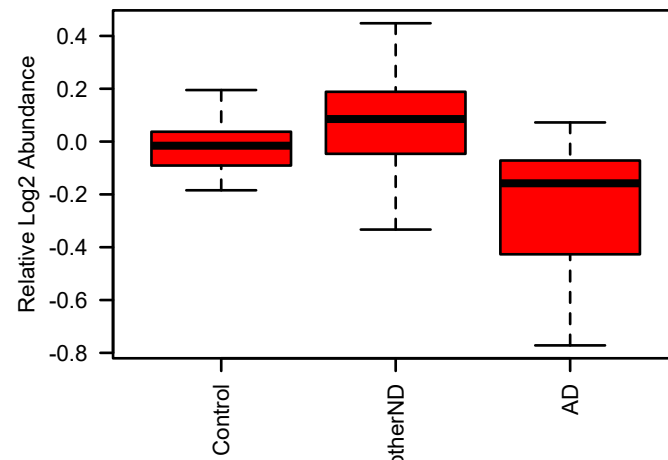
bicor=0.17, p=0.083
cor=0.22, p=0.028



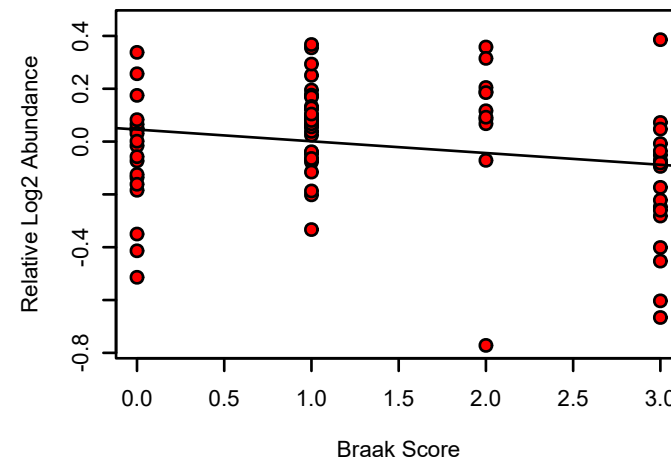
SNCA UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 3.6e-05



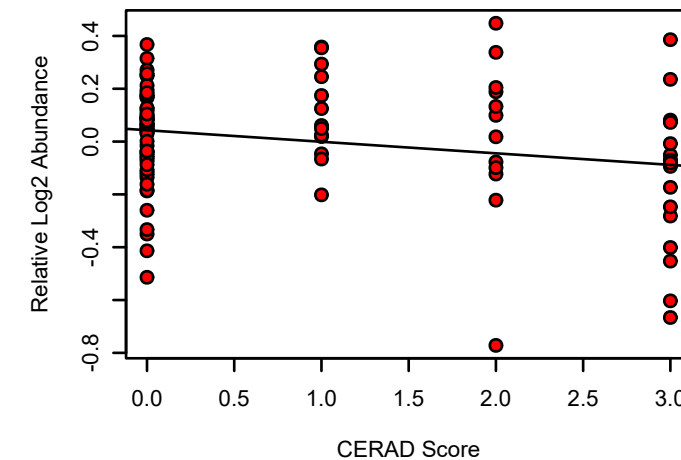
SNCA UPenn Mixed PRM
K-W ANOVA p: 2.3e-07



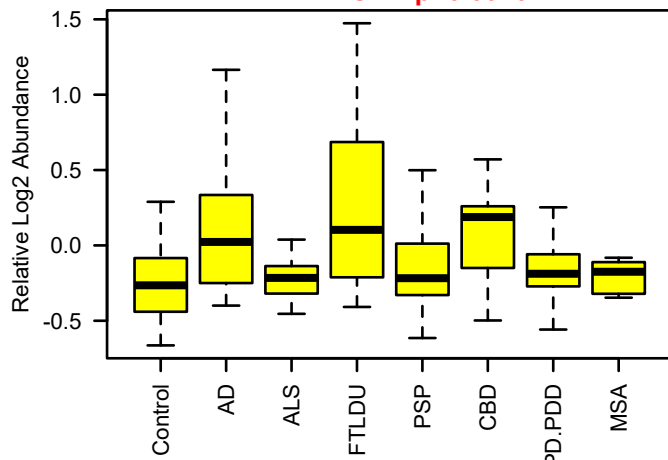
bicor=-0.19, p=0.082
cor=-0.21, p=0.055



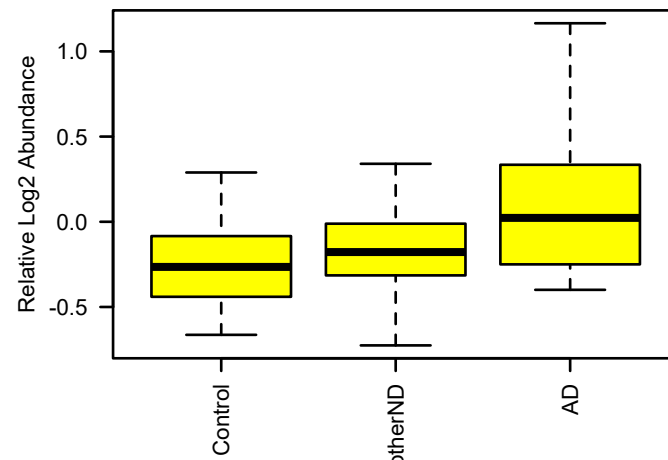
bicor=-0.19, p=0.061
cor=-0.23, p=0.021



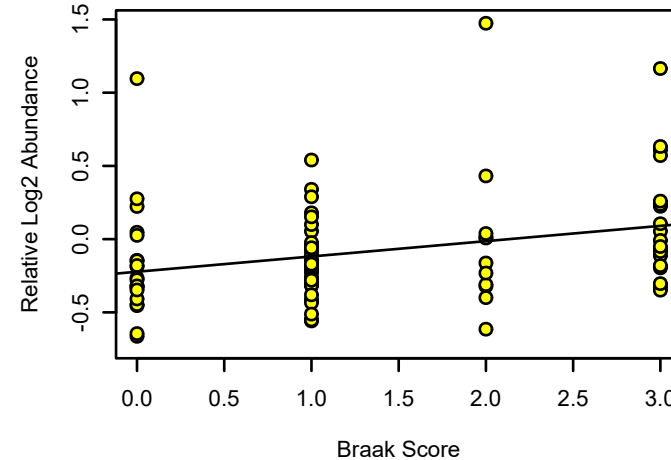
EZR UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.0016



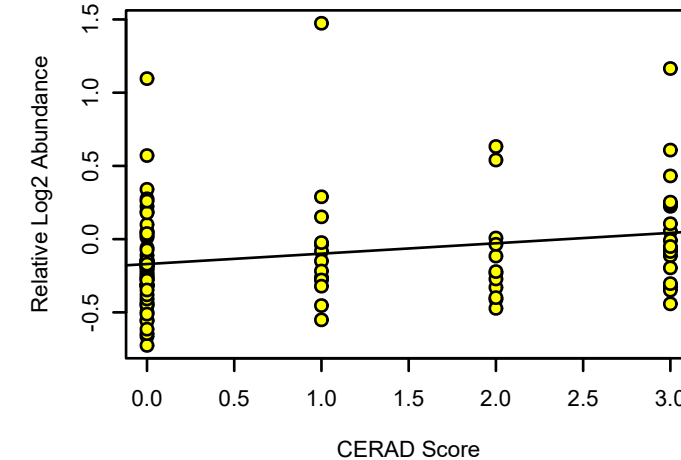
EZR UPenn Mixed PRM
K-W ANOVA p: 0.014



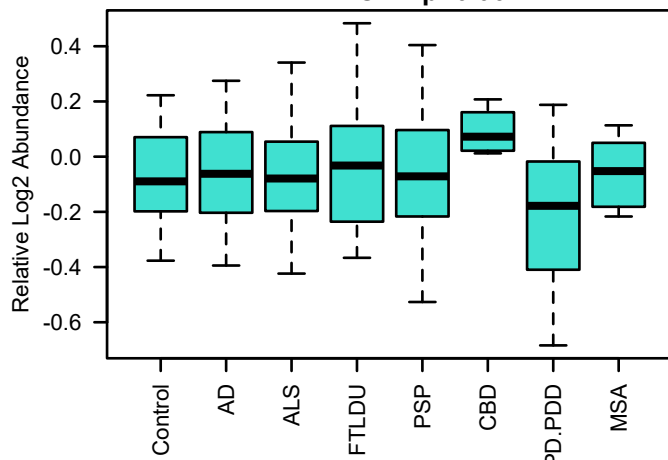
bicor=0.32, p=0.0027
cor=0.29, p=0.0075



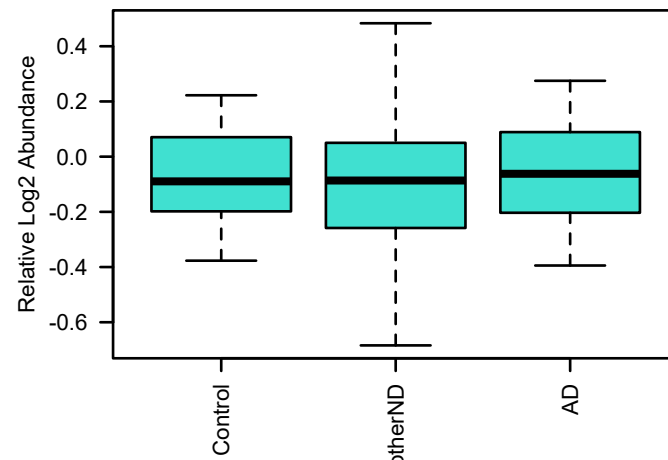
bicor=0.23, p=0.023
cor=0.23, p=0.021



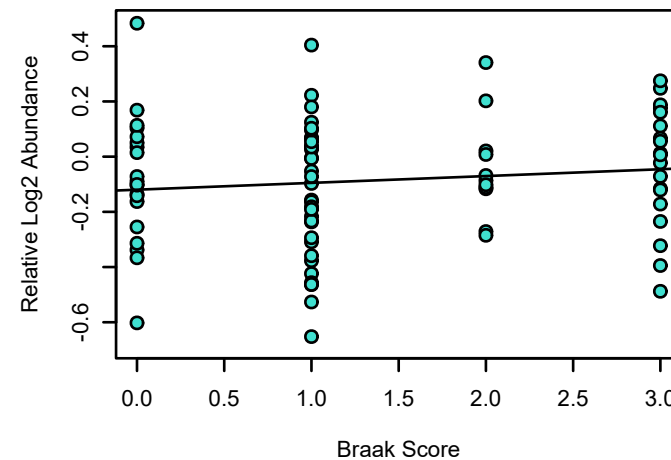
CAMKV UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.067



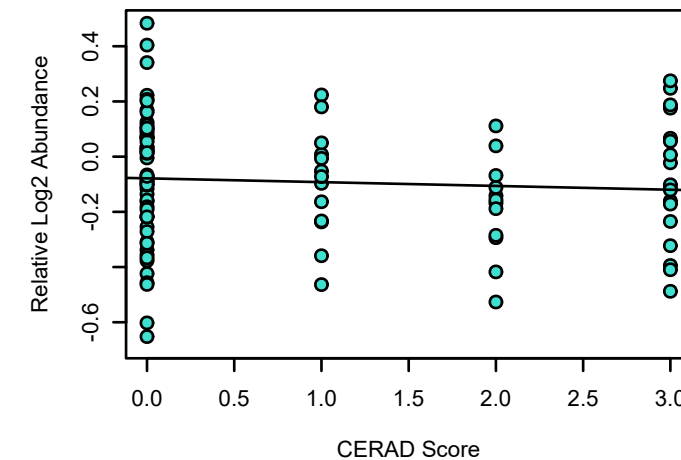
CAMKV UPenn Mixed PRM
K-W ANOVA p: 0.71



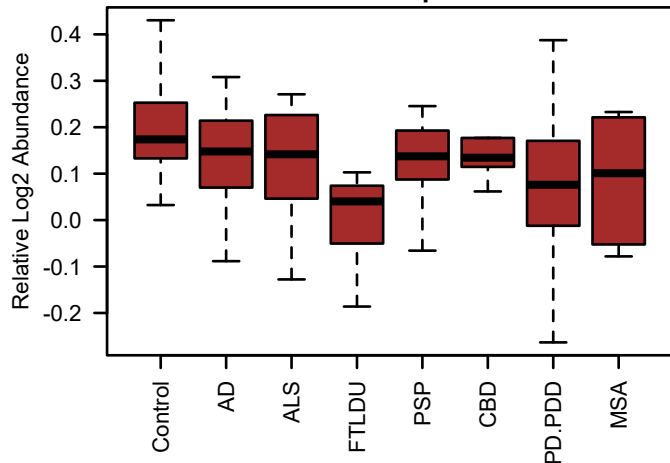
bicor=0.11, p=0.32
cor=0.12, p=0.28



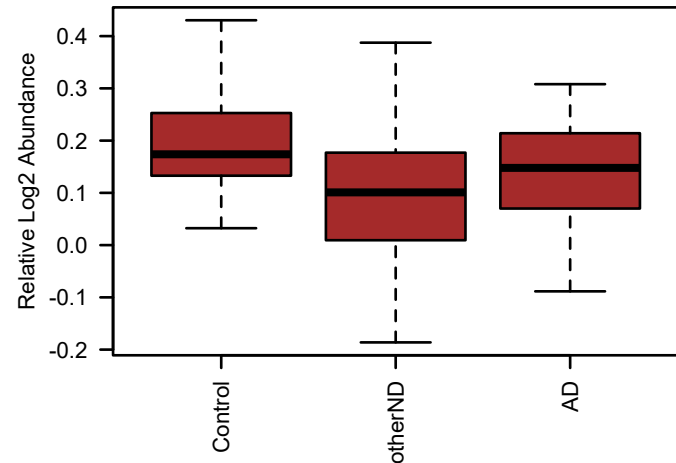
bicor=-0.078, p=0.44
cor=-0.073, p=0.47



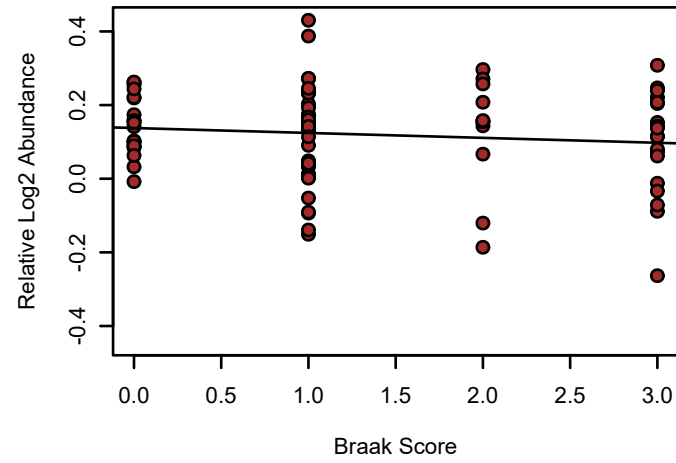
GABRB2 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.063



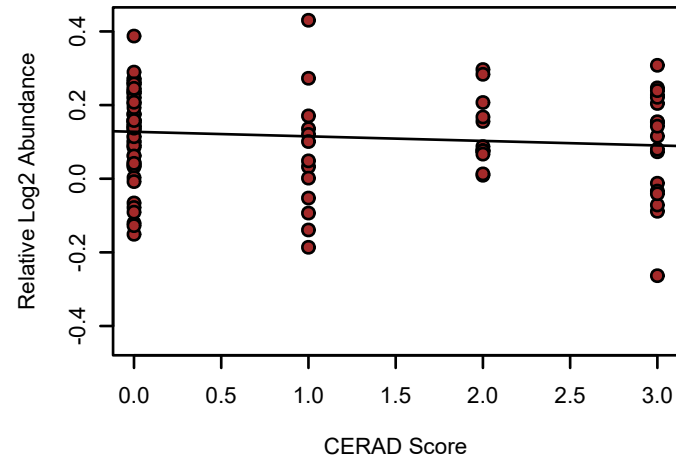
GABRB2 UPenn Mixed PRM
K-W ANOVA p: 0.022



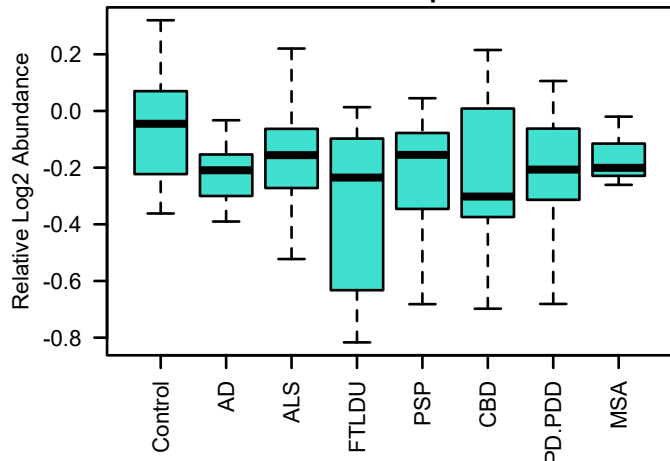
bicor=-0.12, p=0.28
cor=-0.11, p=0.32



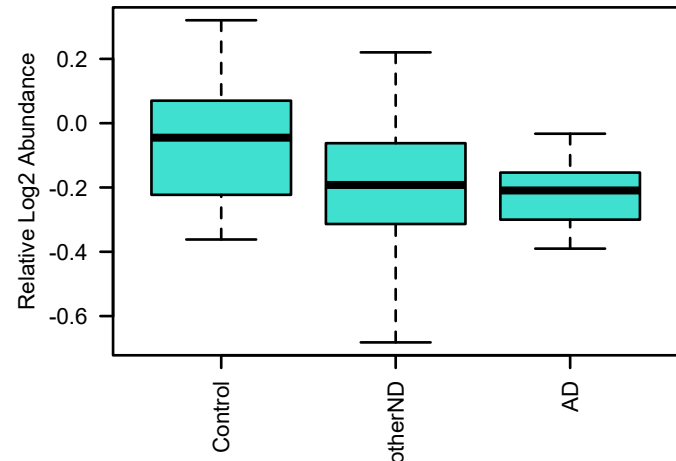
bicor=-0.1, p=0.3
cor=-0.11, p=0.28



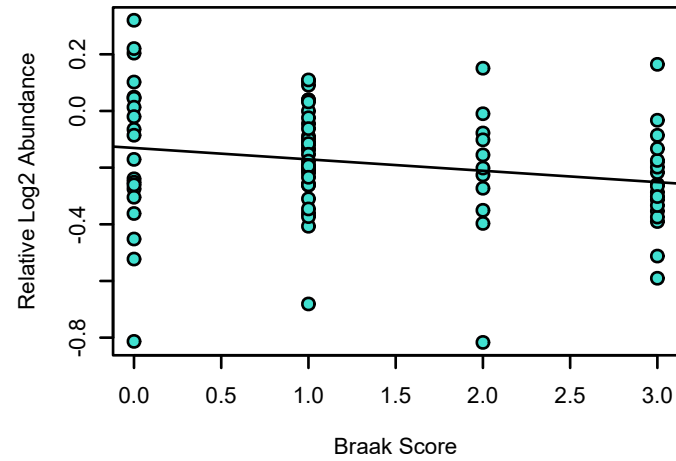
CYFIP2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.17



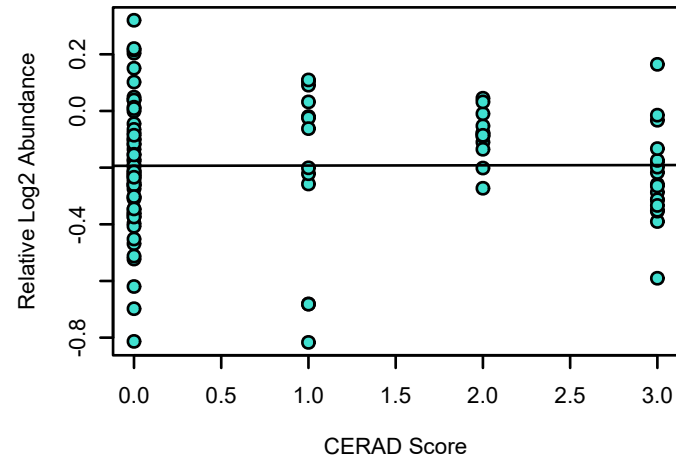
CYFIP2 UPenn Mixed PRM
K-W ANOVA p: 0.049



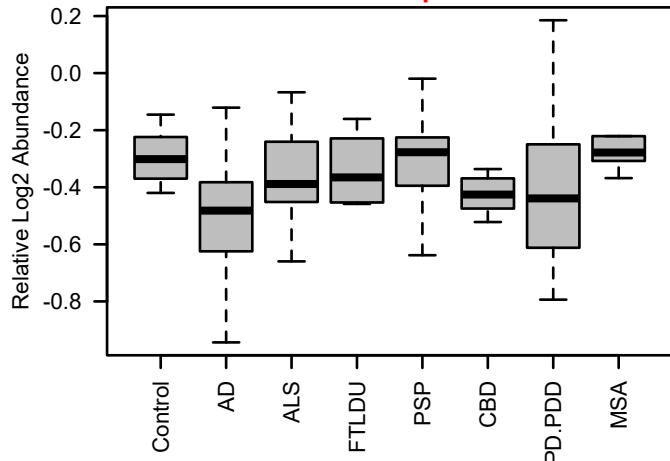
bicor=-0.2, p=0.068
cor=-0.21, p=0.055



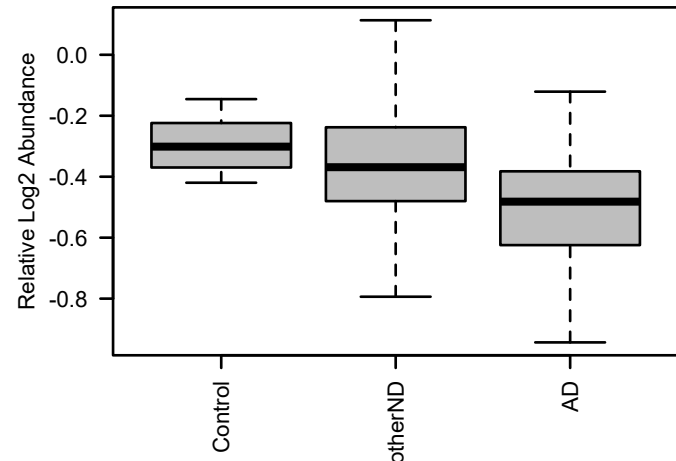
bicor=0.0034, p=0.97
cor=0.0047, p=0.96



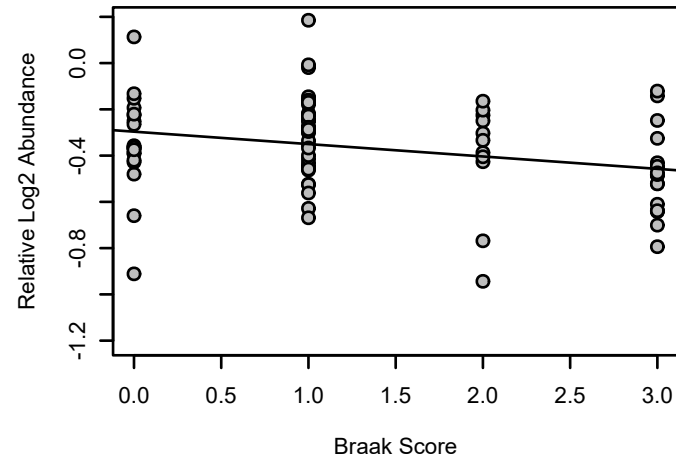
CAMK2D UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.024



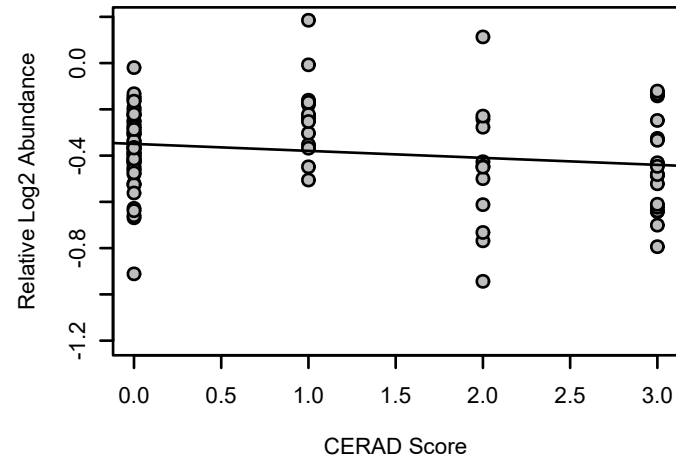
CAMK2D UPenn Mixed PRM
K-W ANOVA p: 0.03



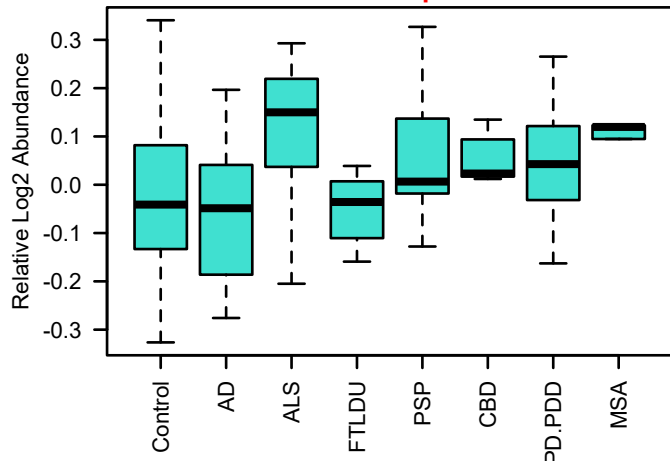
bicor=-0.29, p=0.0078
cor=-0.28, p=0.0099



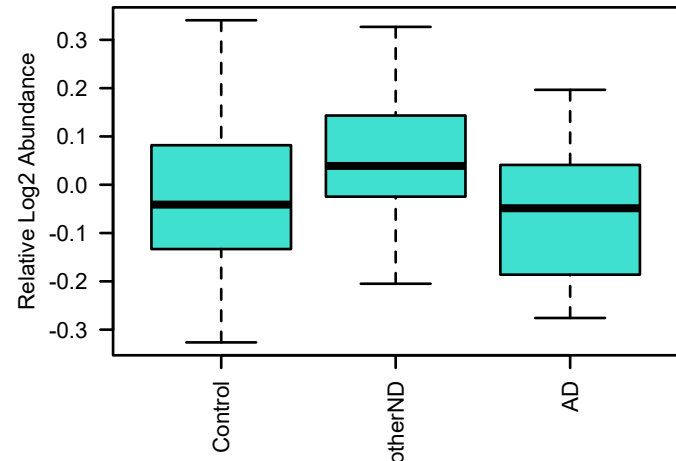
bicor=-0.2, p=0.049
cor=-0.18, p=0.073



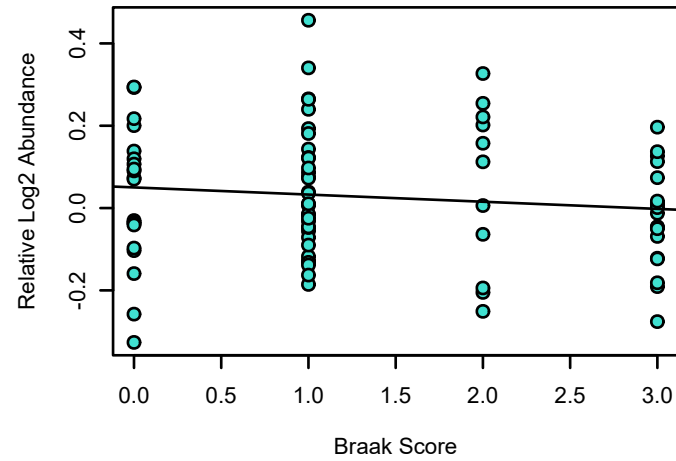
AGK UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.019



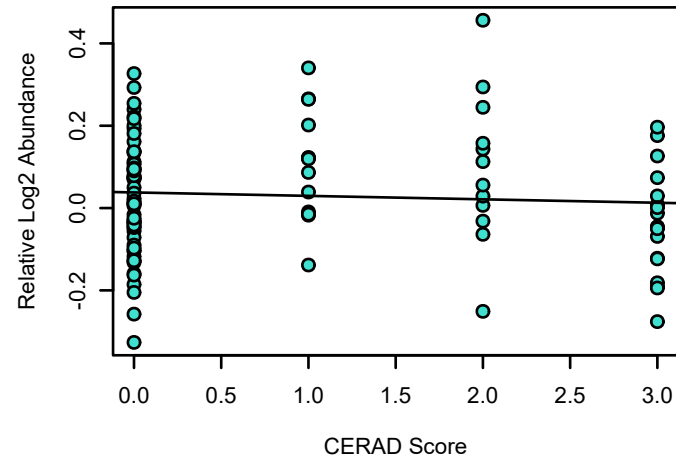
AGK UPenn Mixed PRM
K-W ANOVA p: 0.004

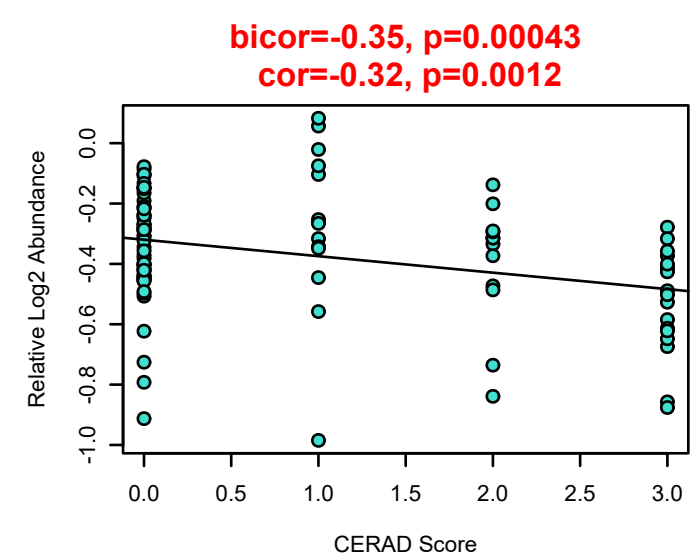
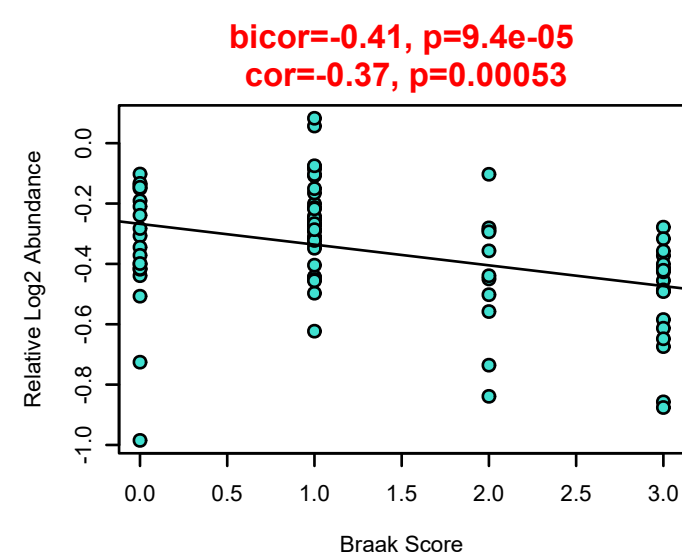
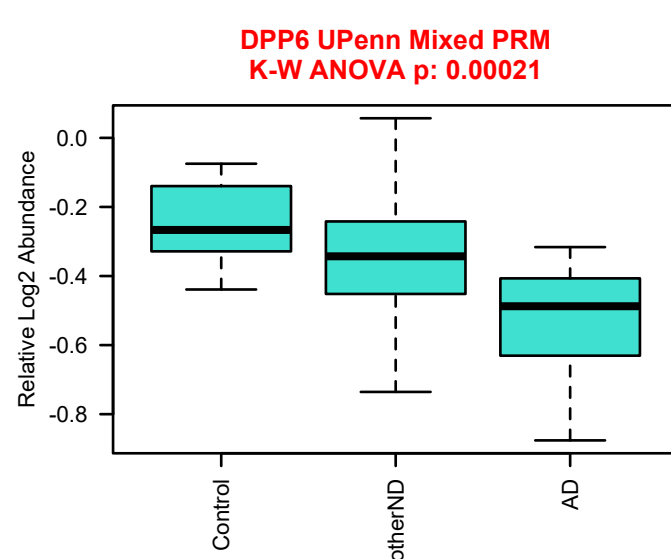
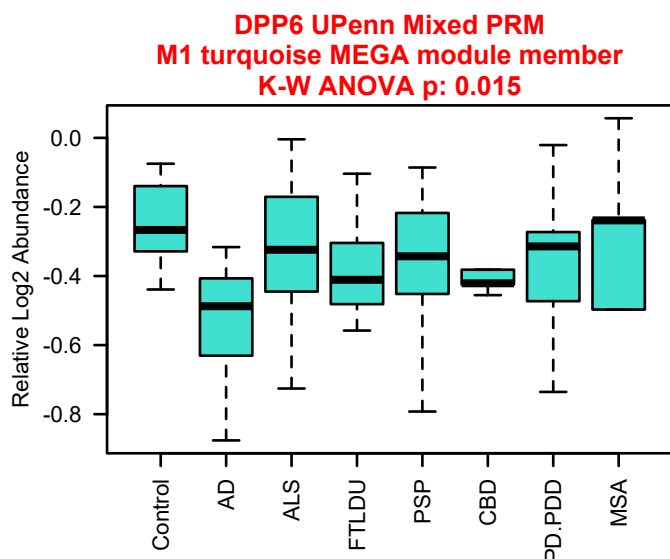
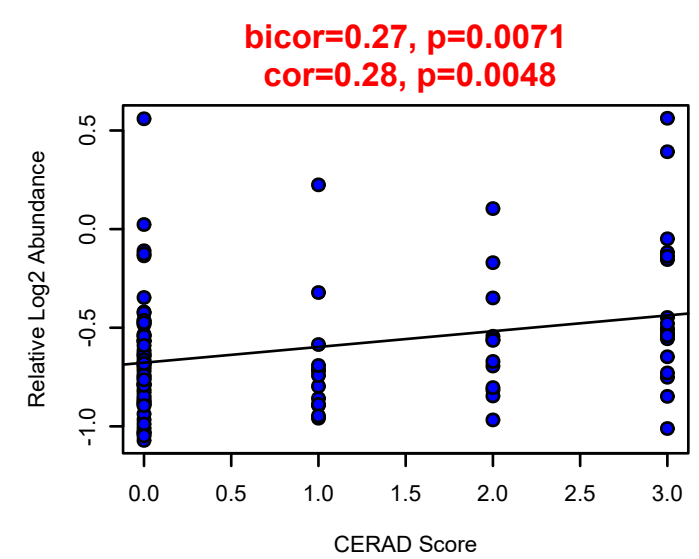
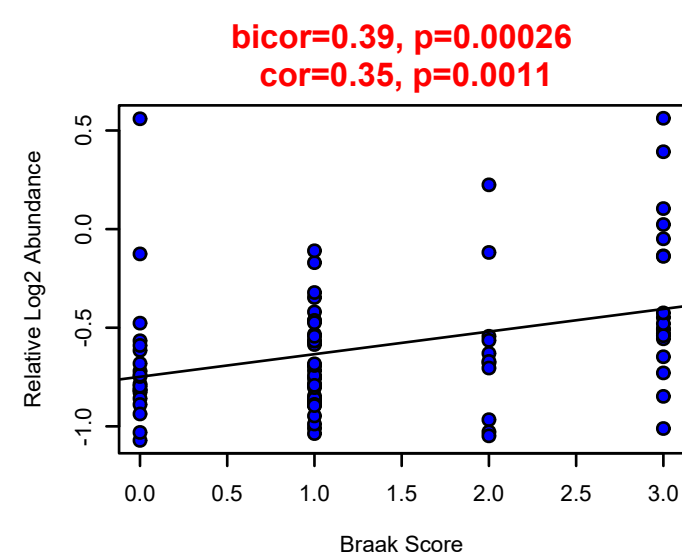
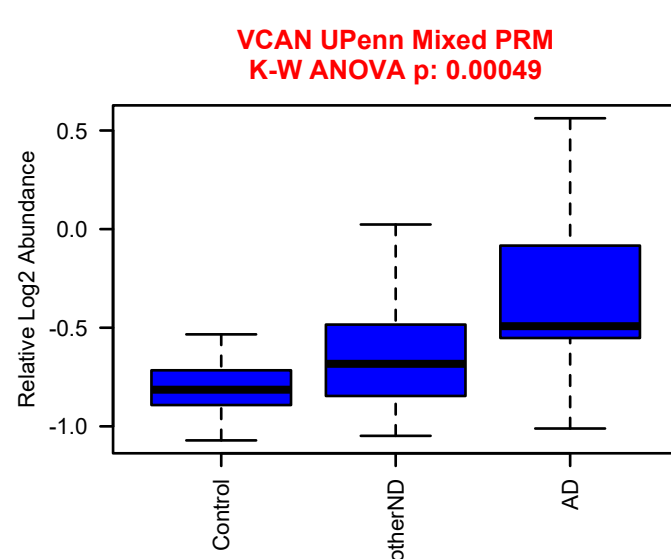
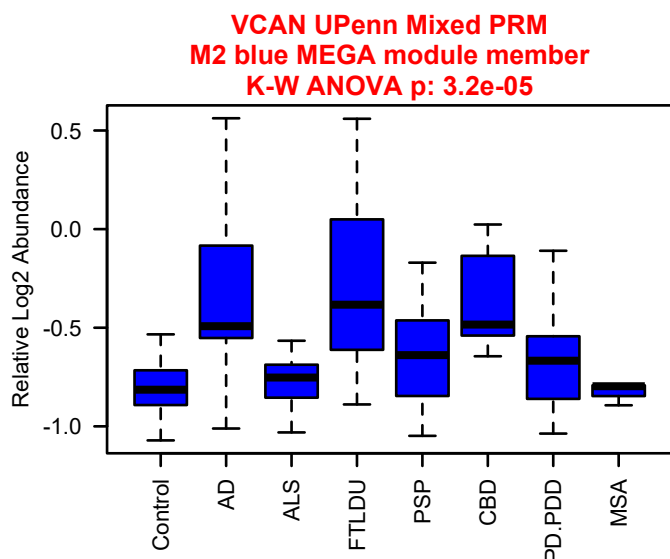
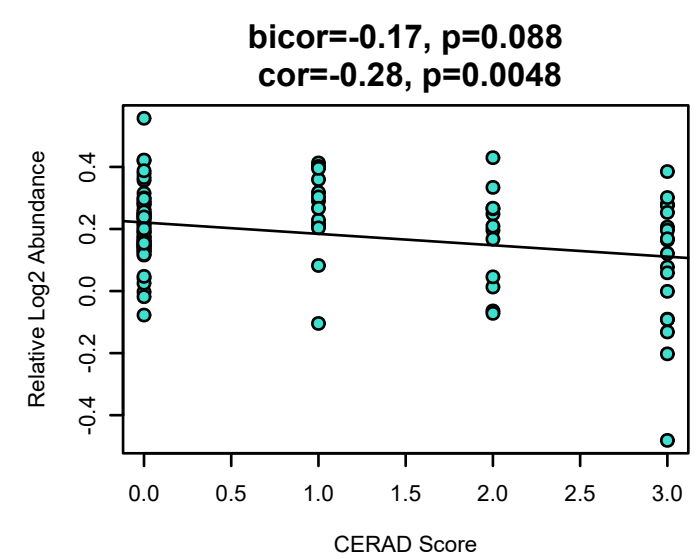
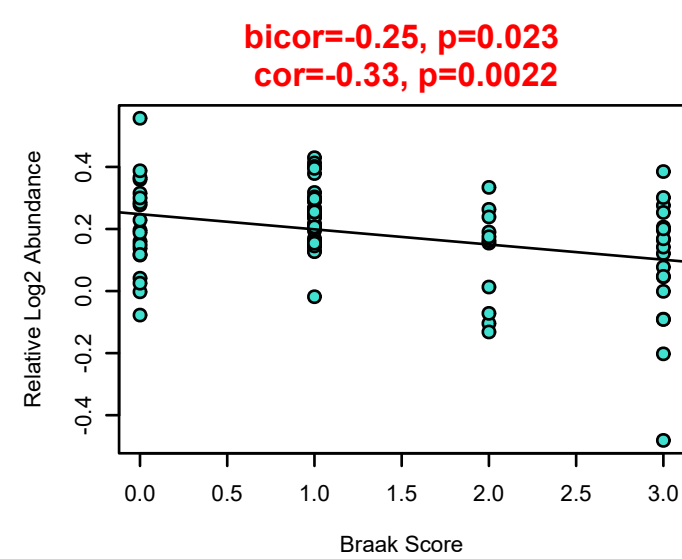
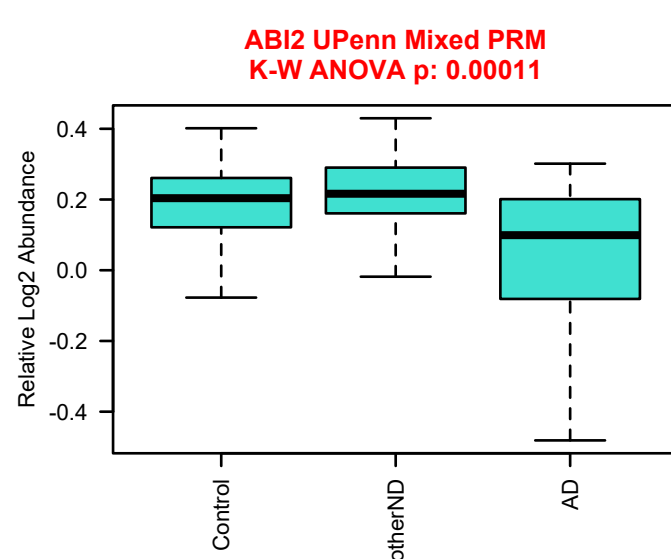
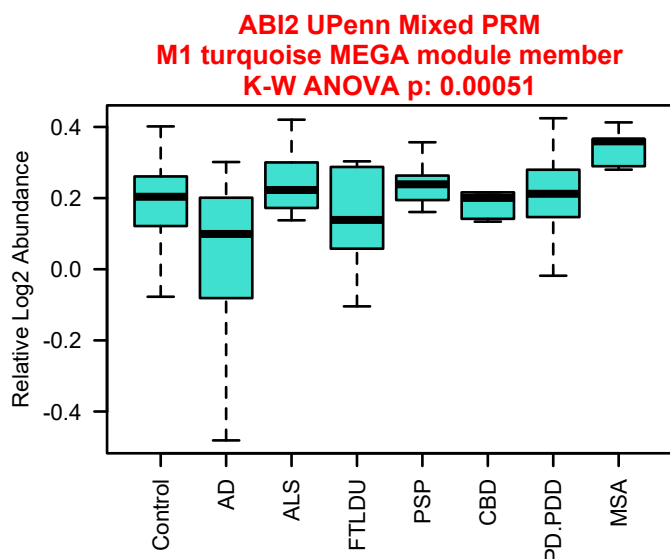
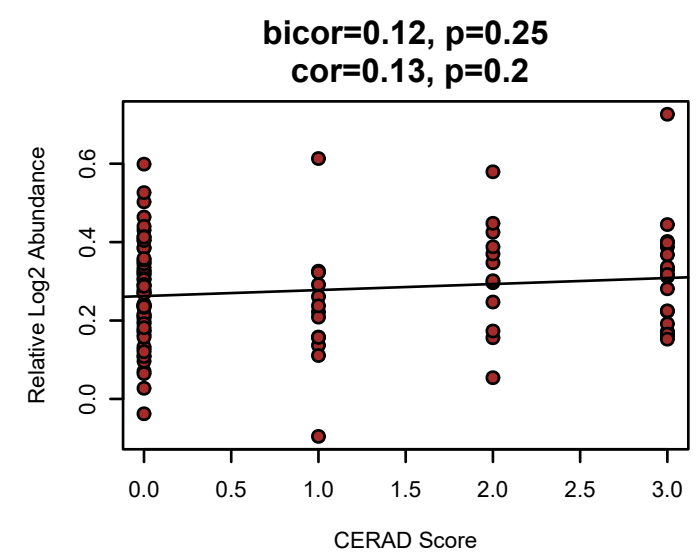
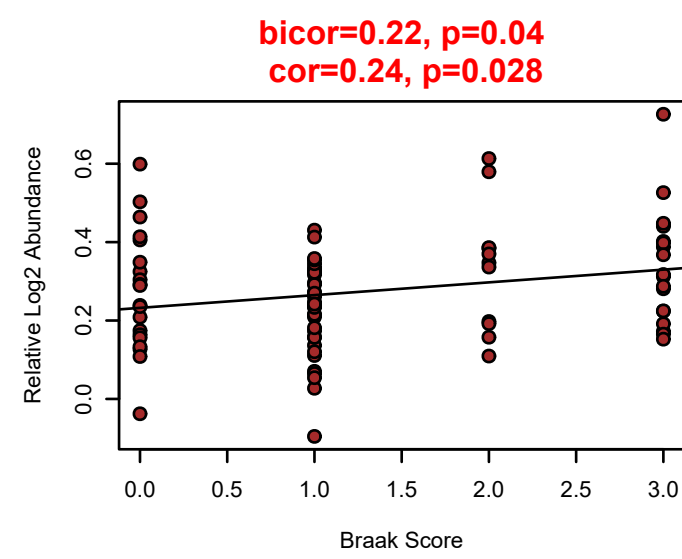
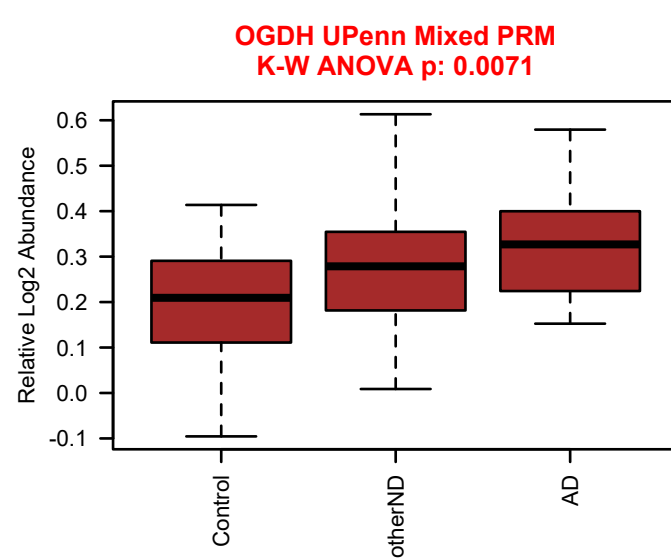
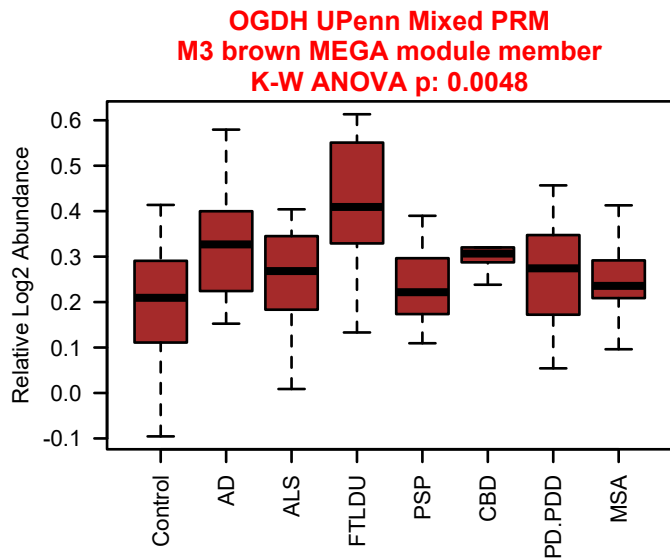


bicor=-0.083, p=0.45
cor=-0.12, p=0.28

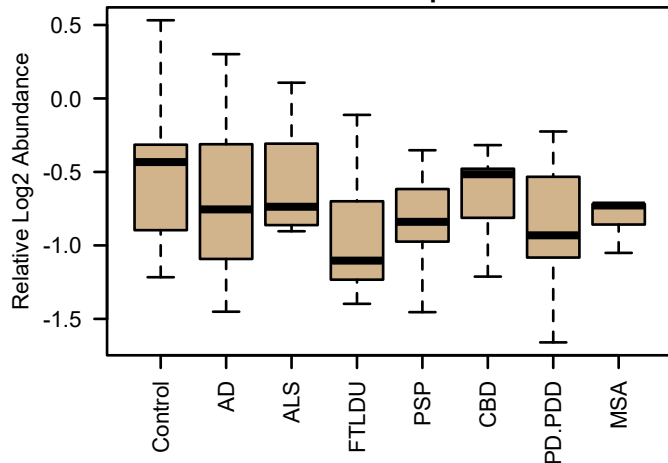


bicor=-0.078, p=0.44
cor=-0.067, p=0.51

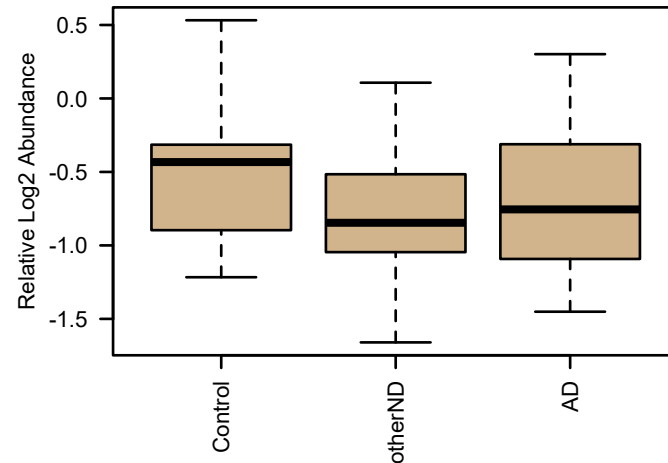




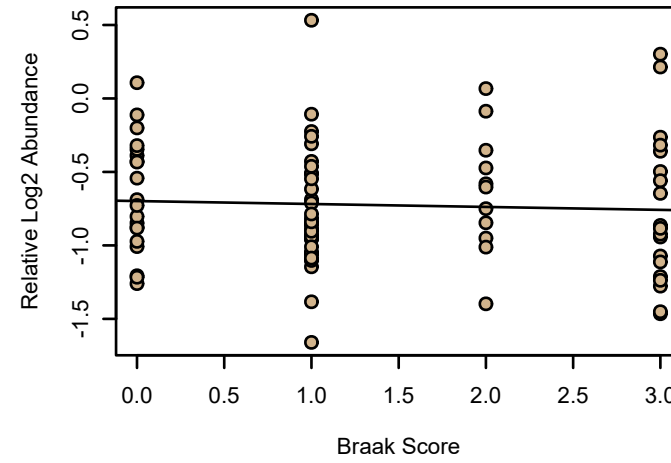
CD81 UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 0.13



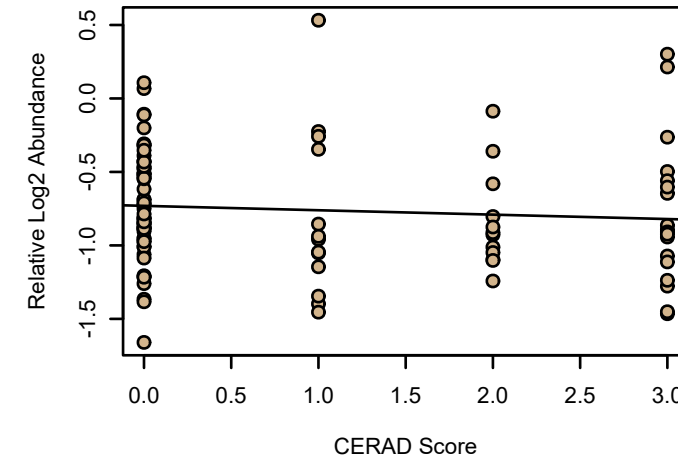
CD81 UPenn Mixed PRM
K-W ANOVA p: 0.1



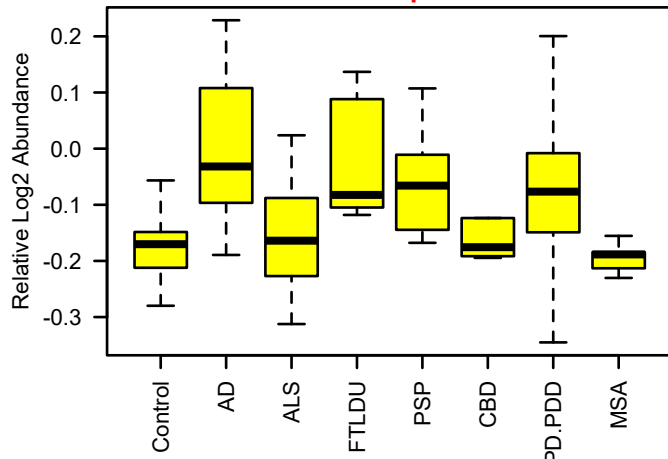
bicor=-0.0055, p=0.96
cor=-0.051, p=0.65



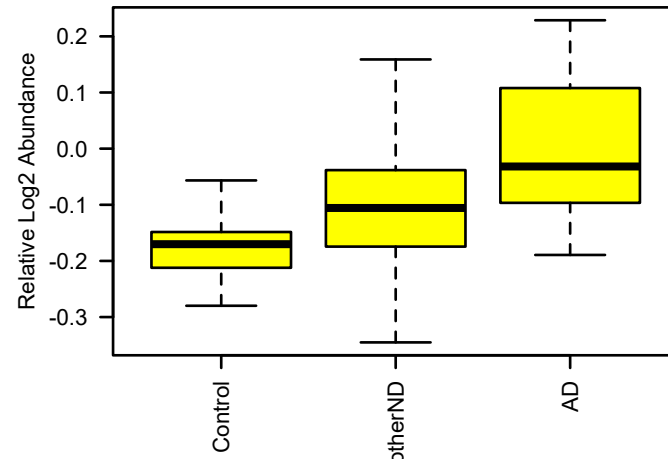
bicor=-0.13, p=0.21
cor=-0.086, p=0.39



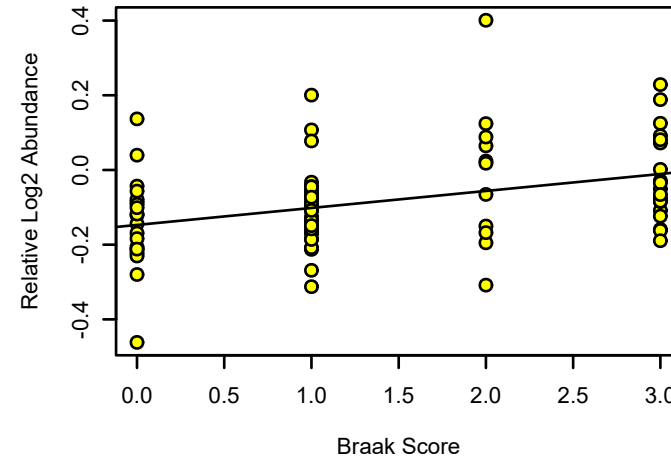
NPEPPS UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.3e-05



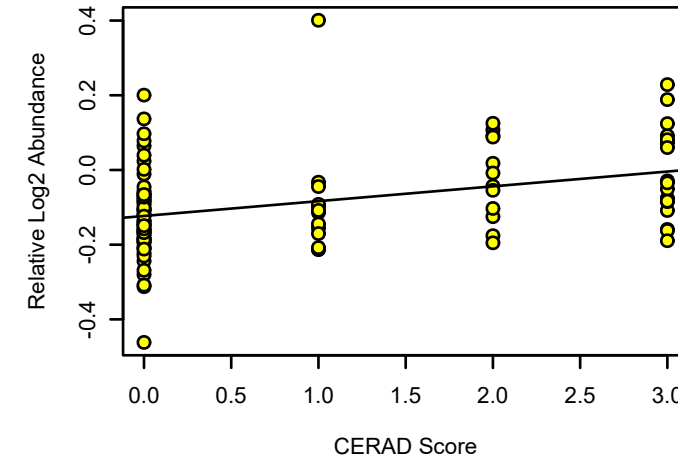
NPEPPS UPenn Mixed PRM
K-W ANOVA p: 0.00054



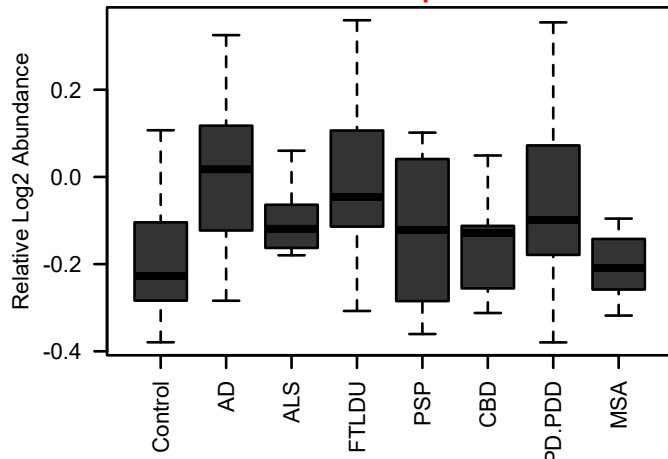
bicor=0.37, p=0.00054
cor=0.37, p=0.00053



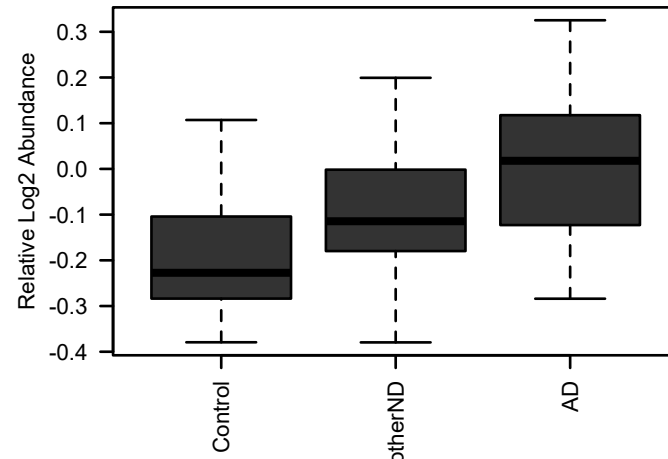
bicor=0.39, p=6.5e-05
cor=0.36, p=0.00023



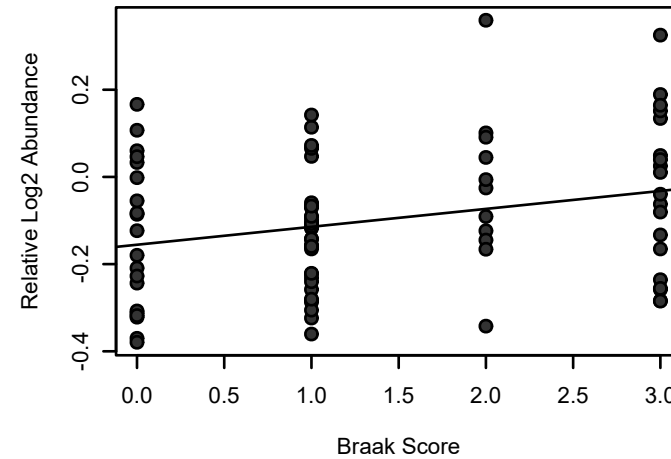
NPEPPSL1 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.016



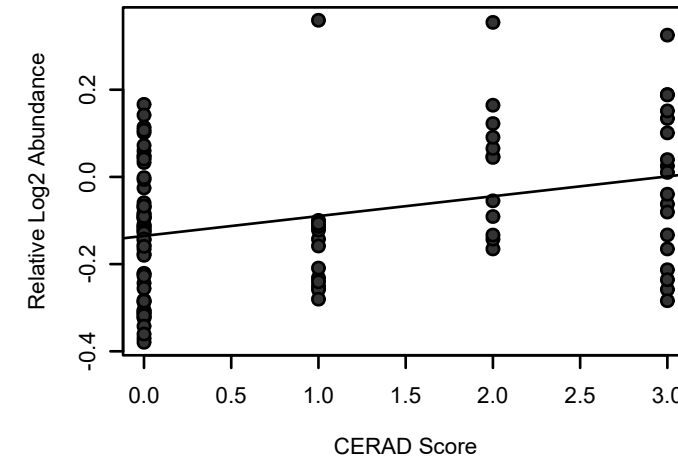
NPEPPSL1 UPenn Mixed PRM
K-W ANOVA p: 0.0073



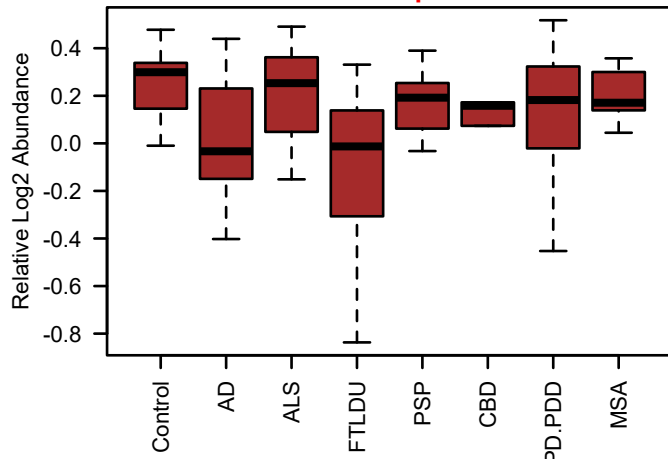
bicor=0.27, p=0.015
cor=0.27, p=0.013



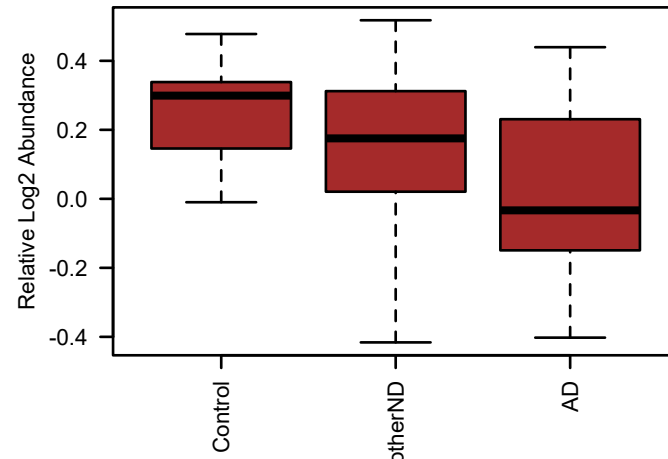
bicor=0.32, p=0.0012
cor=0.33, p=8e-04



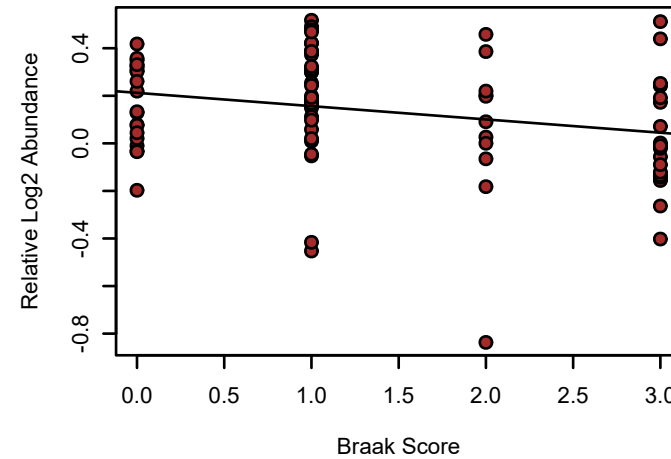
NDUFS8 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0011



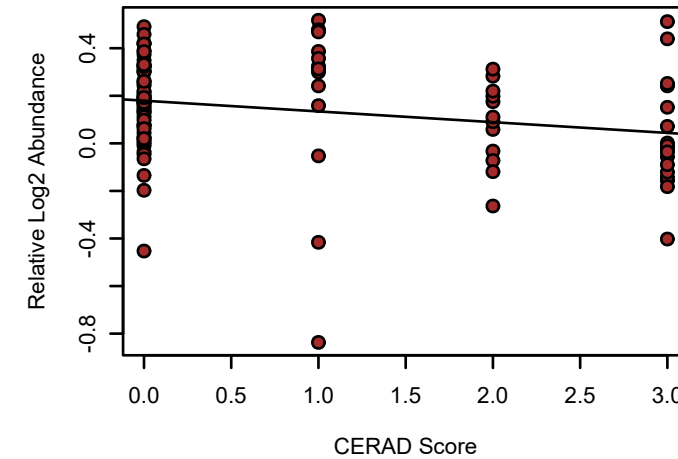
NDUFS8 UPenn Mixed PRM
K-W ANOVA p: 0.0065



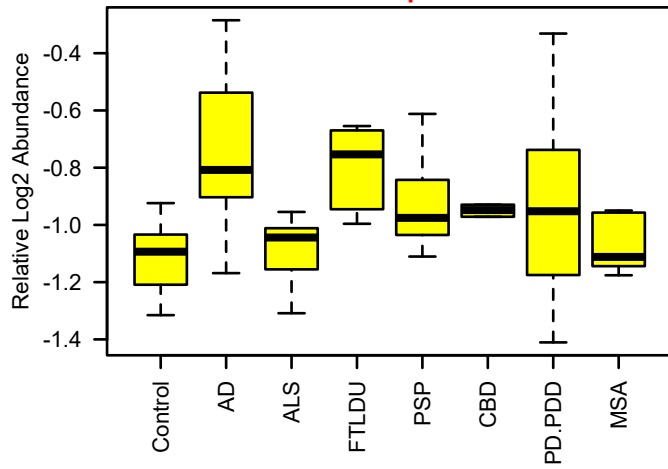
bicor=-0.27, p=0.012
cor=-0.25, p=0.022



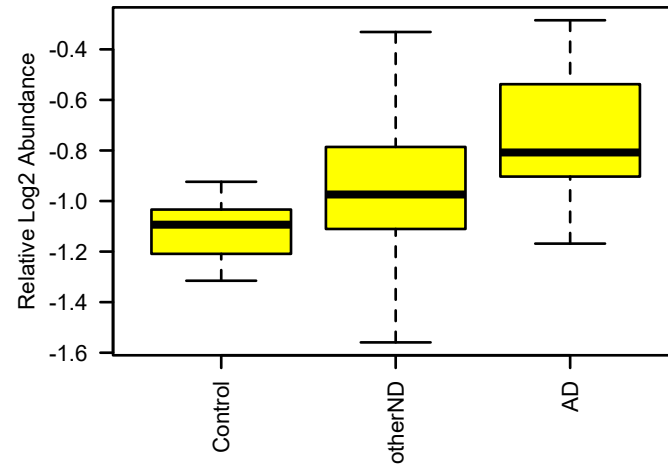
bicor=-0.27, p=0.0074
cor=-0.24, p=0.016



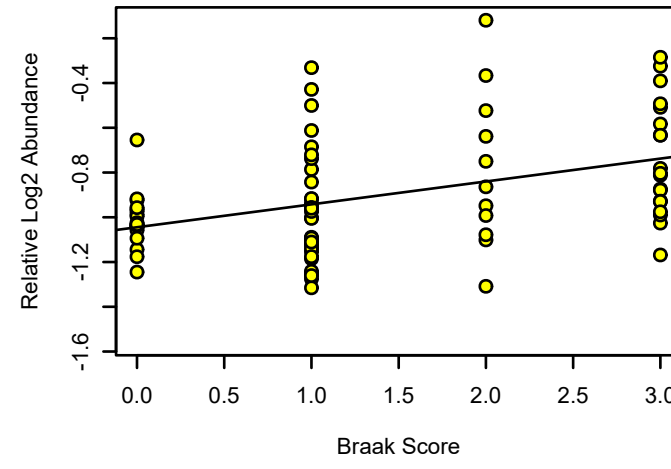
MAPK3 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.00037



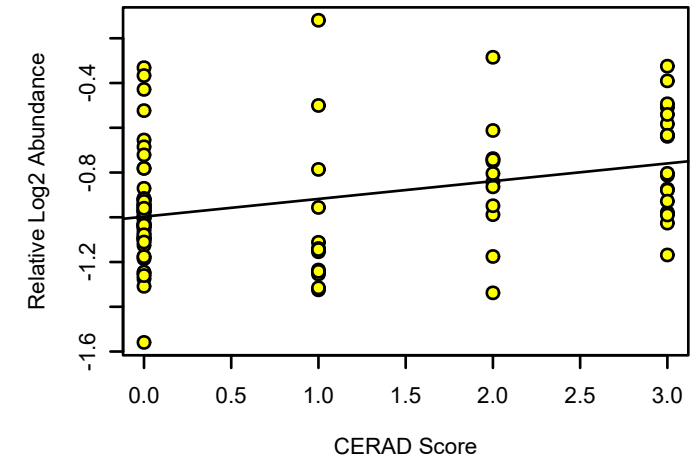
MAPK3 UPenn Mixed PRM
K-W ANOVA p: 0.00034



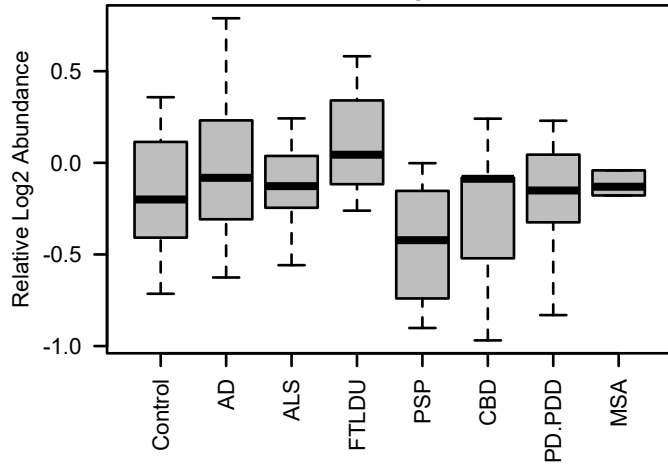
bicor=0.44, p=2.4e-05
cor=0.42, p=7e-05



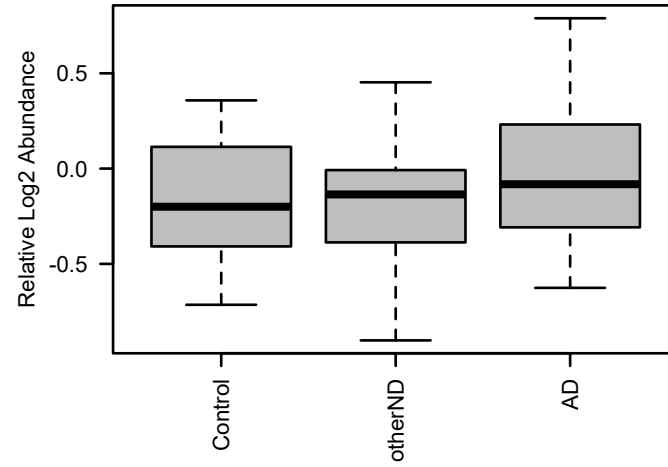
bicor=0.38, p=9.9e-05
cor=0.35, p=0.00036



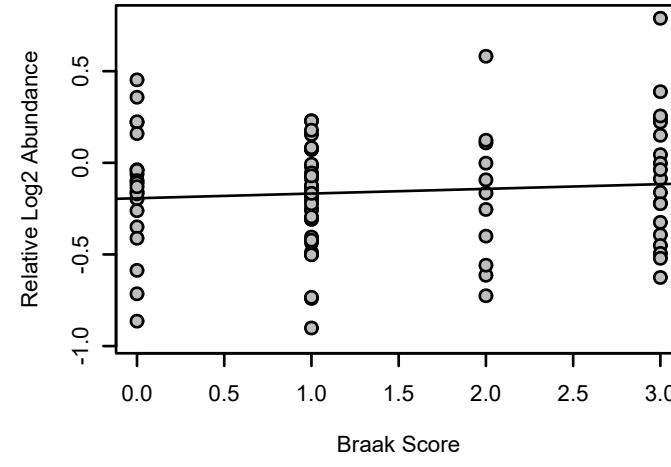
ABLIM1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.0092



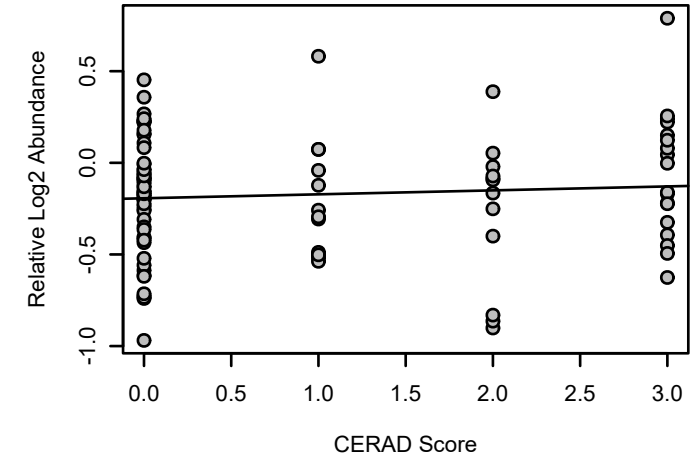
ABLIM1 UPenn Mixed PRM
K-W ANOVA p: 0.22



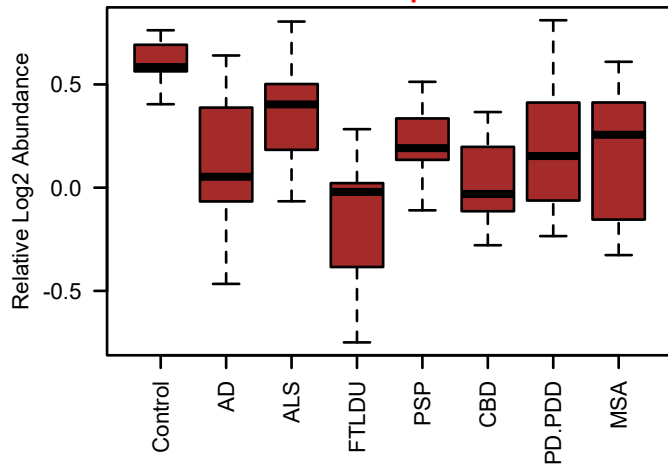
bicor=0.056, p=0.62
cor=0.085, p=0.44



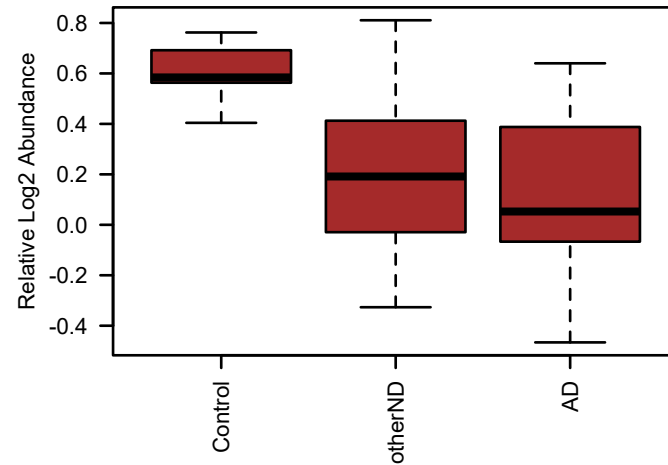
bicor=0.068, p=0.5
cor=0.078, p=0.44



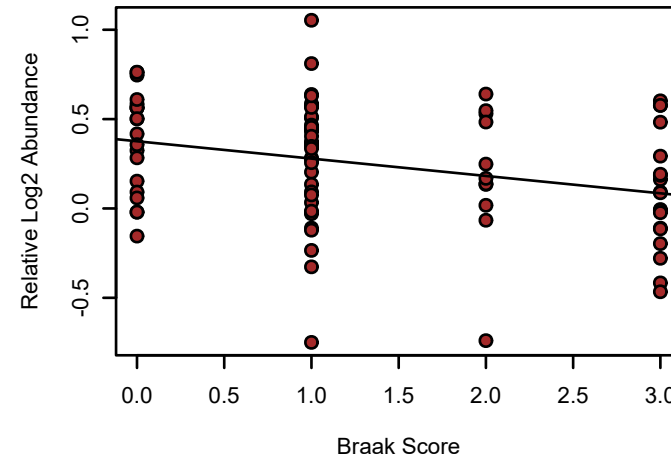
NDUFV1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 1.5e-07



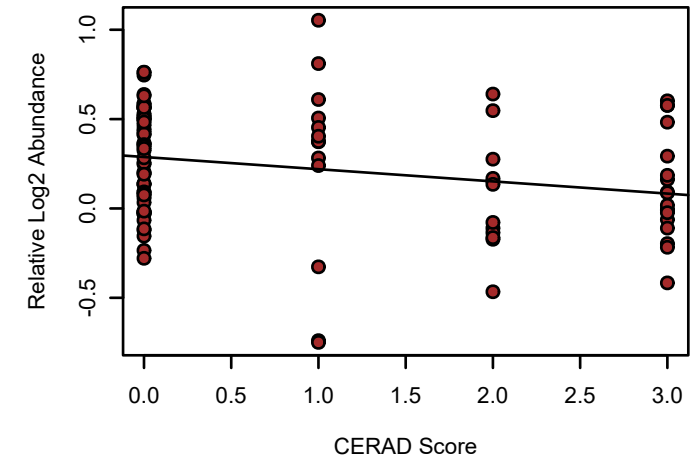
NDUFV1 UPenn Mixed PRM
K-W ANOVA p: 1.7e-06



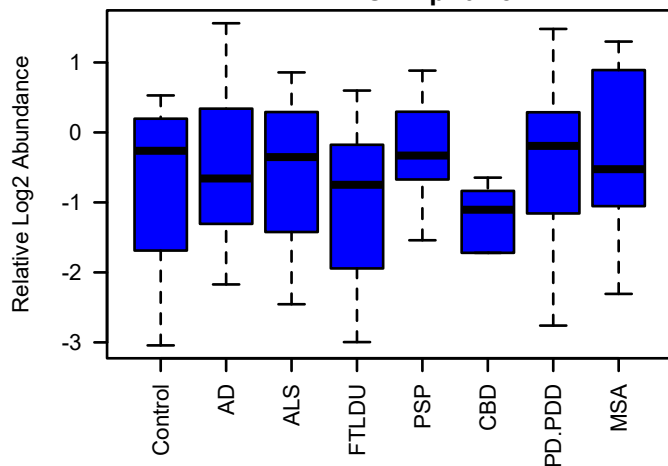
bicor=-0.32, p=0.0029
cor=-0.3, p=0.0056



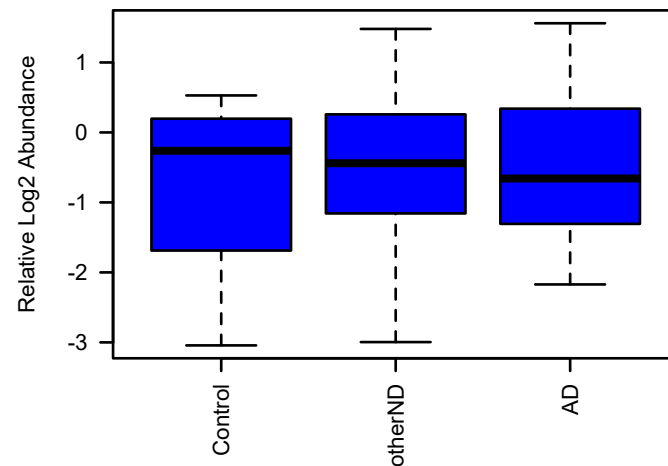
bicor=-0.25, p=0.011
cor=-0.24, p=0.016



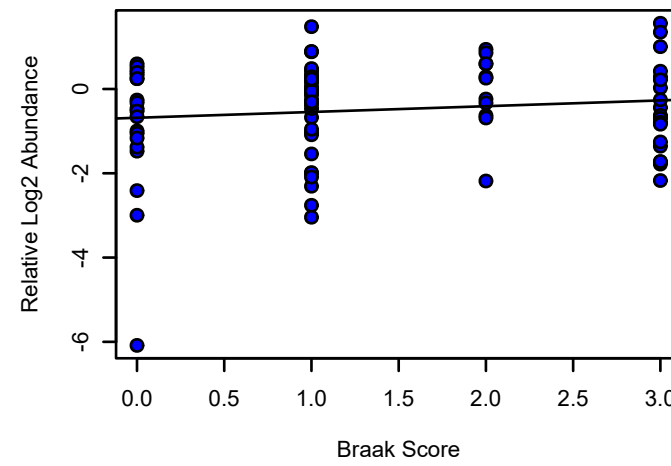
TUBB4B UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.48



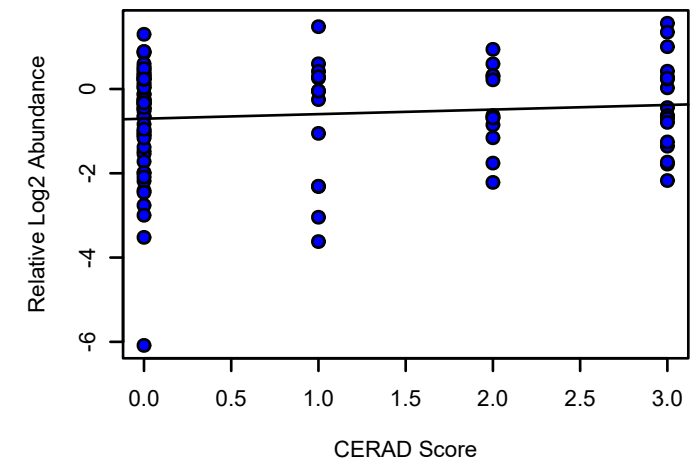
TUBB4B UPenn Mixed PRM
K-W ANOVA p: 0.37



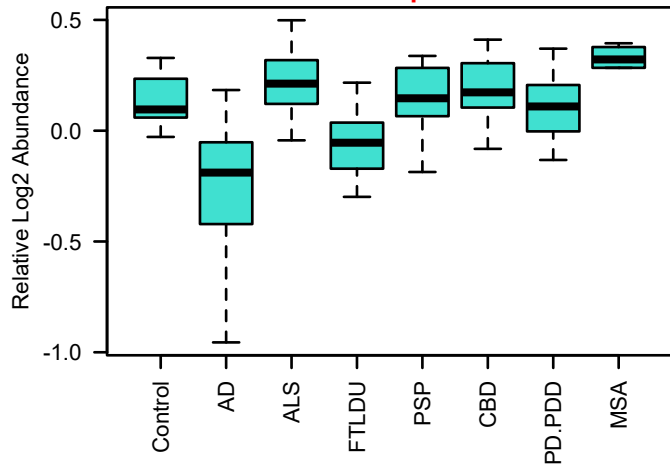
bicor=0.0096, p=0.93
cor=0.12, p=0.28



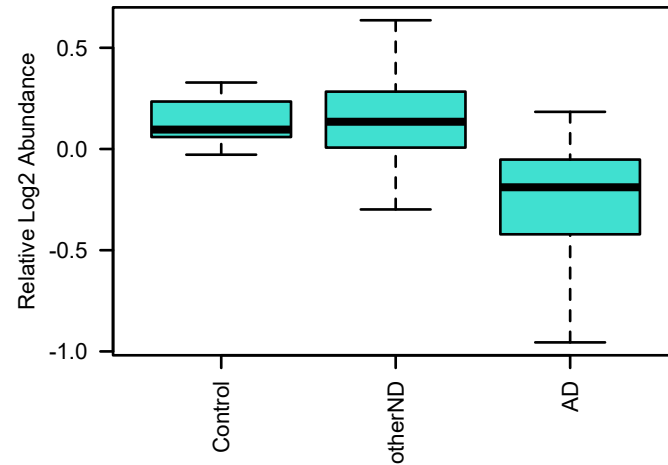
bicor=0.058, p=0.57
cor=0.1, p=0.32



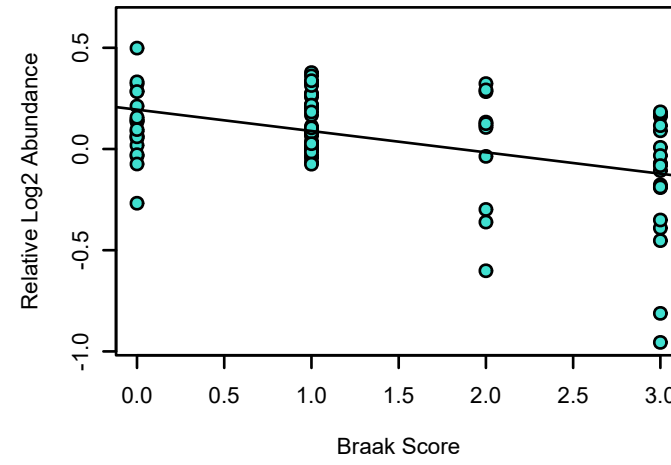
SEPT5 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 8.9e-09



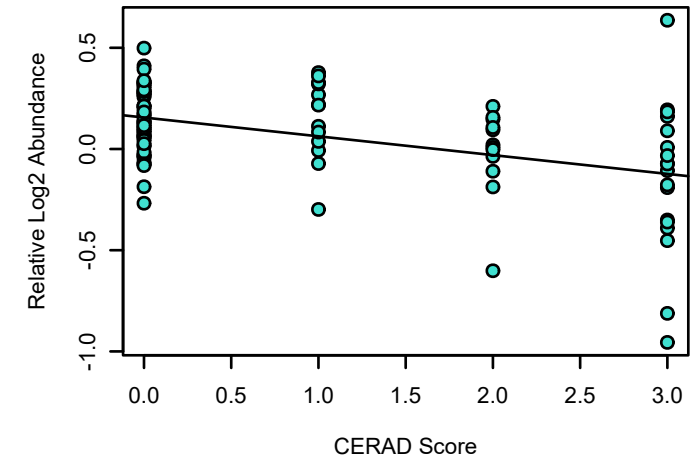
SEPT5 UPenn Mixed PRM
K-W ANOVA p: 2.2e-09



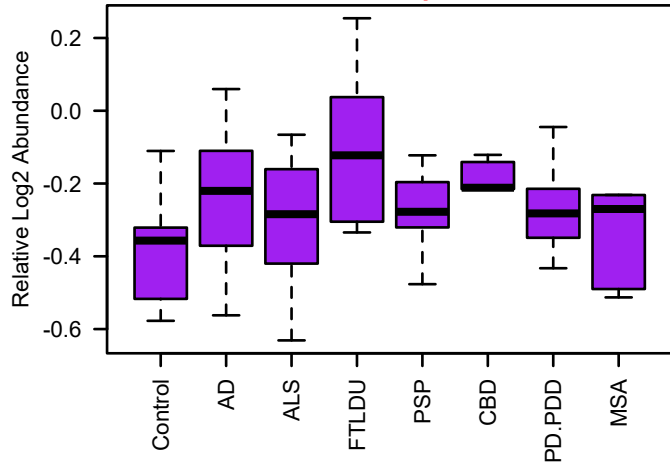
bicor=-0.38, p=0.00037
cor=-0.46, p=1.1e-05



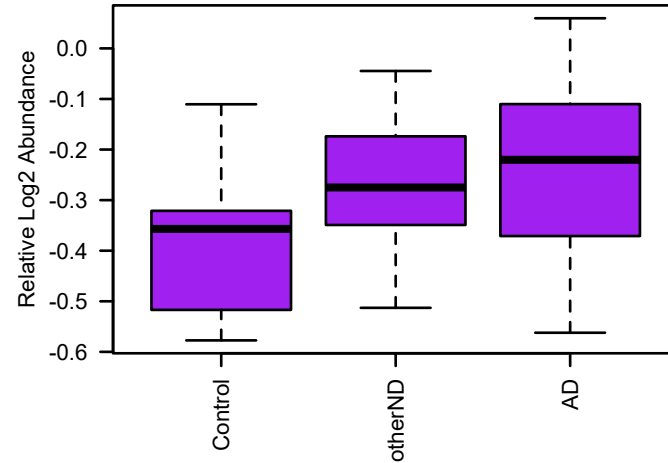
bicor=-0.39, p=6.4e-05
cor=-0.45, p=2.6e-06



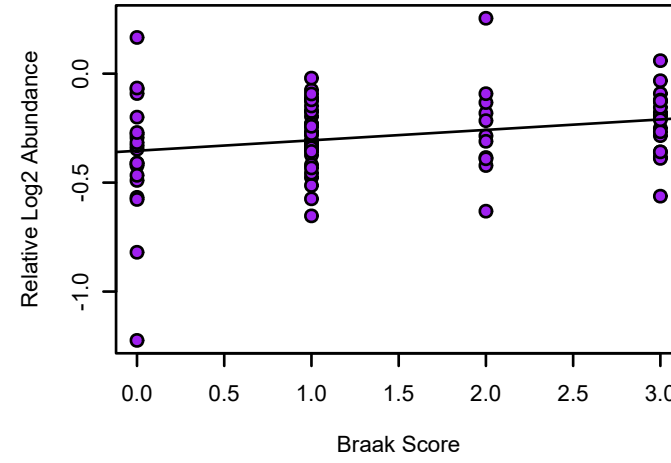
TMPO UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.021



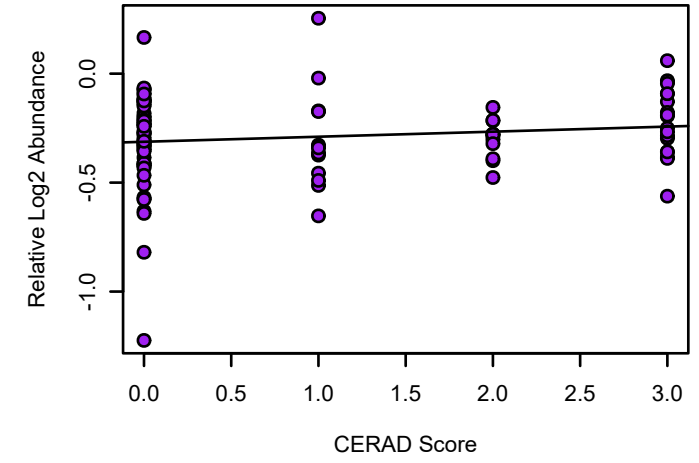
TMPO UPenn Mixed PRM
K-W ANOVA p: 0.042



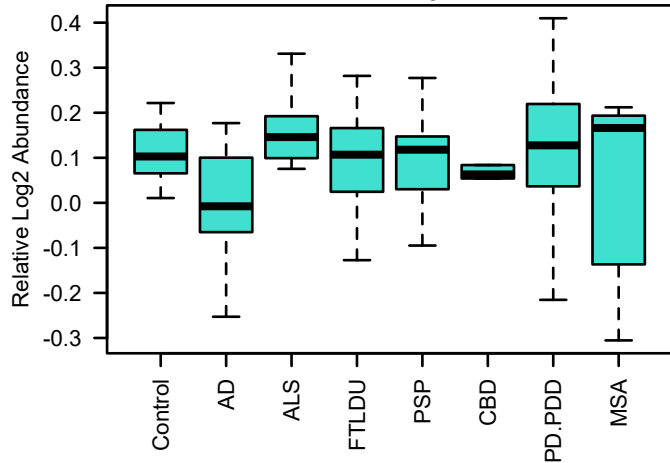
bicor=0.21, p=0.055
cor=0.25, p=0.022



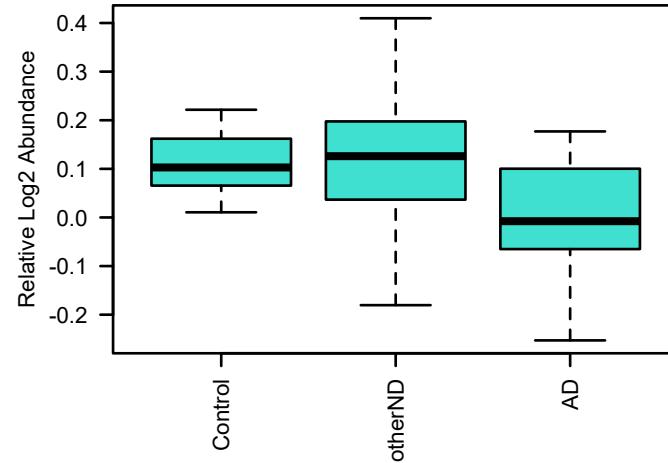
bicor=0.11, p=0.27
cor=0.14, p=0.16



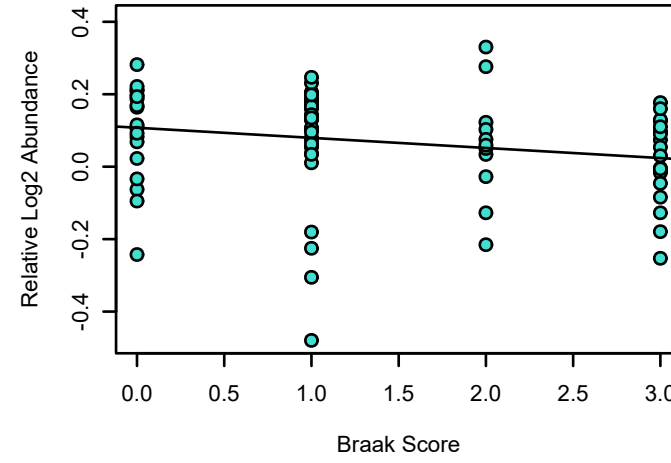
DNM1L UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.39



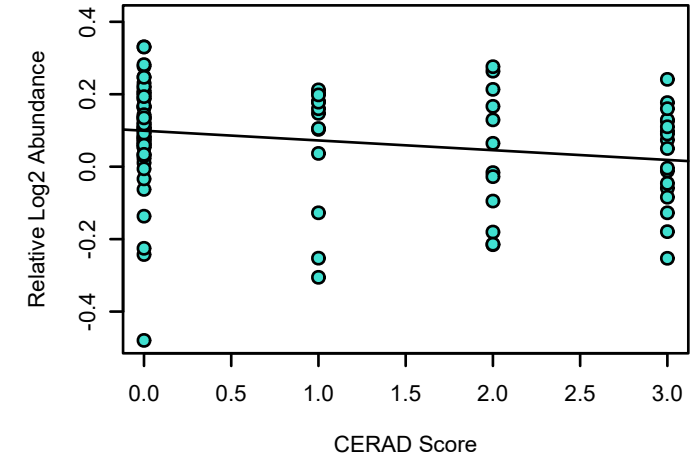
DNM1L UPenn Mixed PRM
K-W ANOVA p: 0.086



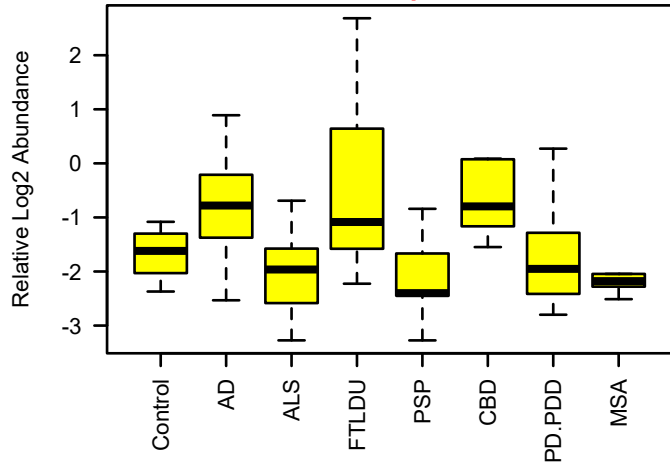
bicor=-0.32, p=0.0029
cor=-0.21, p=0.055



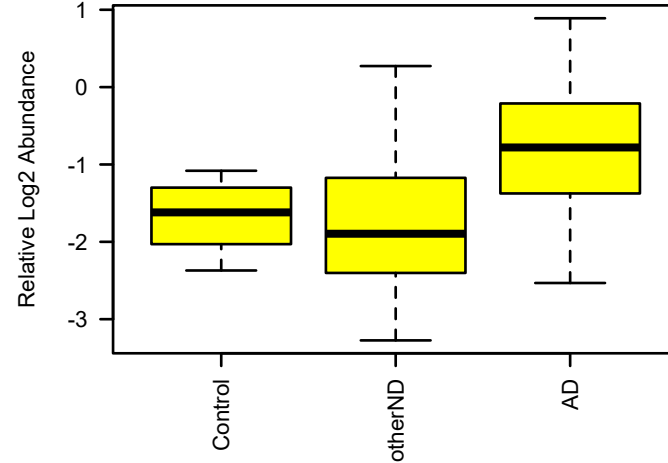
bicor=-0.27, p=0.0074
cor=-0.21, p=0.036



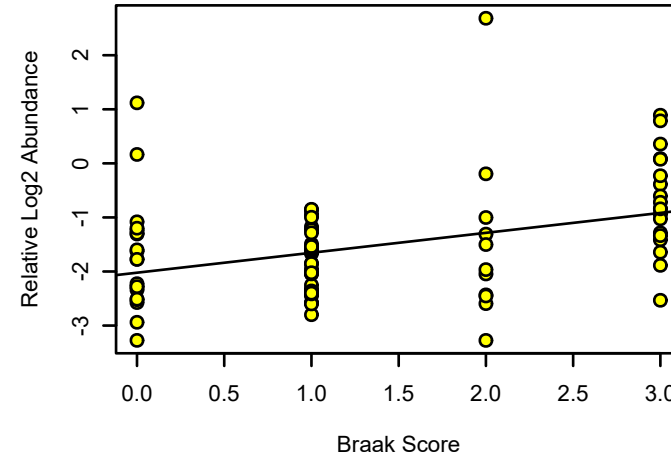
CD44 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.7e-06



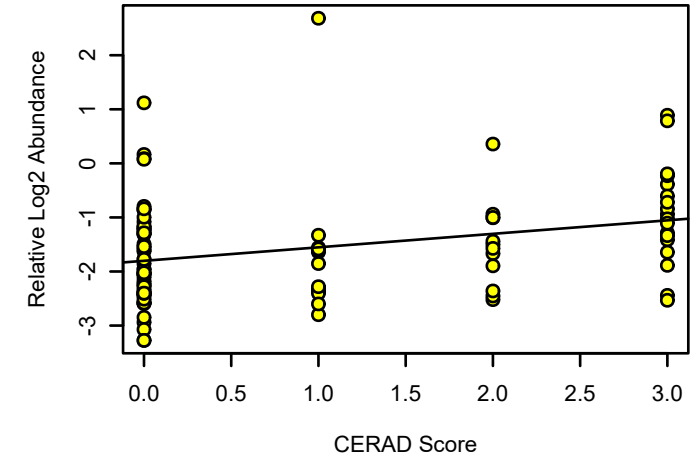
CD44 UPenn Mixed PRM
K-W ANOVA p: 0.0019



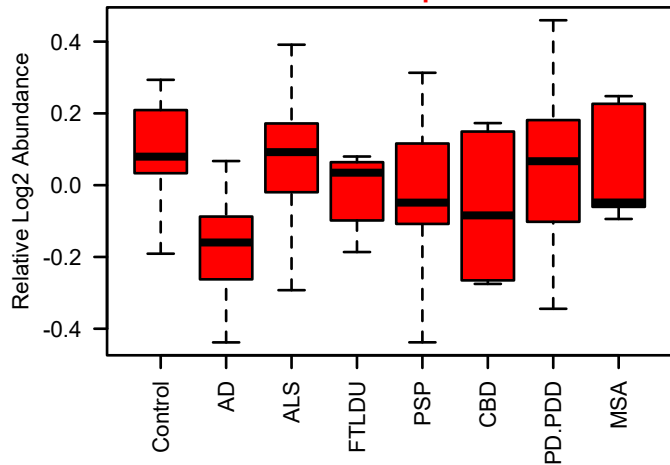
bicor=0.4, p=0.00015
cor=0.39, p=0.00025



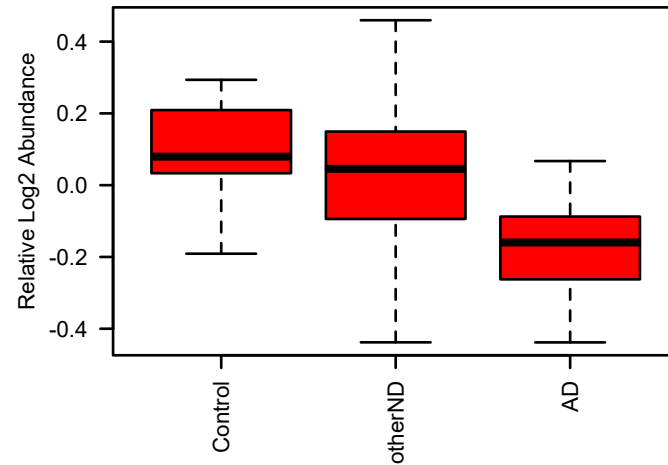
bicor=0.34, p=6e-04
cor=0.3, p=0.0024



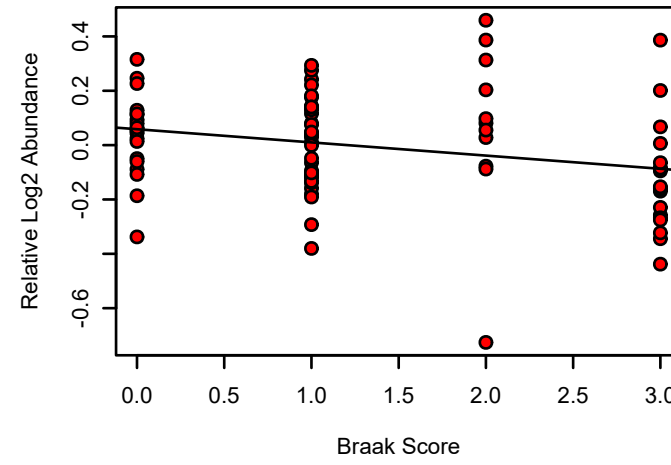
CRIP2 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.012



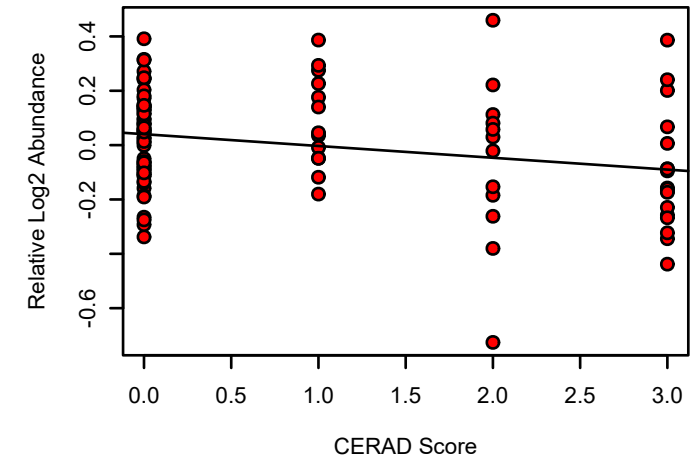
CRIP2 UPenn Mixed PRM
K-W ANOVA p: 0.00041



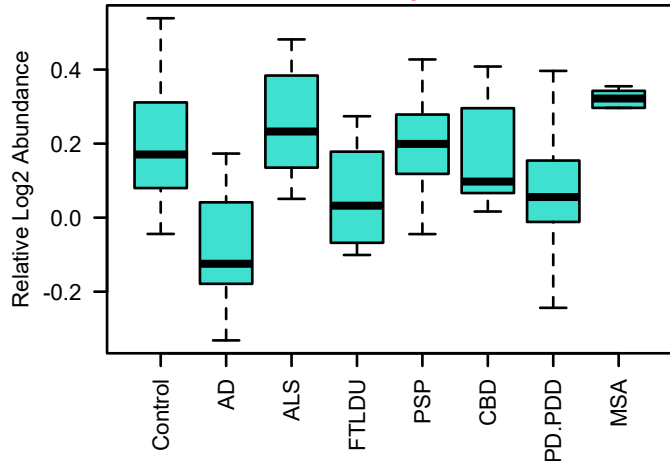
bicor=-0.28, p=0.0094
cor=-0.26, p=0.017



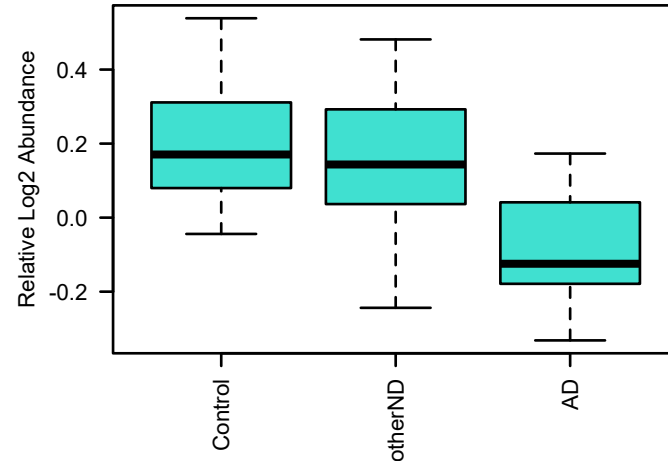
bicor=-0.25, p=0.012
cor=-0.26, p=0.009



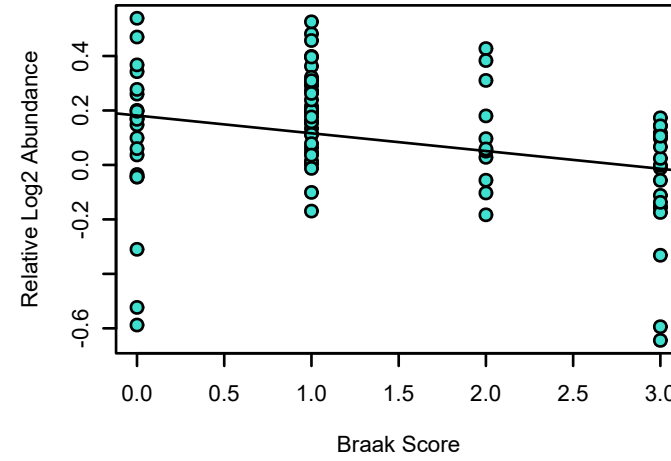
ANKS1B UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 1.6e-05



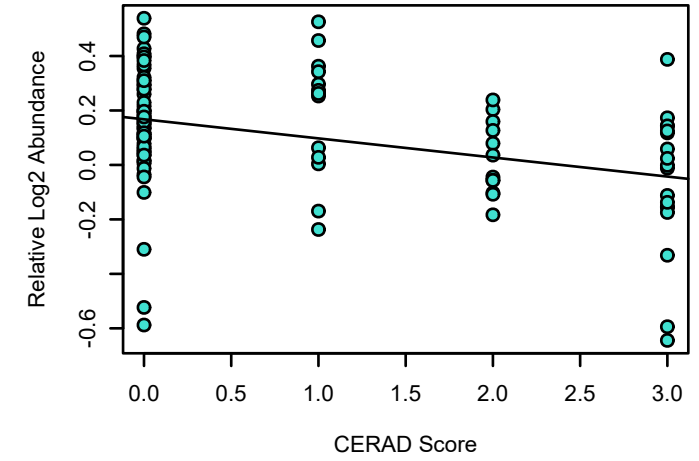
ANKS1B UPenn Mixed PRM
K-W ANOVA p: 2.1e-05



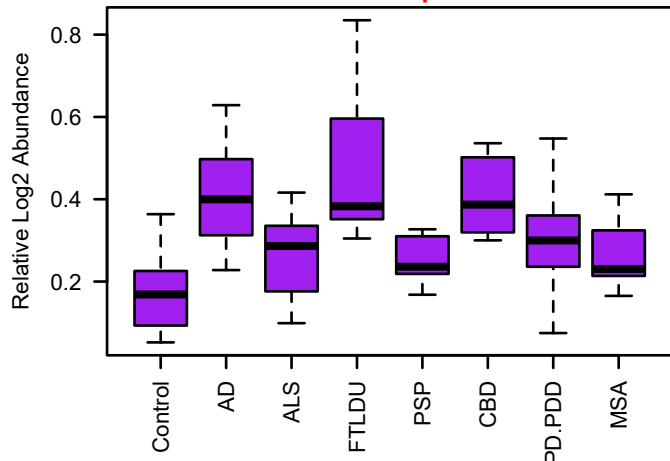
bicor=-0.31, p=0.0041
cor=-0.29, p=0.0075



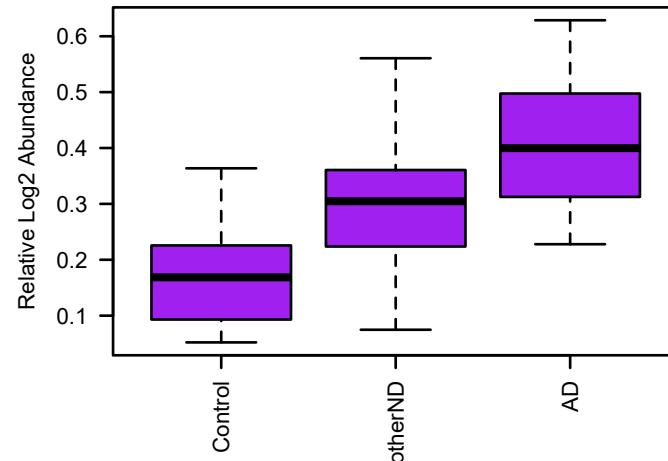
bicor=-0.38, p=9.6e-05
cor=-0.36, p=0.00023



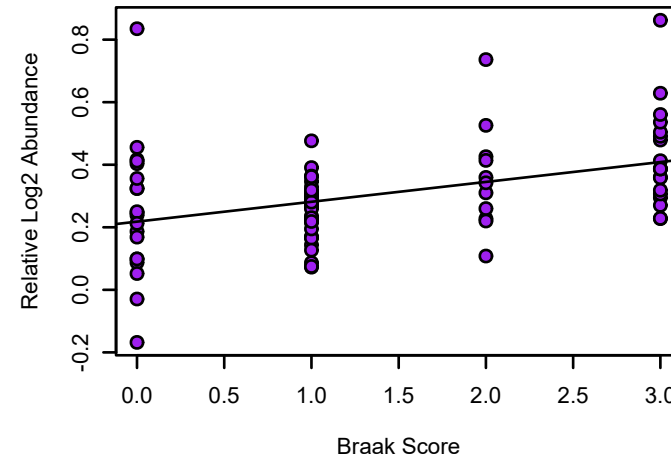
ANP32A UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 3e-06



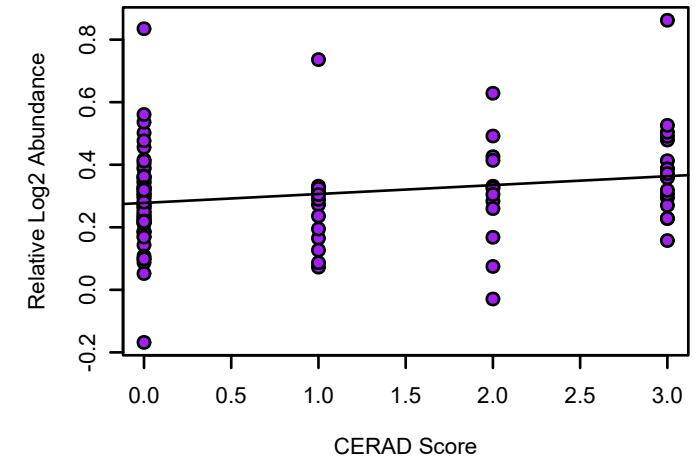
ANP32A UPenn Mixed PRM
K-W ANOVA p: 2.8e-05



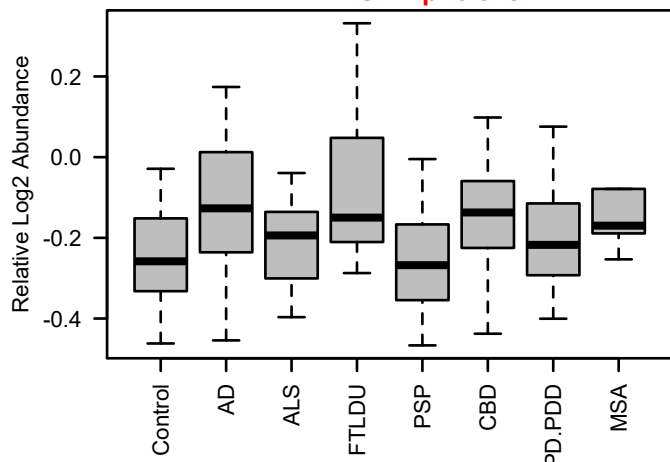
bicor=0.43, p=4.9e-05
cor=0.41, p=0.00011



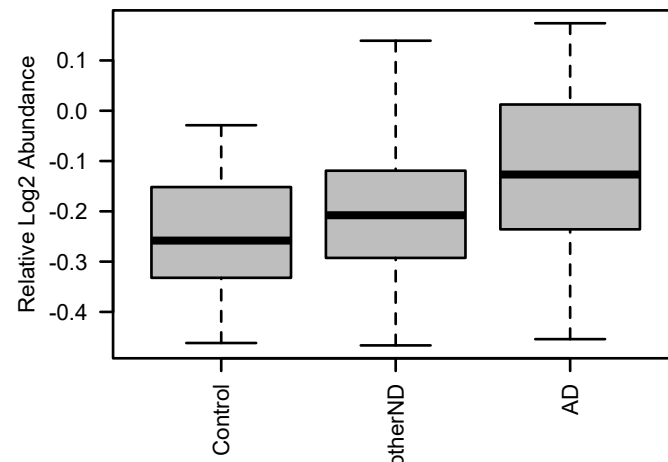
bicor=0.23, p=0.023
cor=0.22, p=0.028



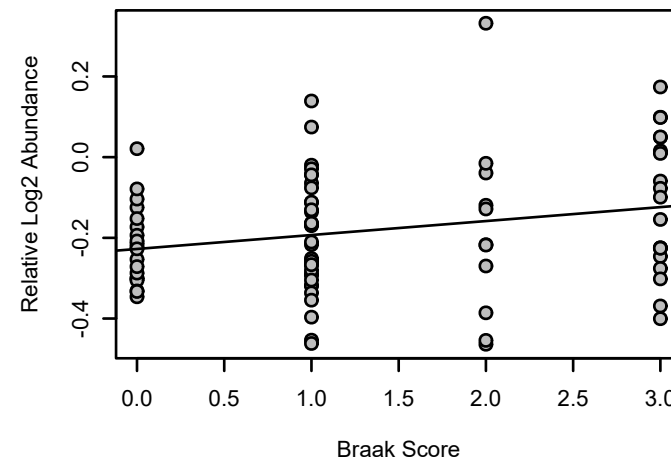
NCAM2 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.025



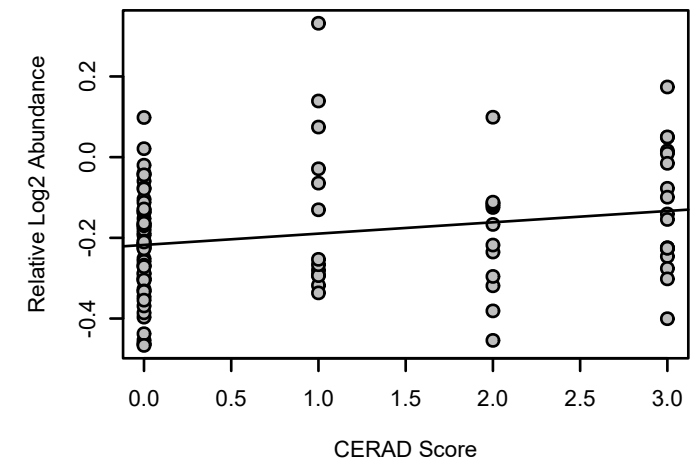
NCAM2 UPenn Mixed PRM
K-W ANOVA p: 0.066



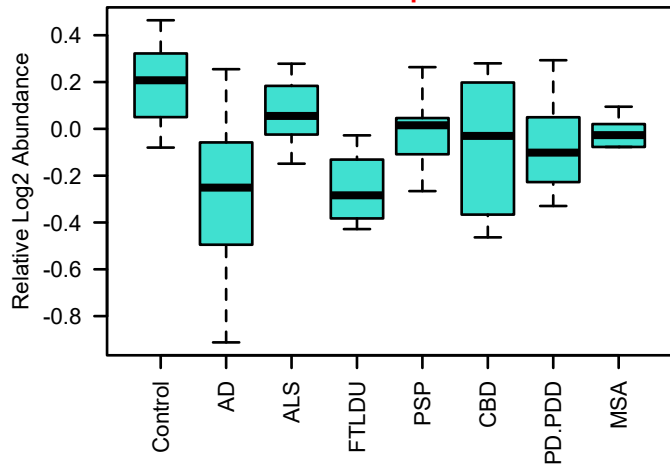
bicor=0.25, p=0.019
cor=0.24, p=0.028



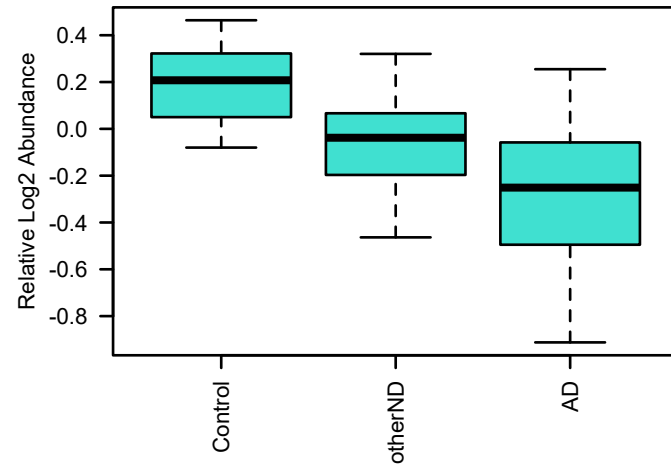
bicor=0.21, p=0.032
cor=0.22, p=0.028



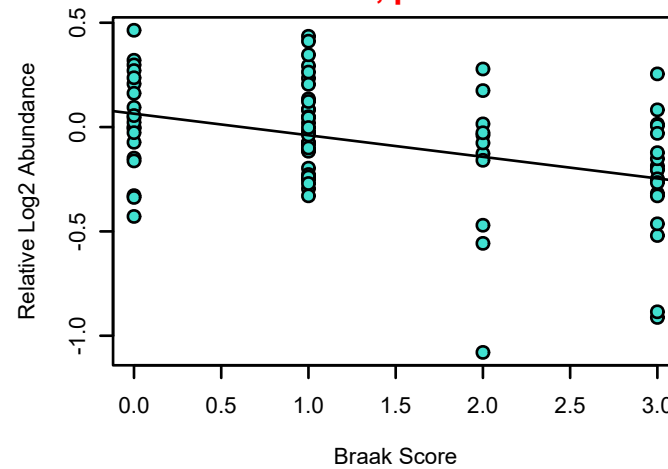
ACTN1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 5.8e-07



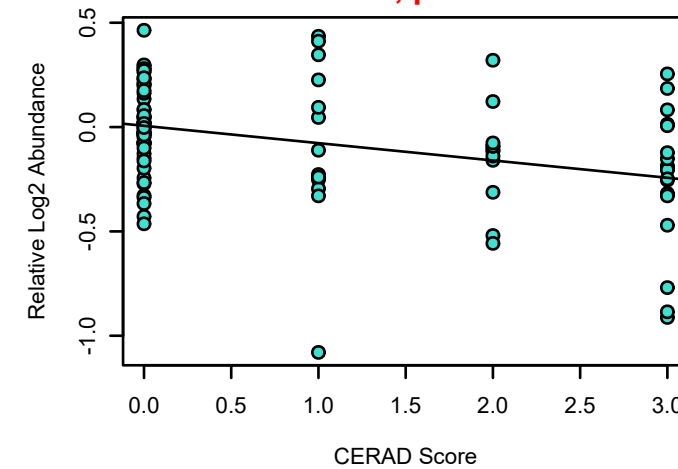
ACTN1 UPenn Mixed PRM
K-W ANOVA p: 2.7e-06



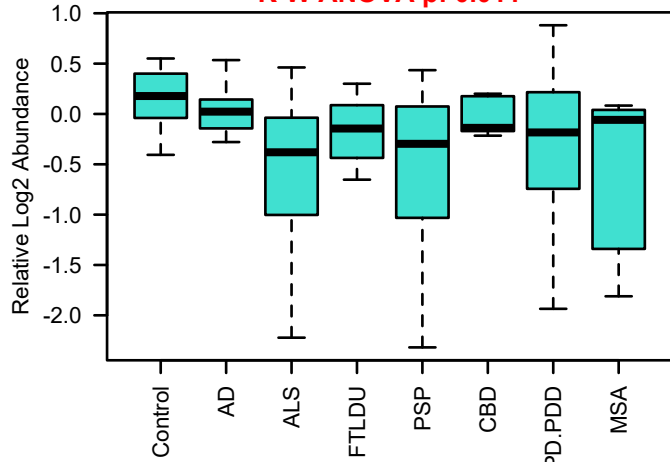
bicor=-0.36, p=0.00076
cor=-0.4, p=0.00016



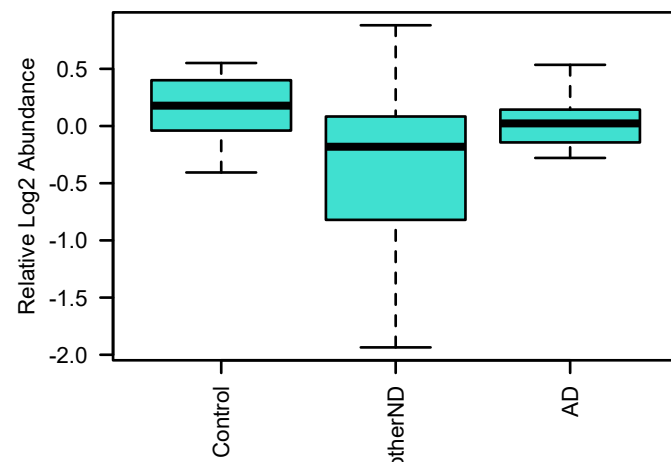
bicor=-0.34, p=0.00055
cor=-0.35, p=0.00036



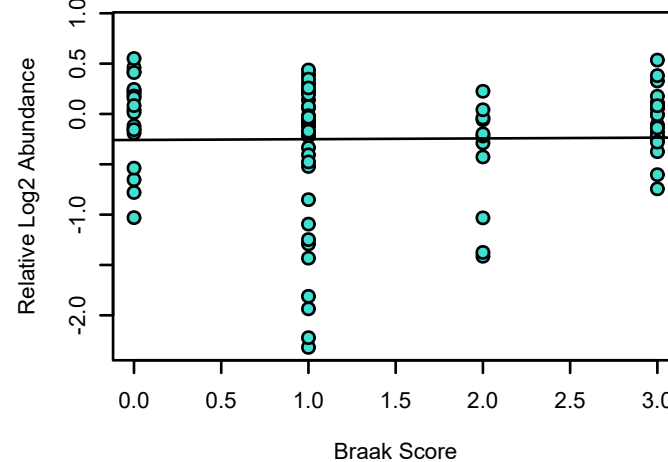
SYT1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.011



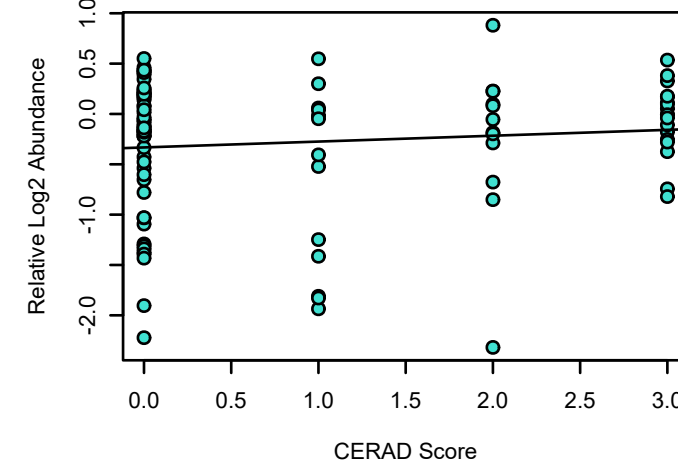
SYT1 UPenn Mixed PRM
K-W ANOVA p: 0.00094



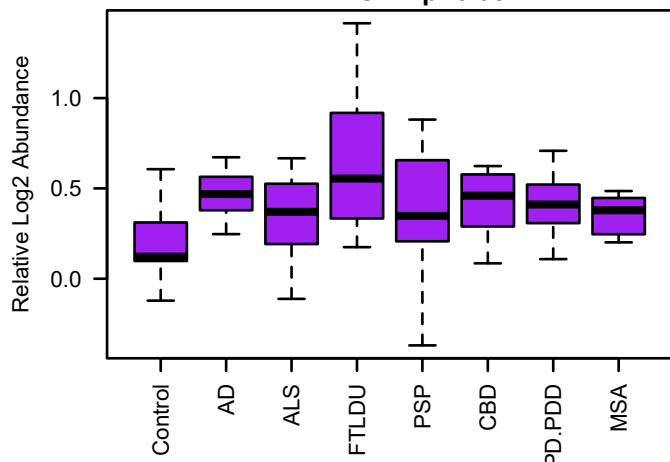
bicor=-0.095, p=0.39
cor=0.013, p=0.91



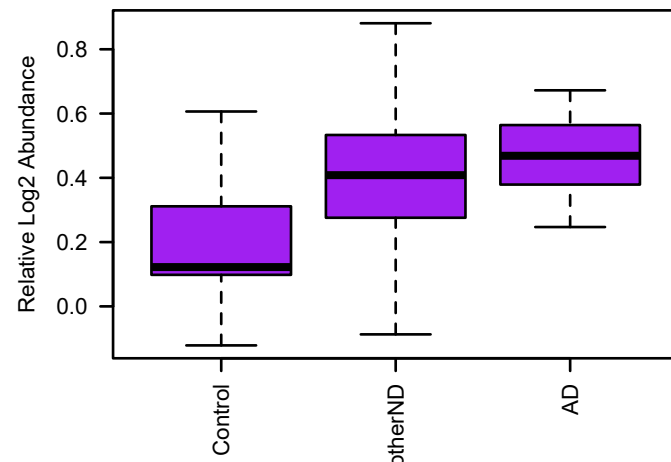
bicor=0.1, p=0.32
cor=0.1, p=0.32



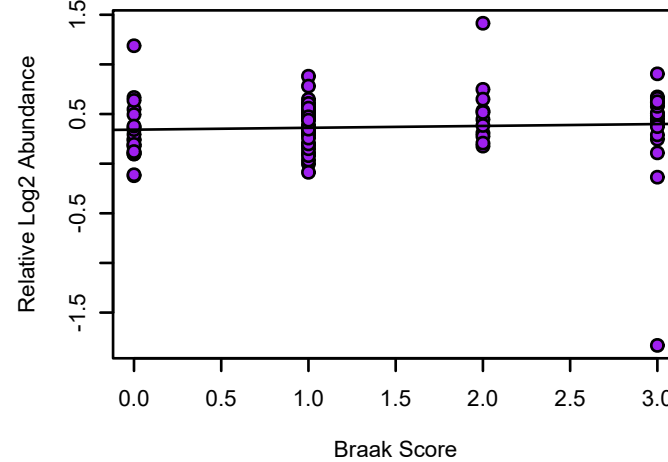
SRSF2 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.057



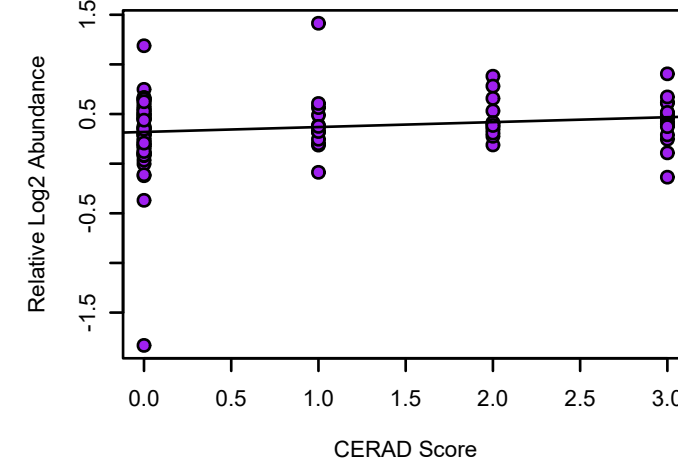
SRSF2 UPenn Mixed PRM
K-W ANOVA p: 0.063



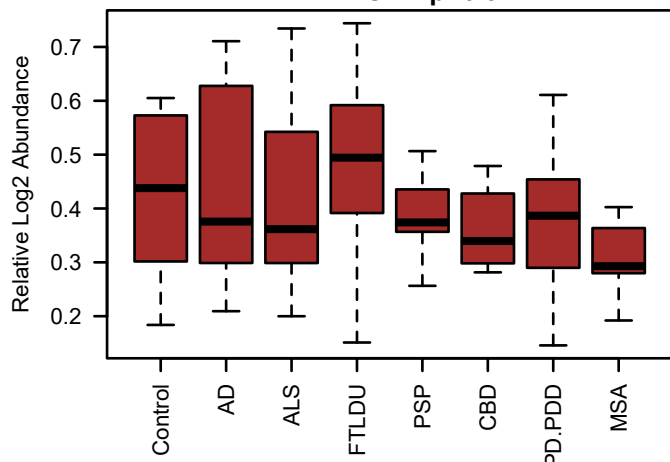
bicor=0.27, p=0.012
cor=0.057, p=0.61



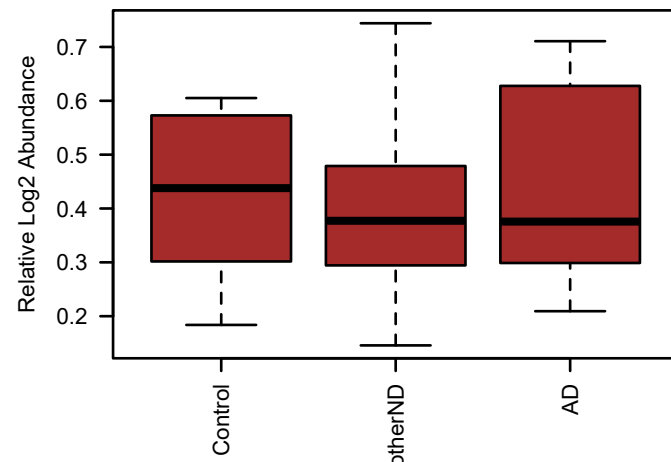
bicor=0.19, p=0.056
cor=0.17, p=0.091



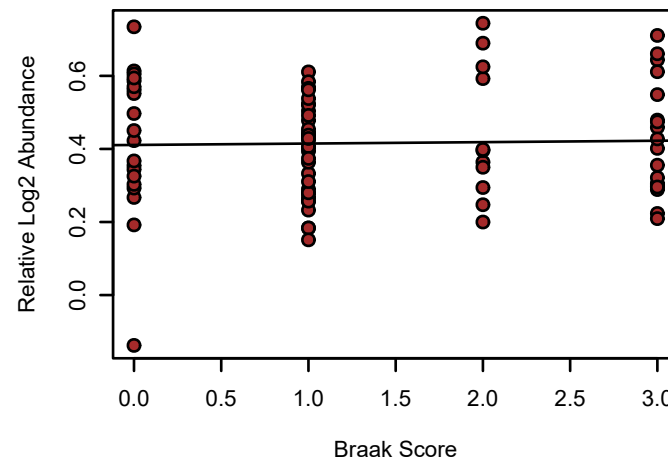
LONP1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.37



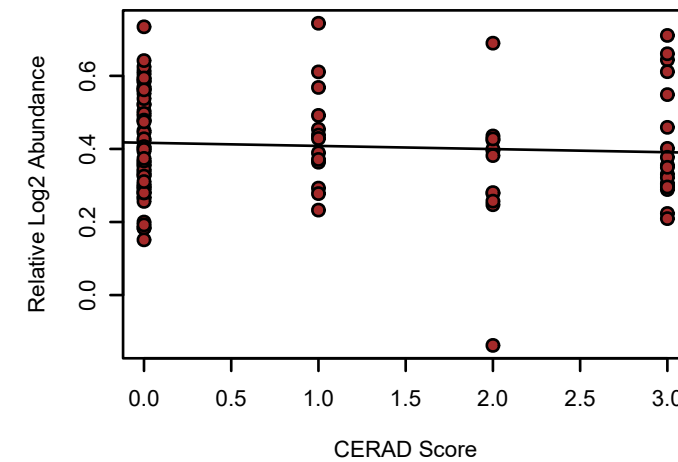
LONP1 UPenn Mixed PRM
K-W ANOVA p: 0.38



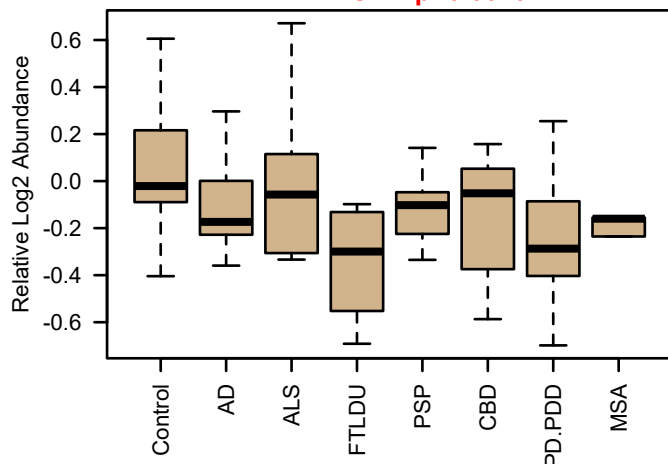
bicor=0.018, p=0.87
cor=0.026, p=0.81



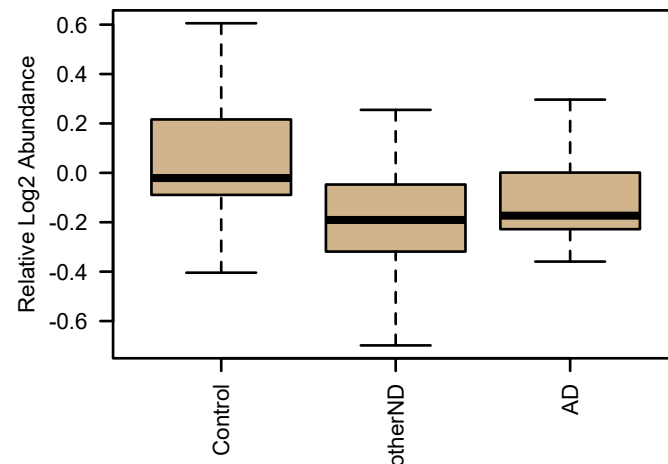
bicor=-0.071, p=0.48
cor=-0.069, p=0.5



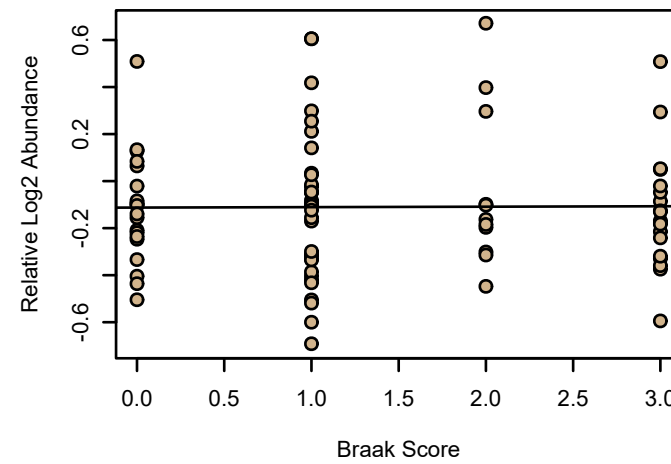
RPS5 UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 0.0019



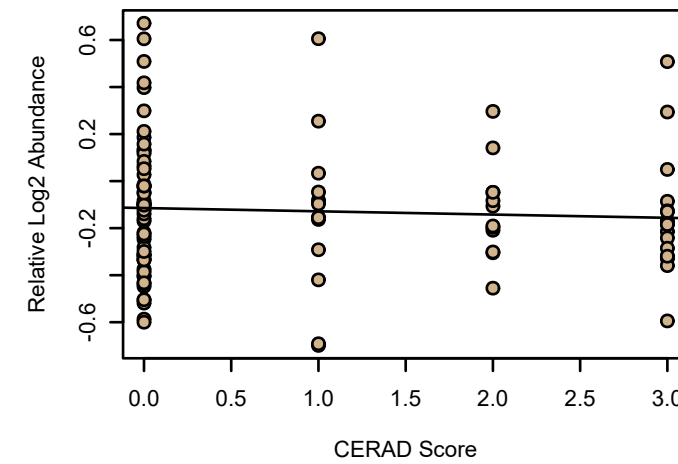
RPS5 UPenn Mixed PRM
K-W ANOVA p: 0.0019



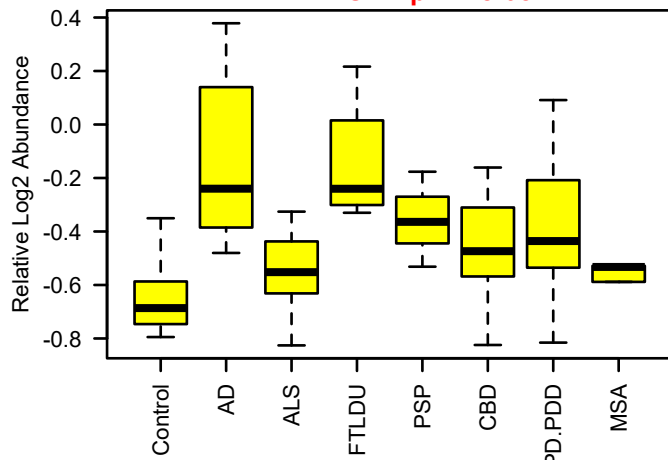
bicor=0.0041, p=0.97
cor=0.0071, p=0.95



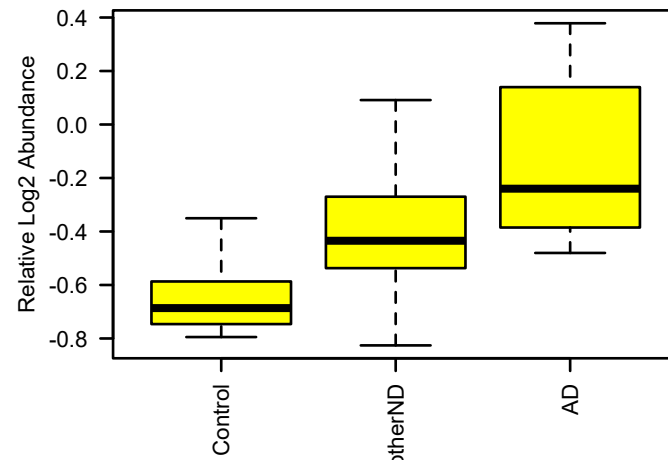
bicor=-0.055, p=0.59
cor=-0.059, p=0.56



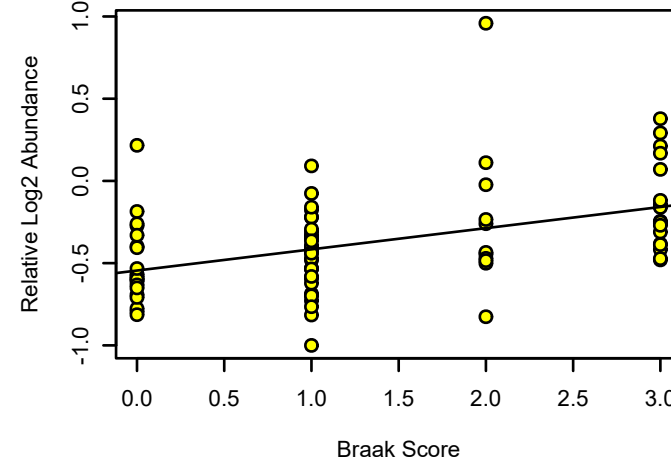
PAFAH1B3 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.2e-08



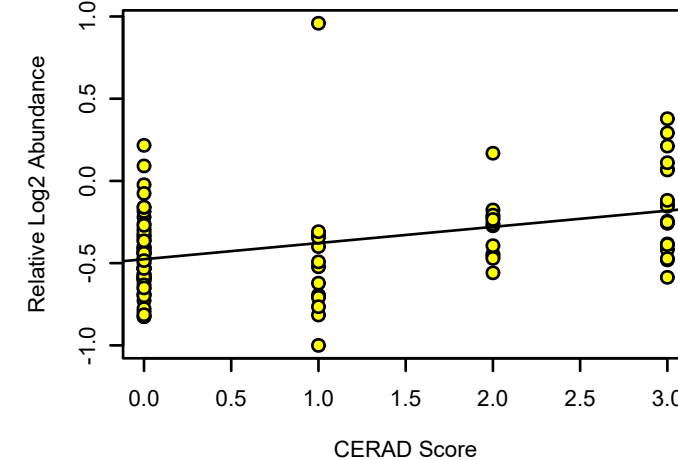
PAFAH1B3 UPenn Mixed PRM
K-W ANOVA p: 8.8e-07



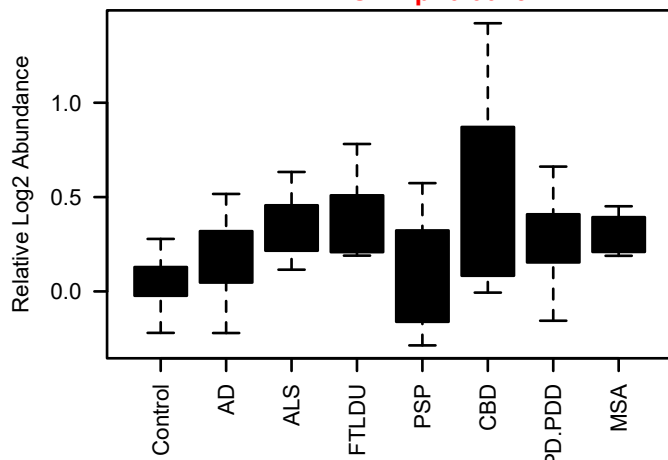
bicor=0.46, p=8.6e-06
cor=0.45, p=1.7e-05



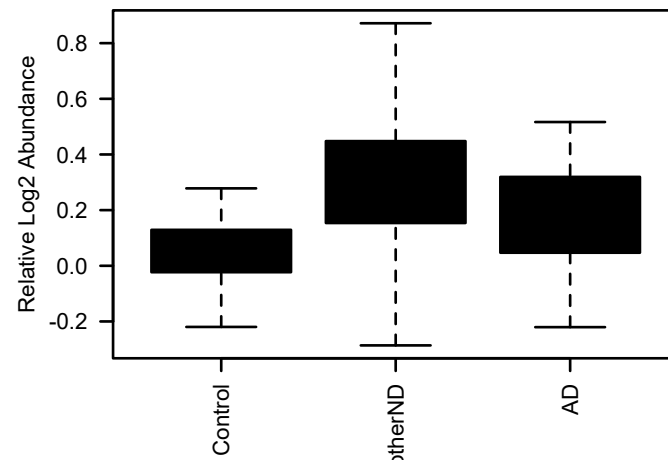
bicor=0.43, p=8.6e-06
cor=0.39, p=6e-05



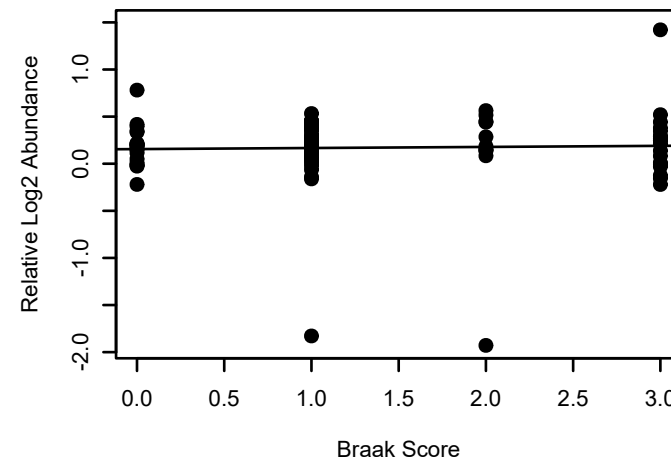
RPL18A UPenn Mixed PRM
M7 black MEGA module member
K-W ANOVA p: 0.0015



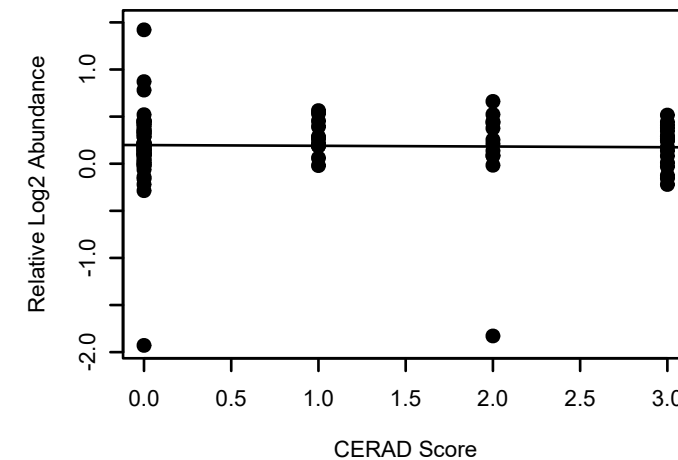
RPL18A UPenn Mixed PRM
K-W ANOVA p: 0.15



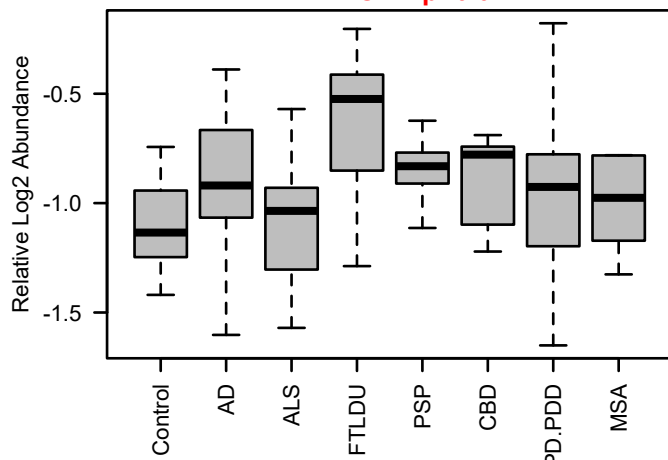
bicor=0.016, p=0.89
cor=0.031, p=0.78



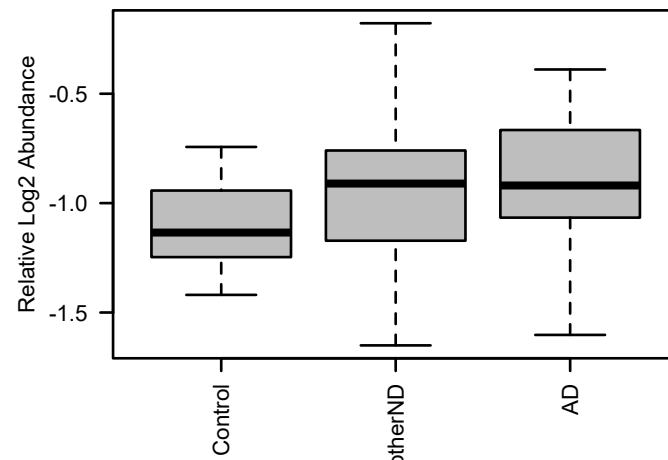
bicor=0.033, p=0.74
cor=-0.024, p=0.81



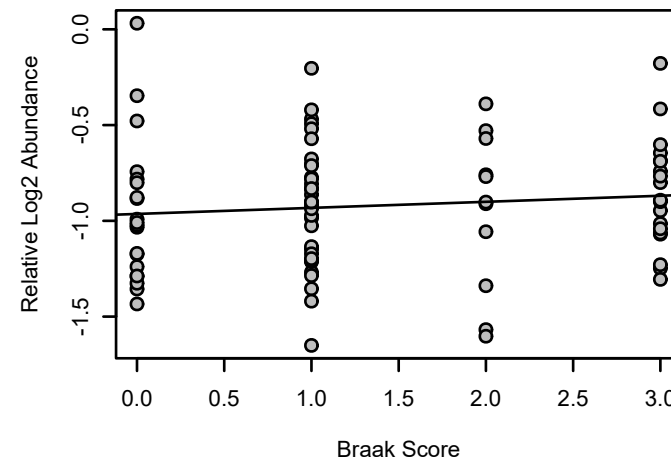
RAB27B UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.011



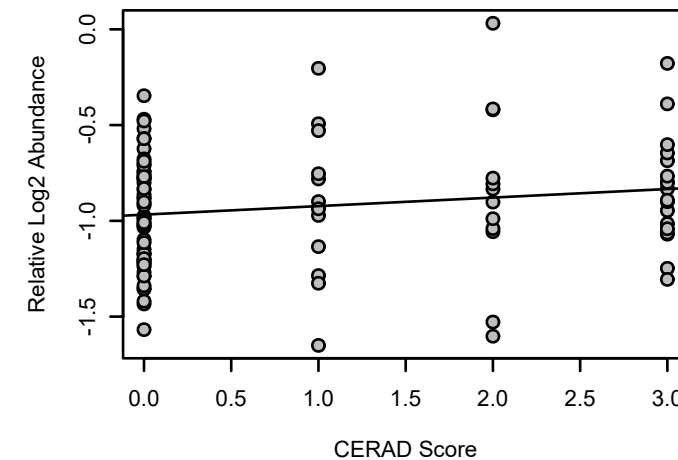
RAB27B UPenn Mixed PRM
K-W ANOVA p: 0.16



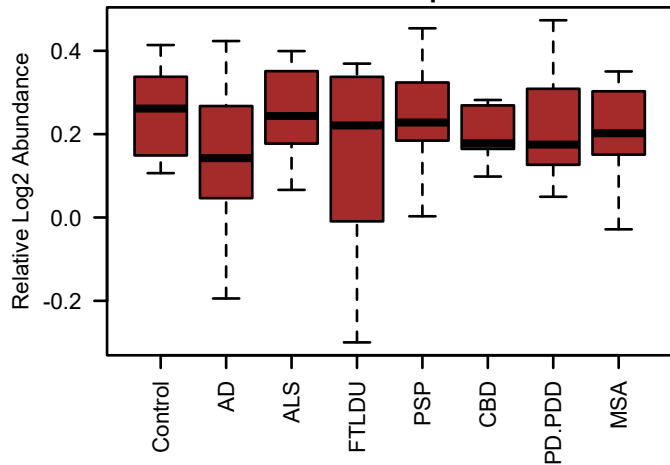
bicor=0.1, p=0.37
cor=0.1, p=0.37



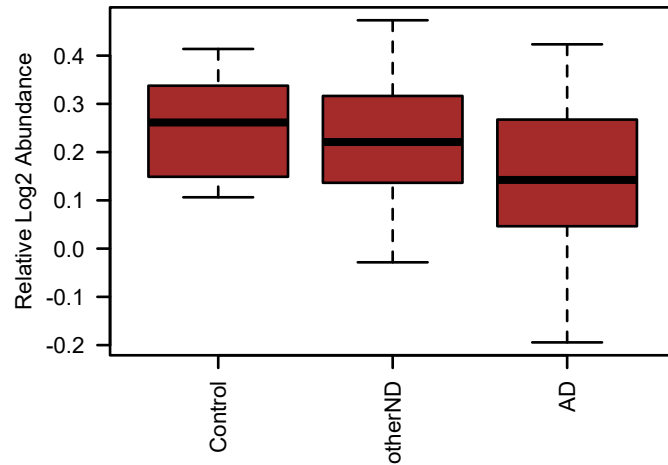
bicor=0.16, p=0.11
cor=0.17, p=0.091



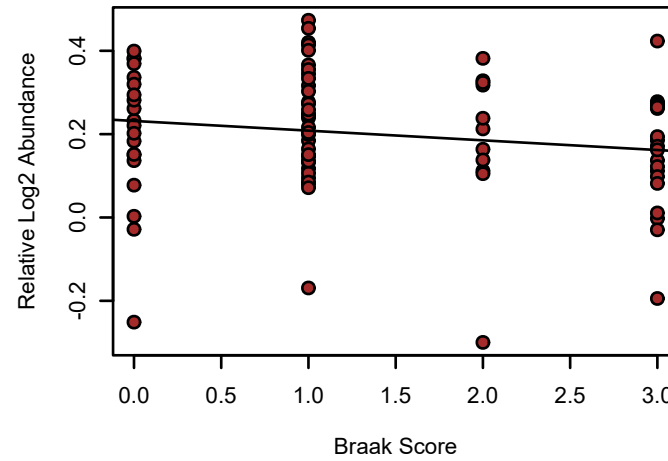
PDHX UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.41



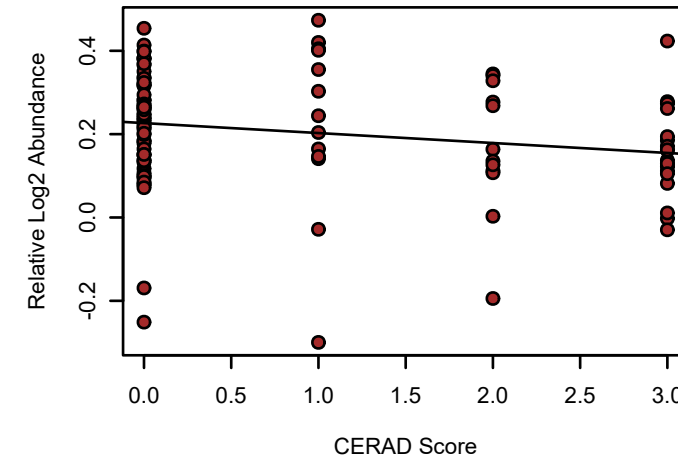
PDHX UPenn Mixed PRM
K-W ANOVA p: 0.15



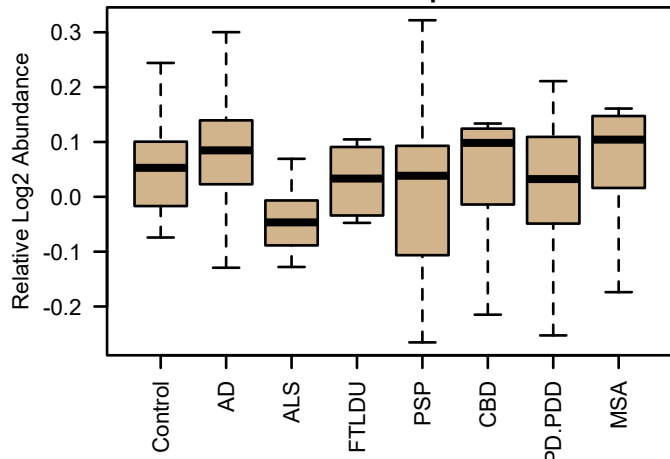
bicor=-0.17, p=0.11
cor=-0.17, p=0.12



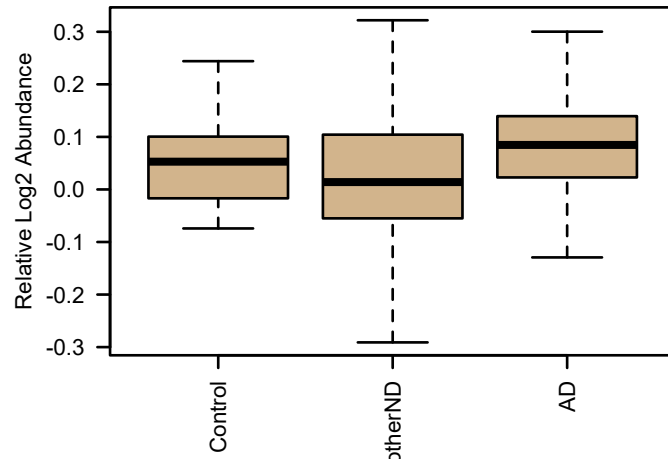
bicor=-0.24, p=0.015
cor=-0.2, p=0.046



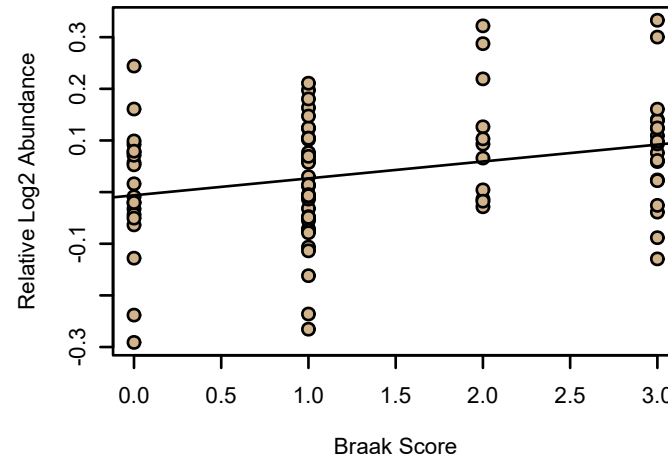
IPO5 UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 0.24



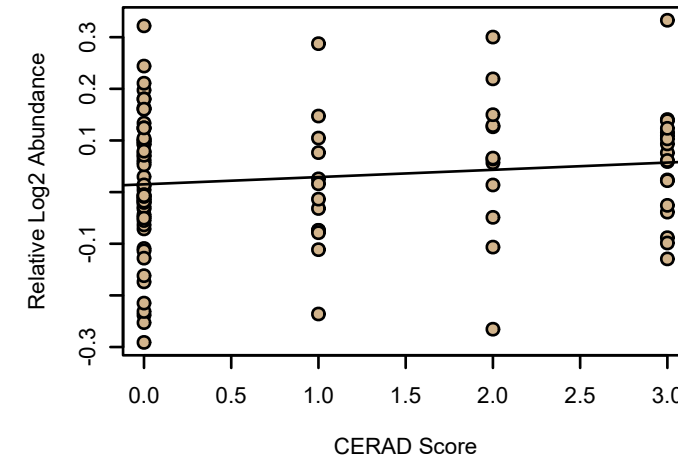
IPO5 UPenn Mixed PRM
K-W ANOVA p: 0.083



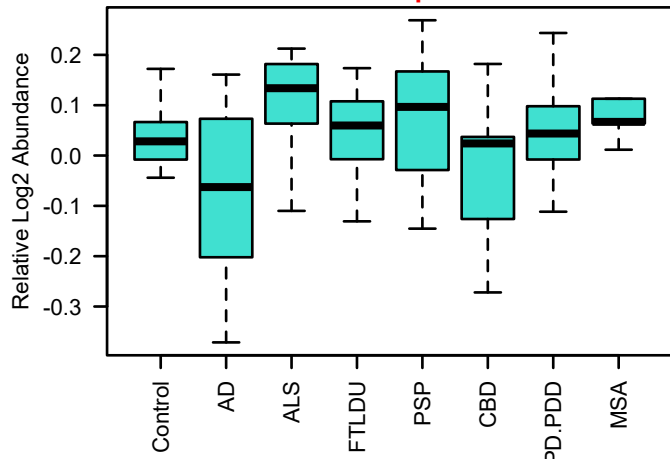
bicor=0.22, p=0.044
cor=0.29, p=0.0075



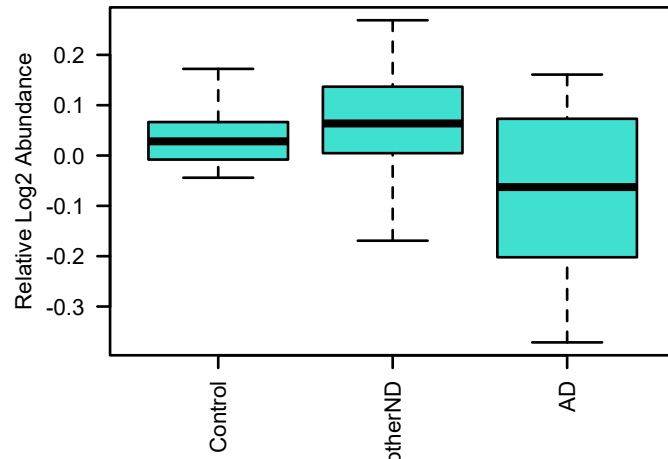
bicor=0.12, p=0.22
cor=0.13, p=0.2



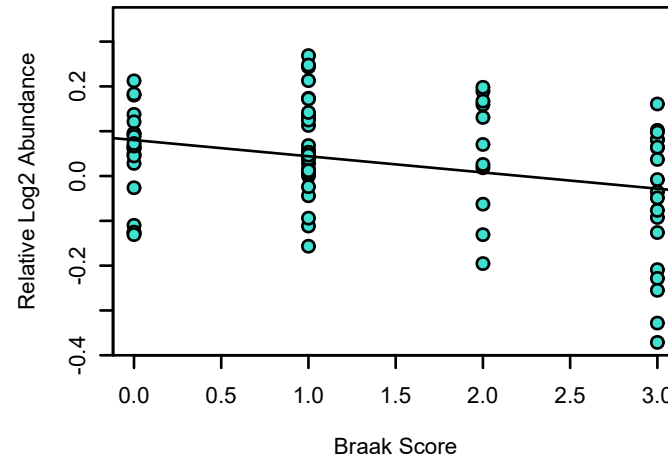
AP3D1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0092



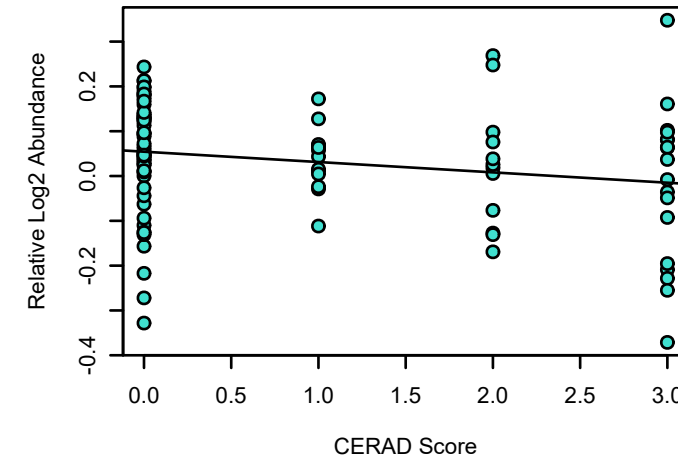
AP3D1 UPenn Mixed PRM
K-W ANOVA p: 0.0018



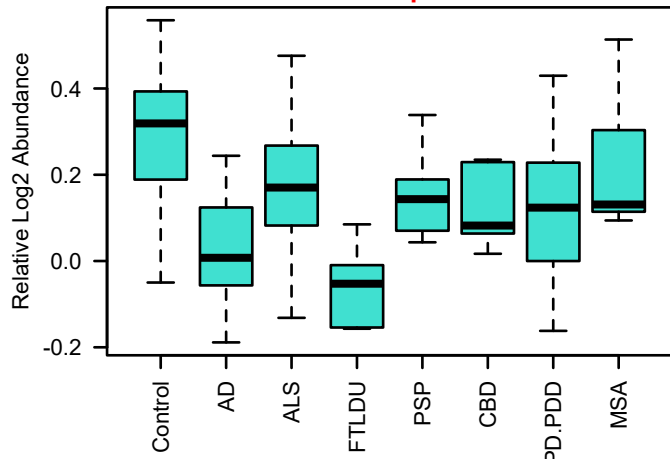
bicor=-0.26, p=0.019
cor=-0.31, p=0.0041



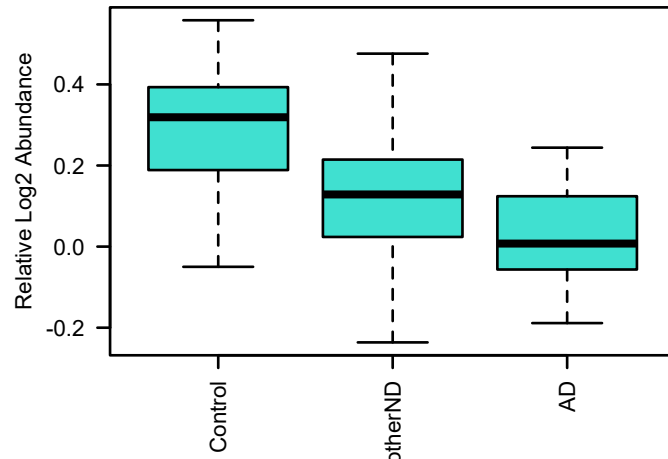
bicor=-0.21, p=0.036
cor=-0.21, p=0.036



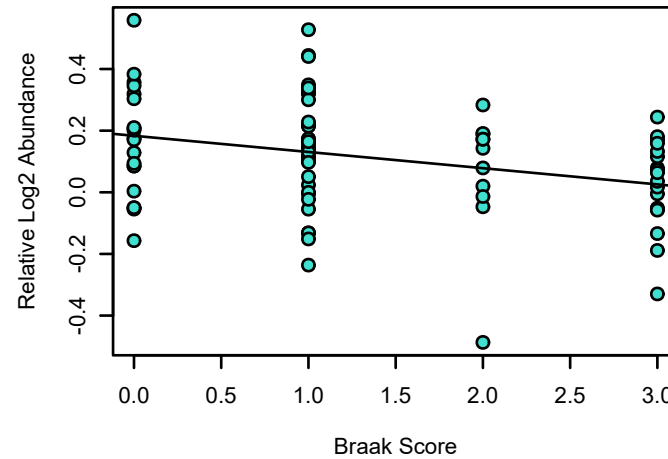
GNB5 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 2.4e-06



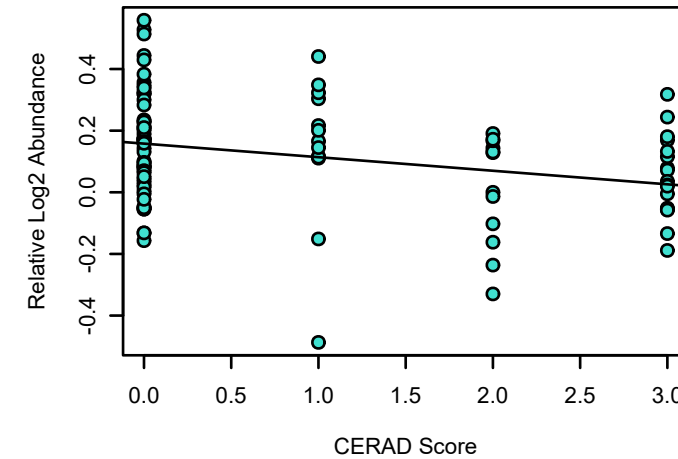
GNB5 UPenn Mixed PRM
K-W ANOVA p: 5.5e-05



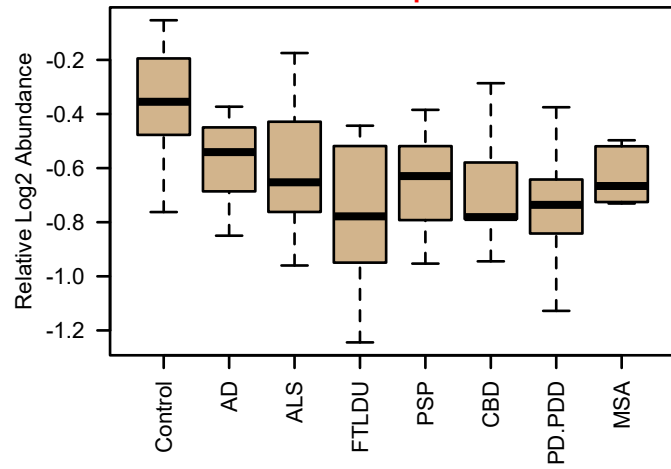
bicor=-0.32, p=0.0032
cor=-0.31, p=0.0041



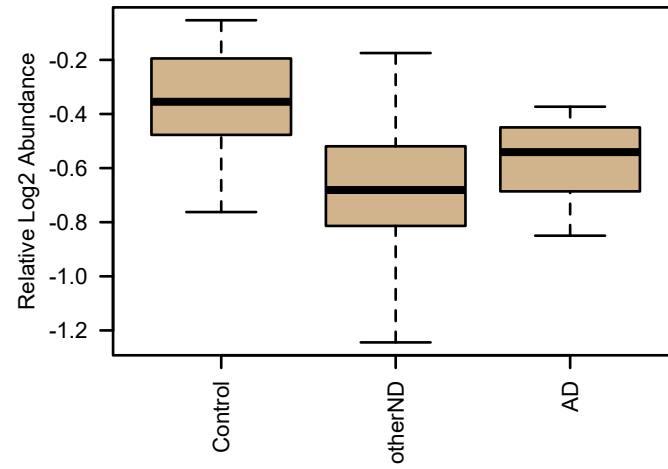
bicor=-0.3, p=0.0028
cor=-0.29, p=0.0034



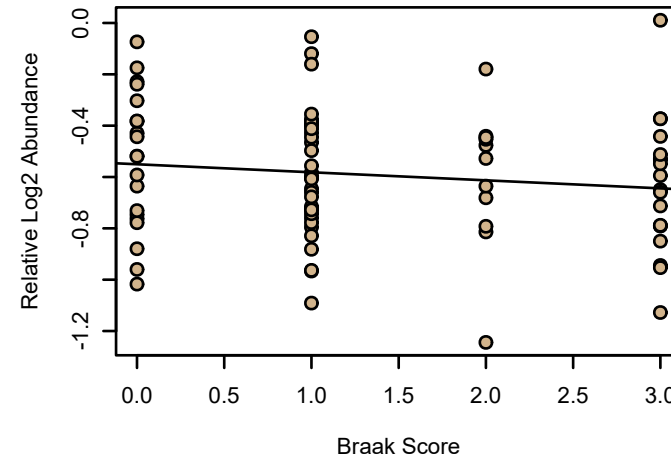
MGST3 UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 3.3e-05



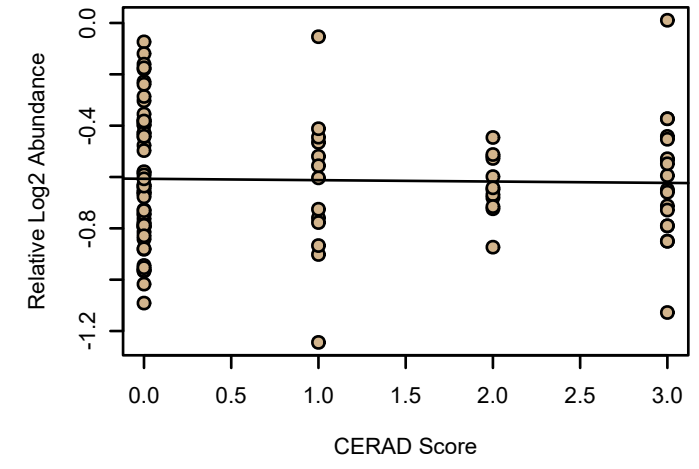
MGST3 UPenn Mixed PRM
K-W ANOVA p: 1.2e-06



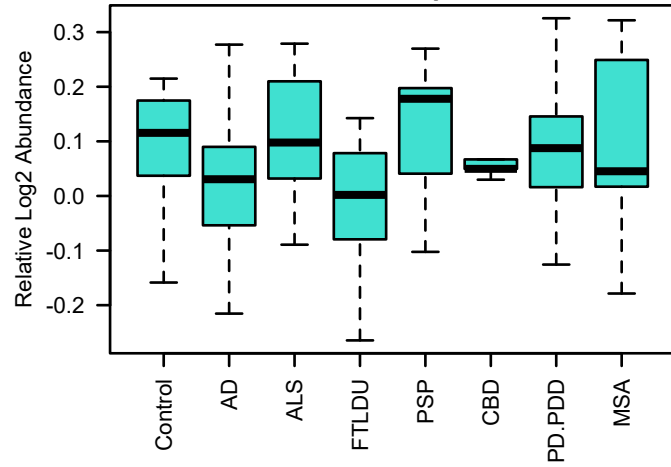
bicor=-0.12, p=0.26
cor=-0.13, p=0.24



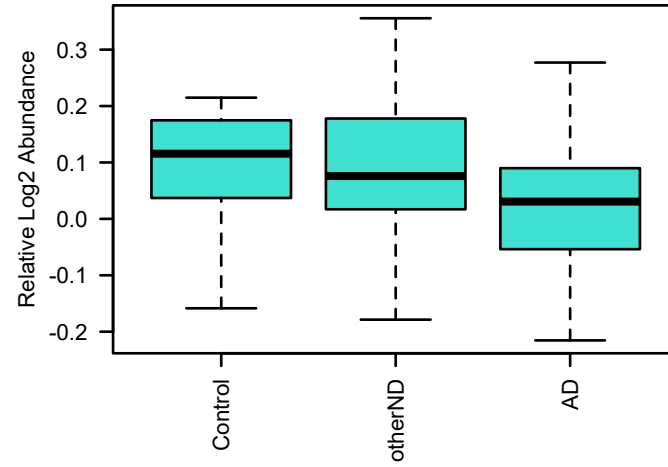
bicor=-0.023, p=0.82
cor=-0.026, p=0.8



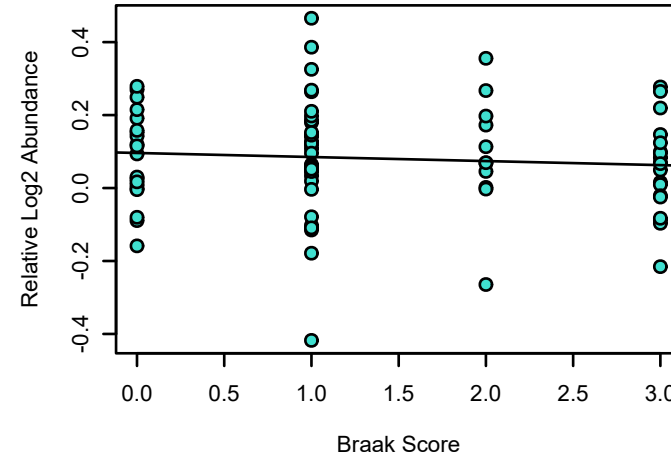
LIN7A UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.24



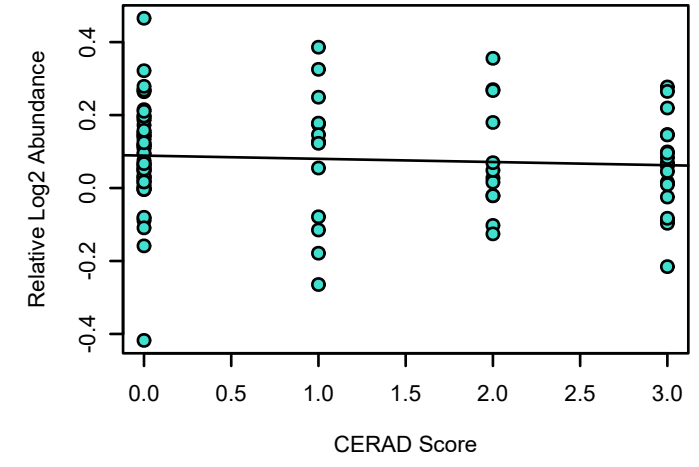
LIN7A UPenn Mixed PRM
K-W ANOVA p: 0.2



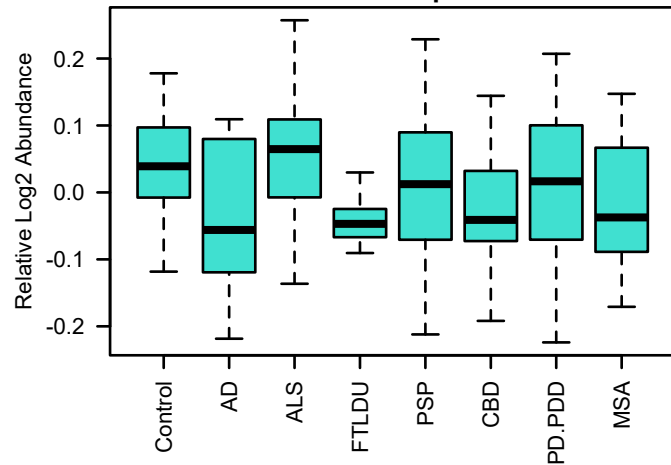
bicor=-0.069, p=0.53
cor=-0.082, p=0.46



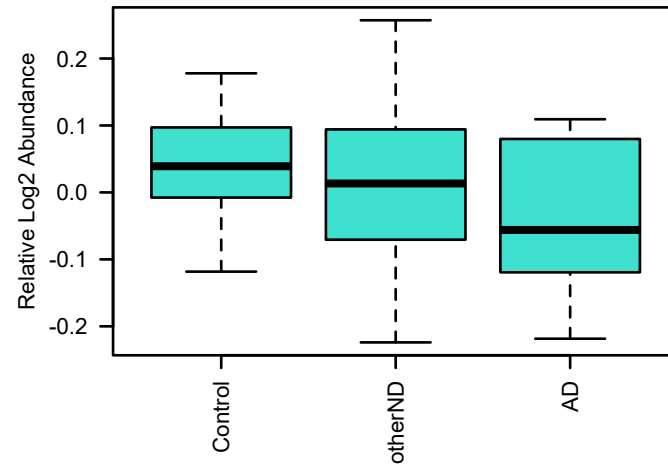
bicor=-0.097, p=0.34
cor=-0.074, p=0.46



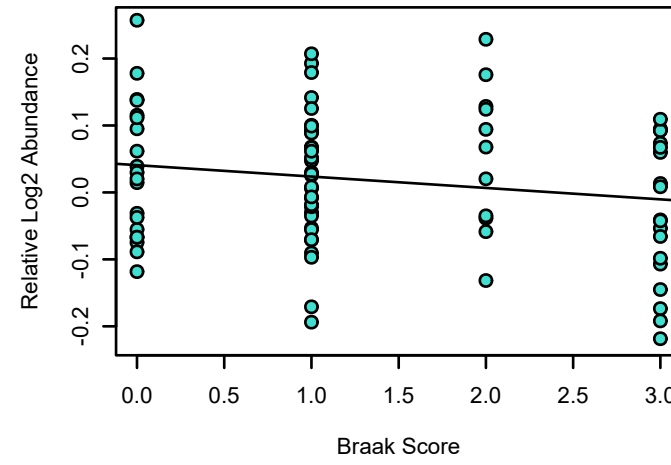
SPTBN2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.26



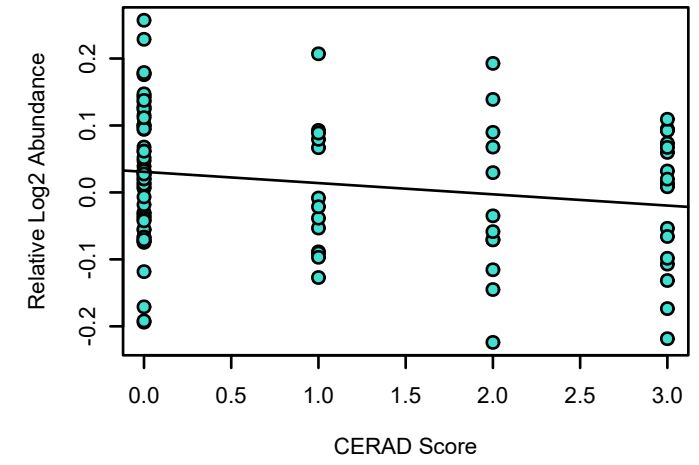
SPTBN2 UPenn Mixed PRM
K-W ANOVA p: 0.15



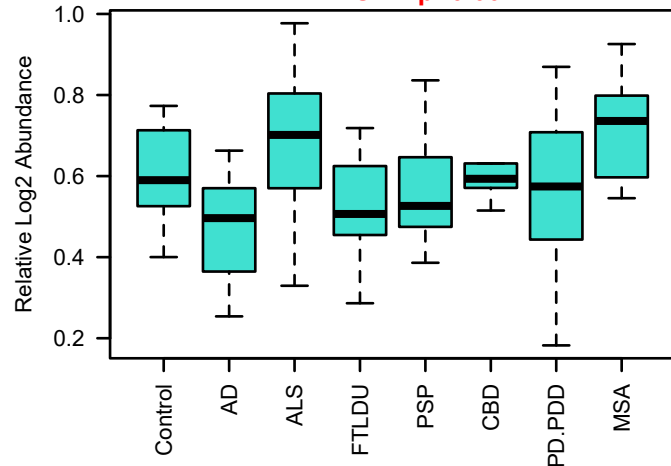
bicor=-0.16, p=0.16
cor=-0.18, p=0.1



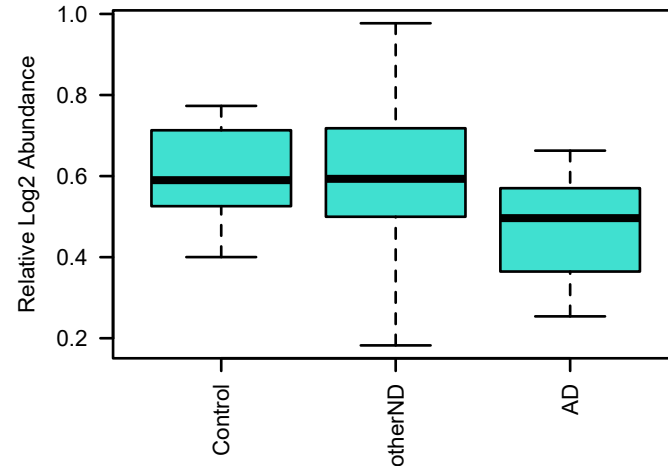
bicor=-0.18, p=0.068
cor=-0.19, p=0.058



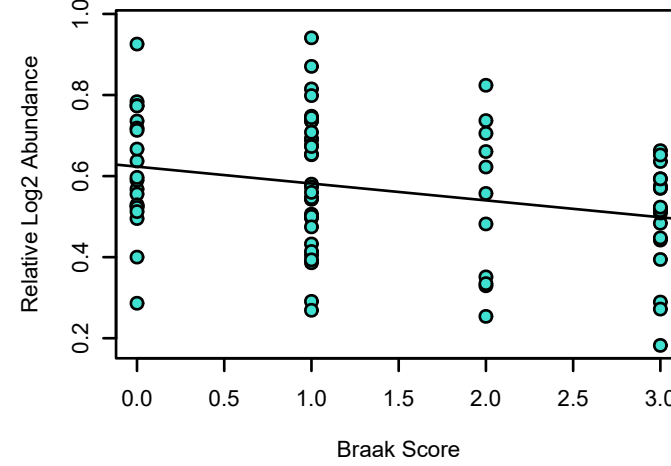
DCLK1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0017



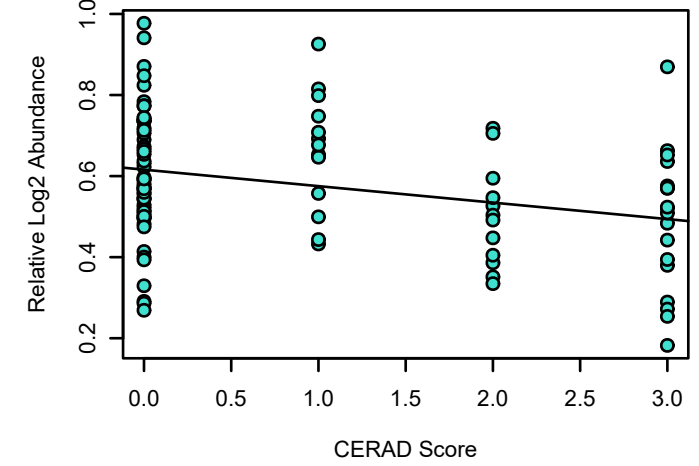
DCLK1 UPenn Mixed PRM
K-W ANOVA p: 0.0099

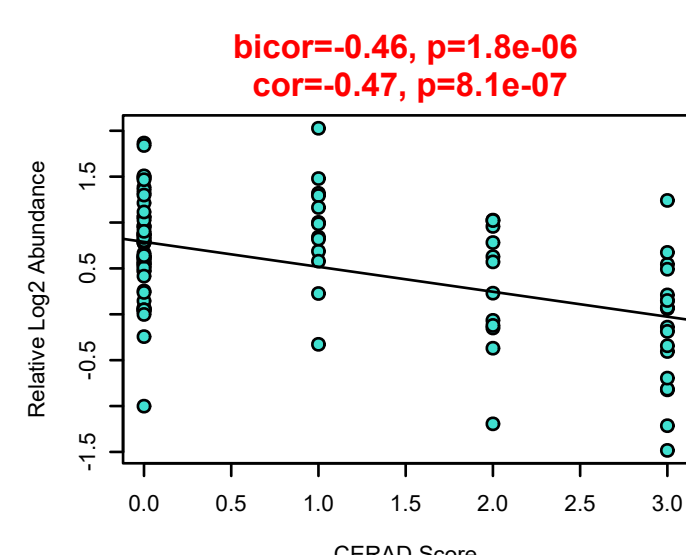
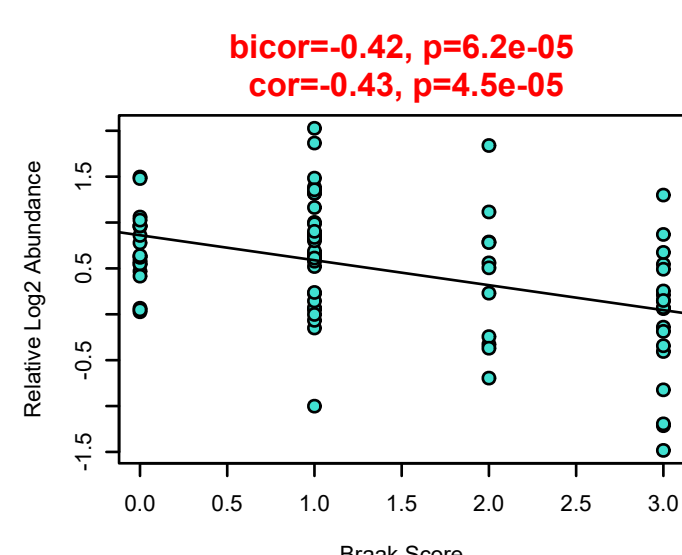
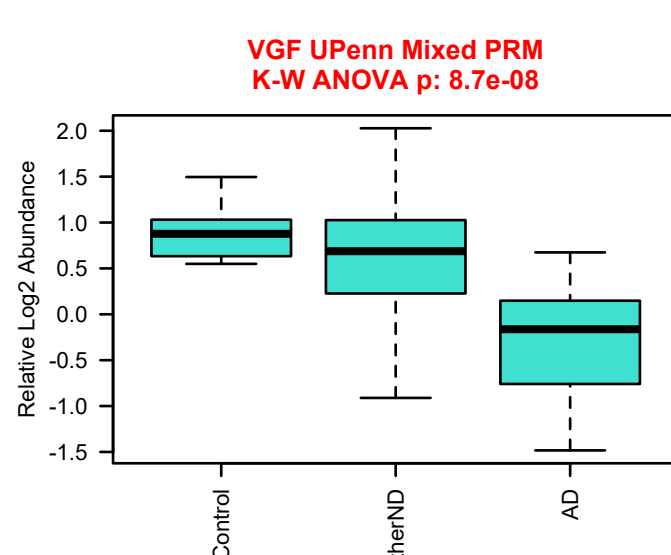
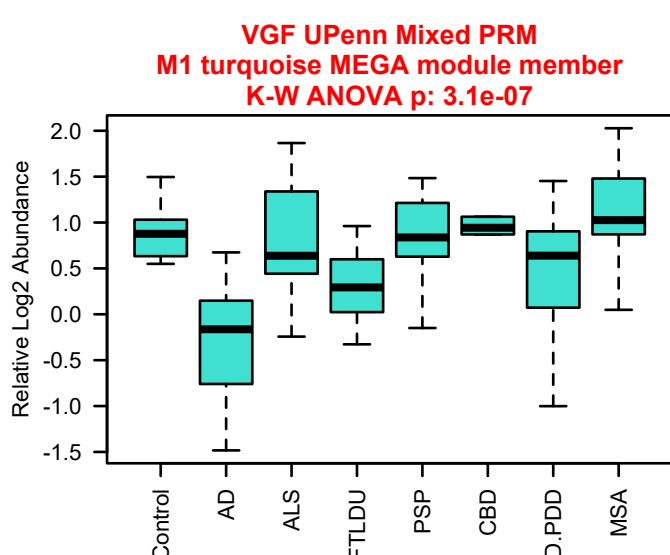
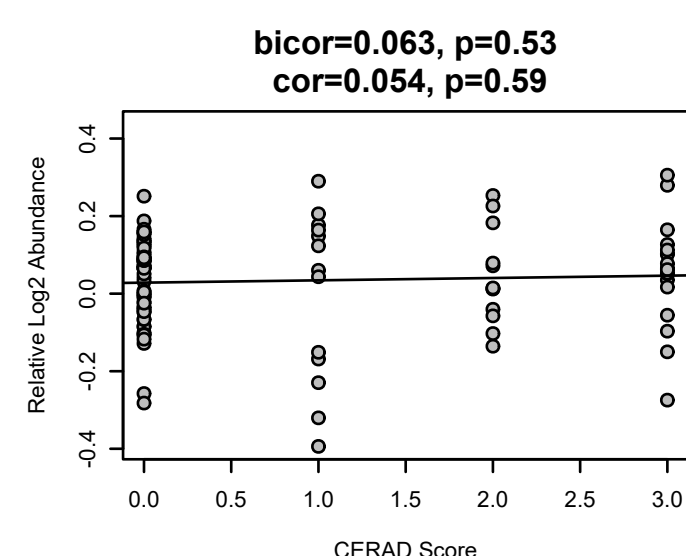
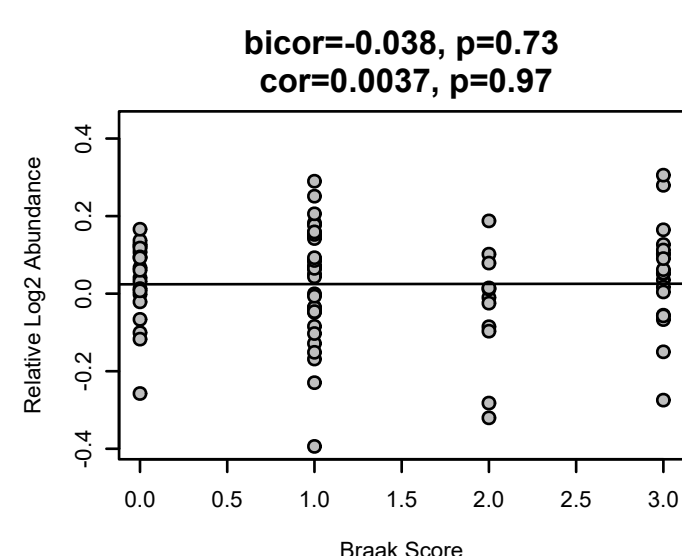
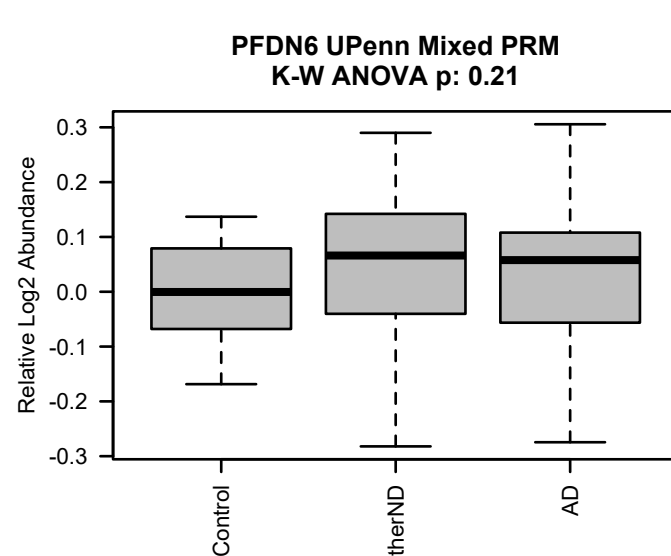
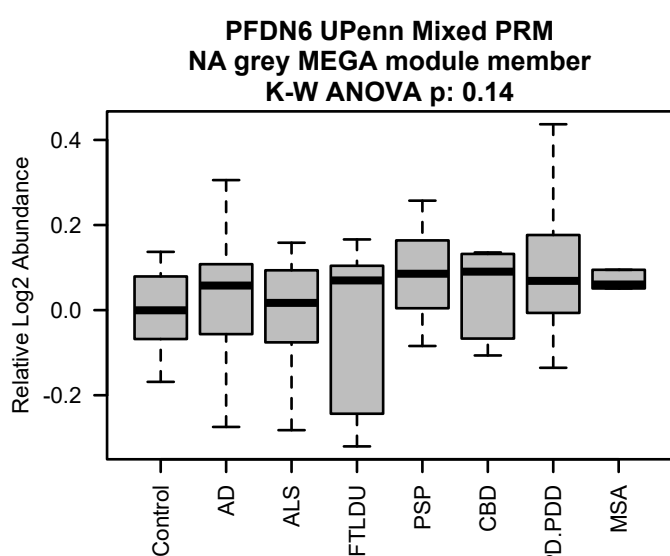
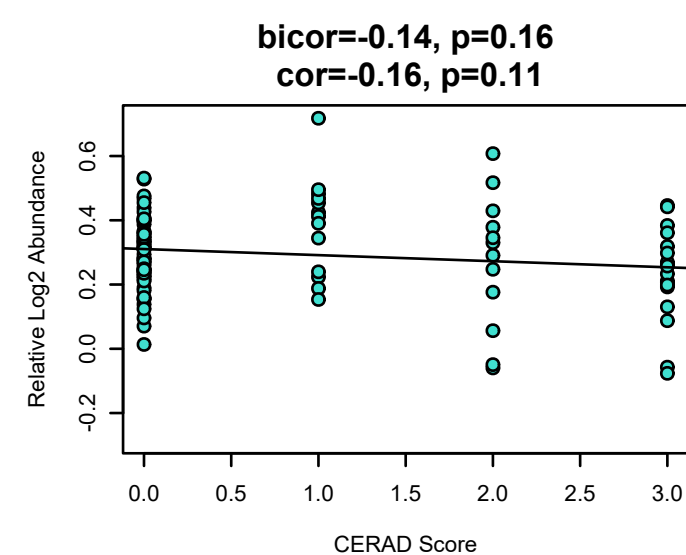
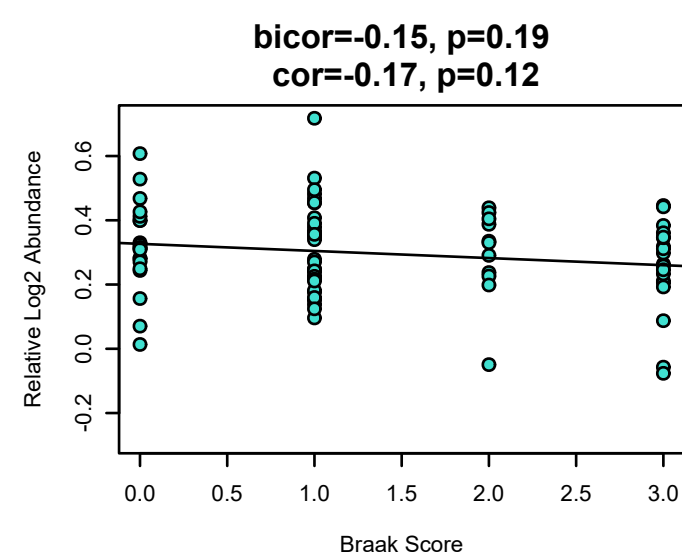
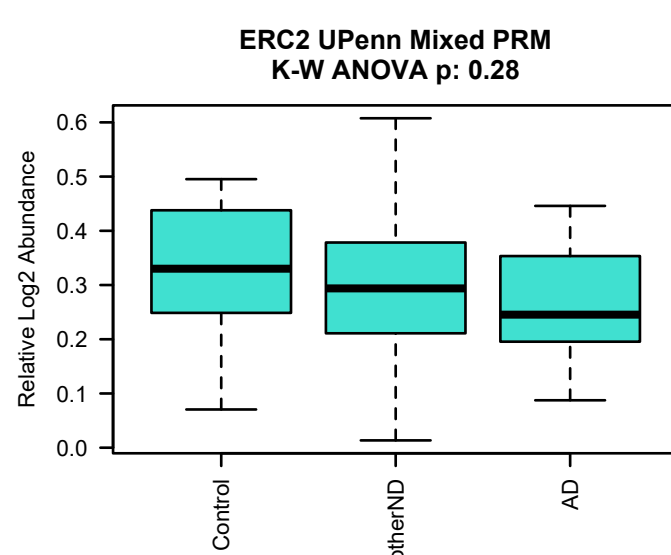
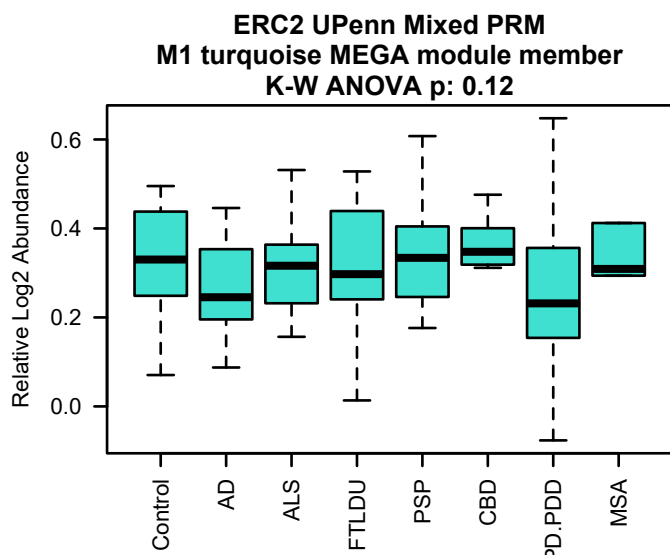
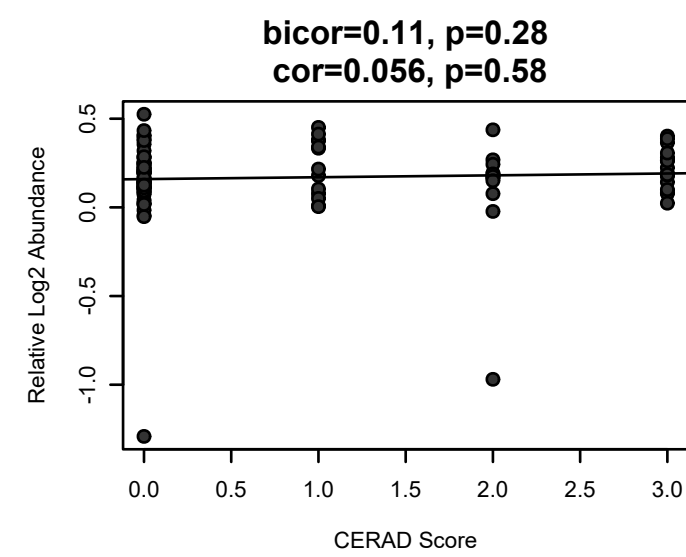
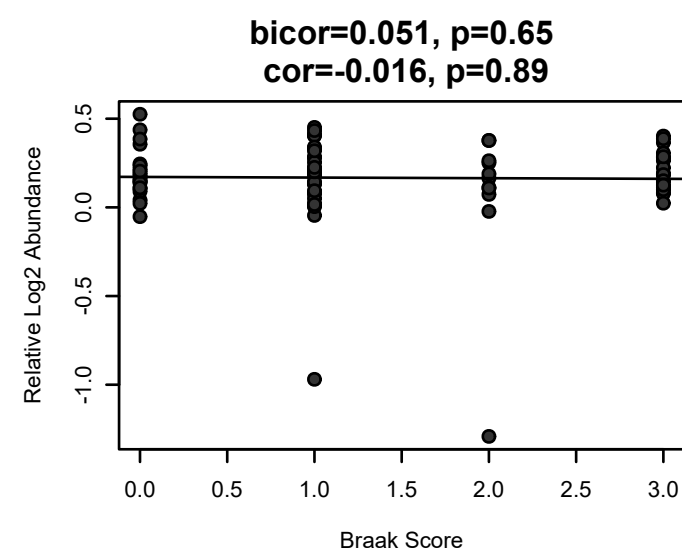
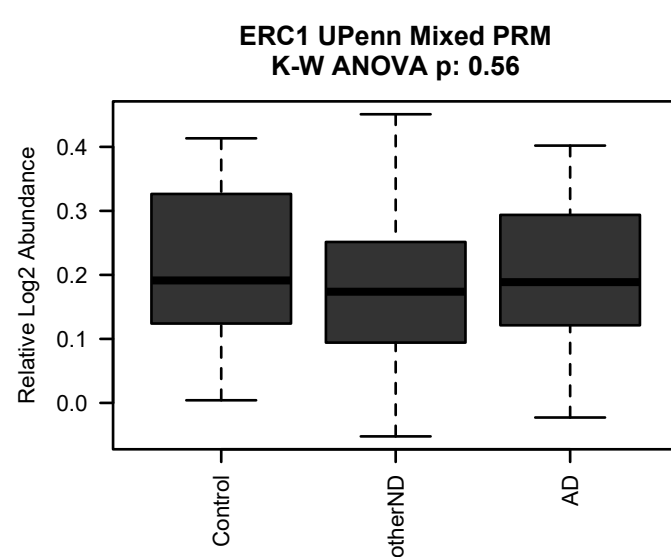
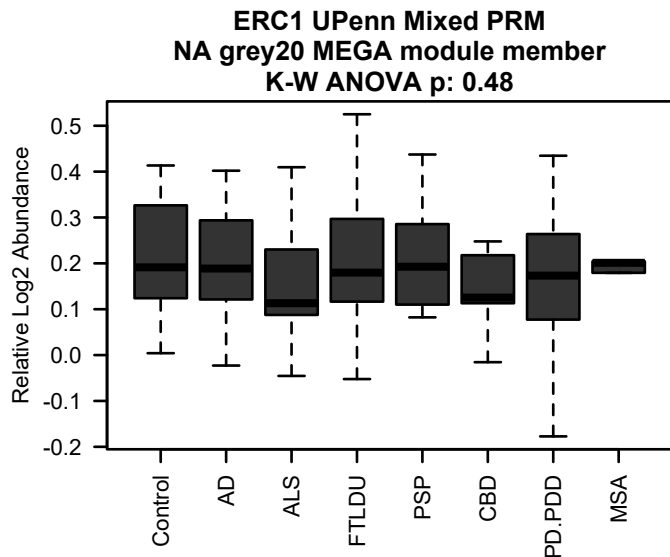


bicor=-0.25, p=0.021
cor=-0.28, p=0.0099

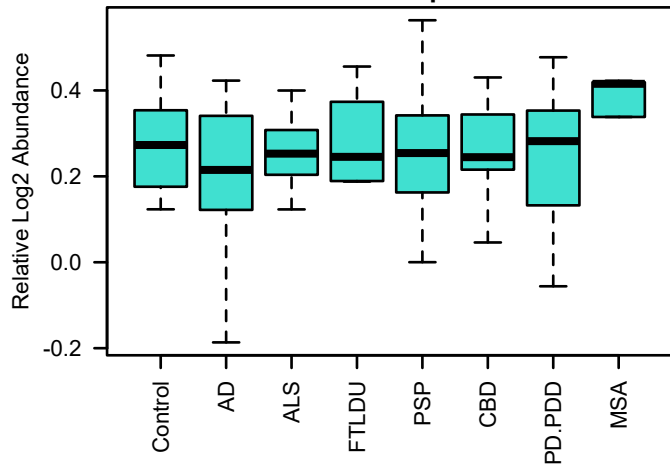


bicor=-0.29, p=0.003
cor=-0.3, p=0.0024

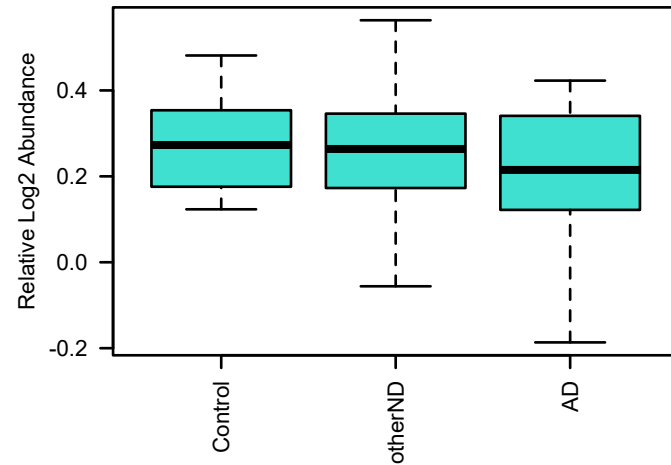




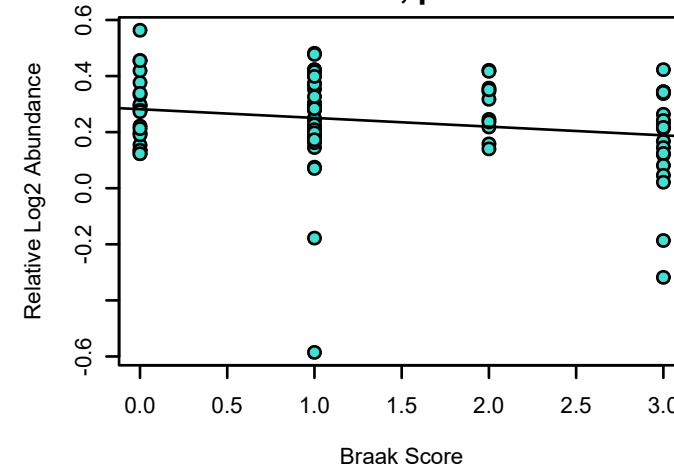
OGT UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.92



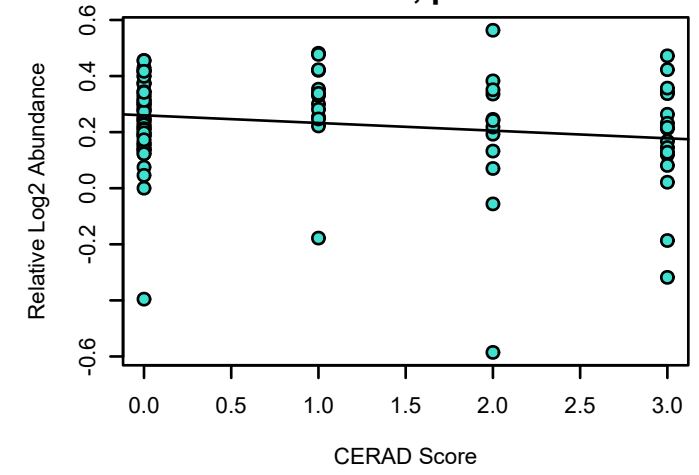
OGT UPenn Mixed PRM
K-W ANOVA p: 0.52



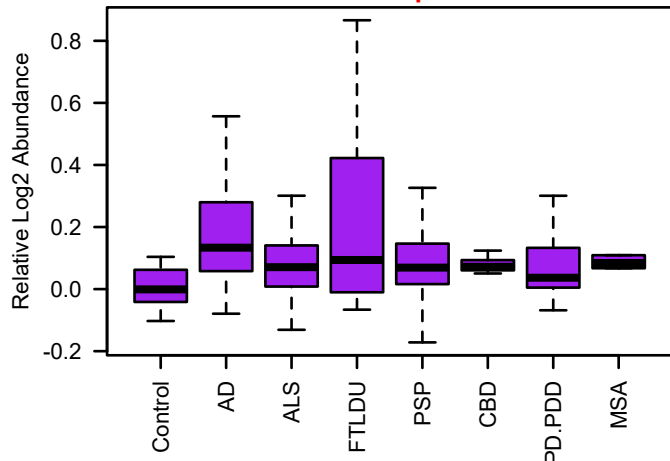
bicor=-0.17, p=0.13
cor=-0.2, p=0.068



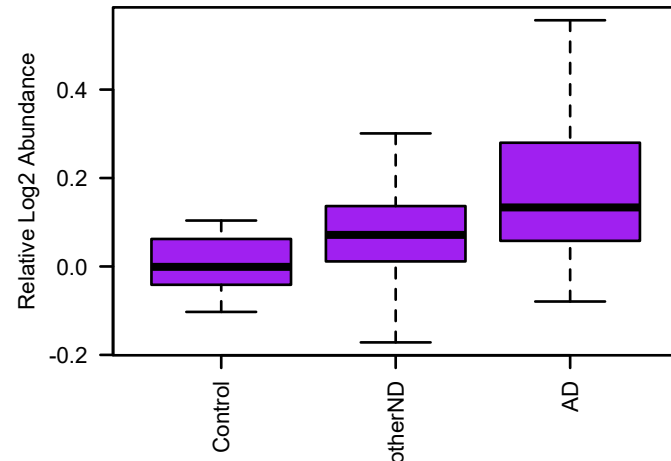
bicor=-0.16, p=0.12
cor=-0.18, p=0.073



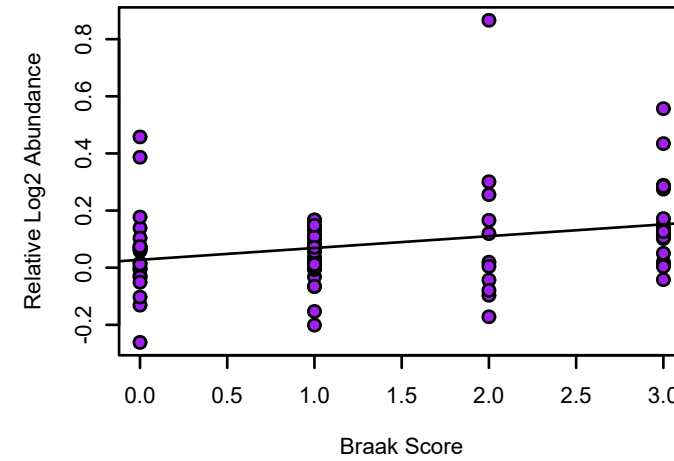
HNRNPR UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.0049



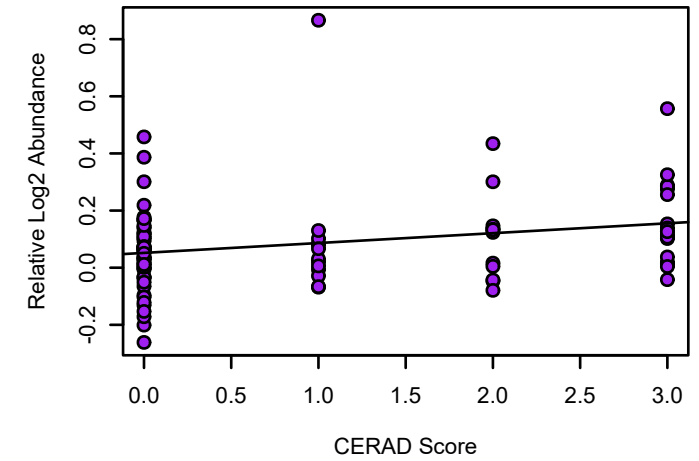
HNRNPR UPenn Mixed PRM
K-W ANOVA p: 0.0024



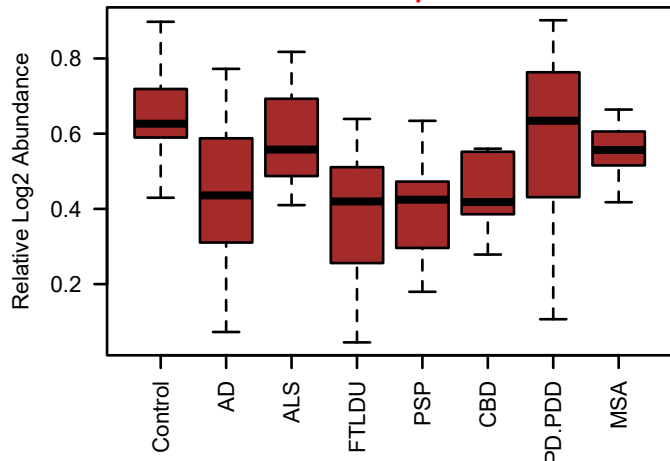
bicor=0.26, p=0.016
cor=0.28, p=0.0099



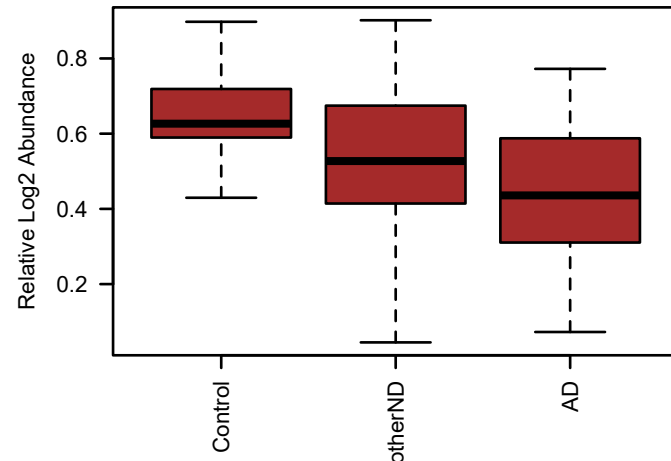
bicor=0.28, p=0.0049
cor=0.26, p=0.009



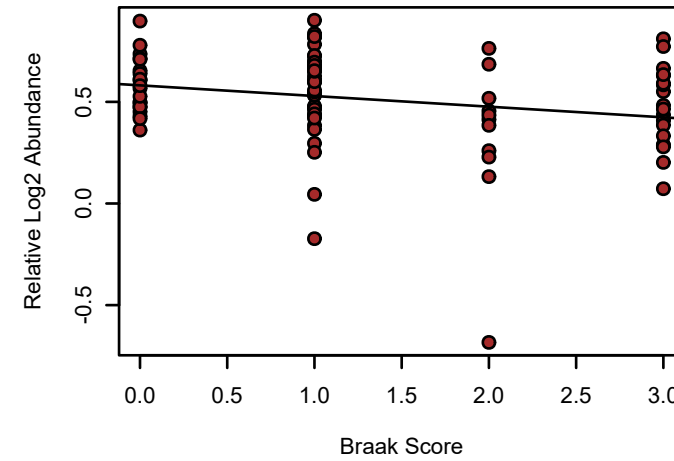
NDUFS5 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0011



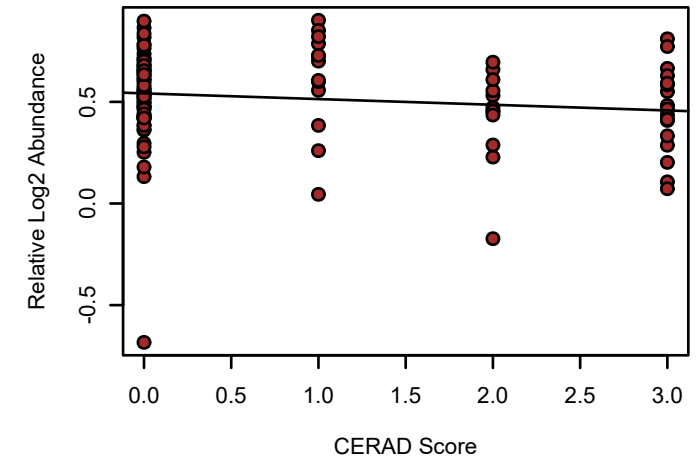
NDUFS5 UPenn Mixed PRM
K-W ANOVA p: 0.041



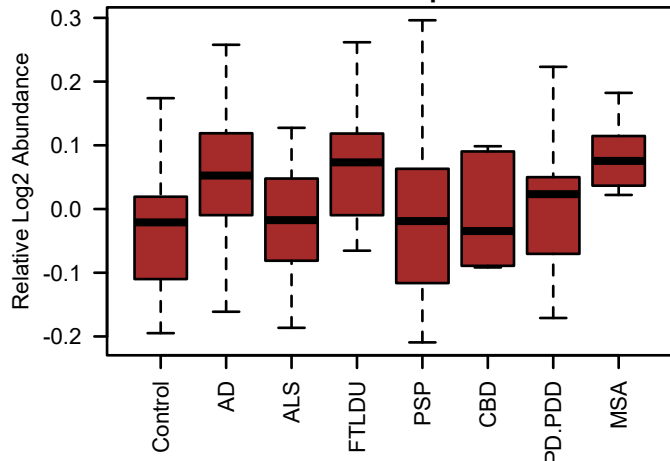
bicor=-0.25, p=0.02
cor=-0.24, p=0.028



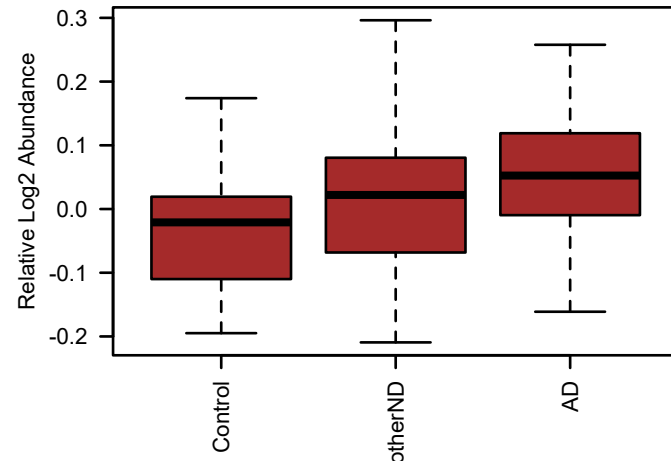
bicor=-0.2, p=0.049
cor=-0.14, p=0.16



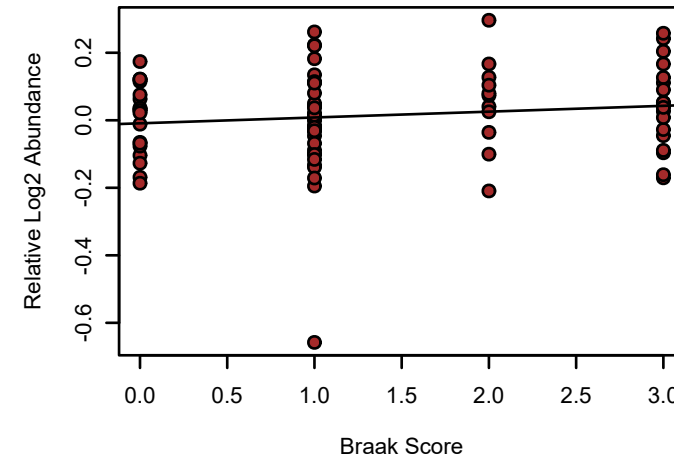
OPA1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.17



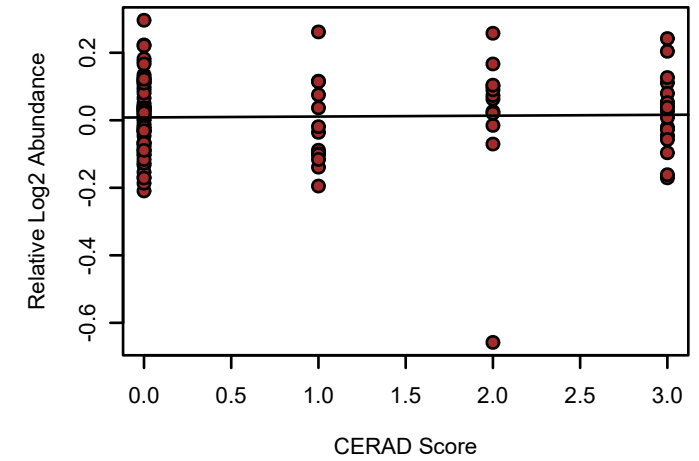
OPA1 UPenn Mixed PRM
K-W ANOVA p: 0.13



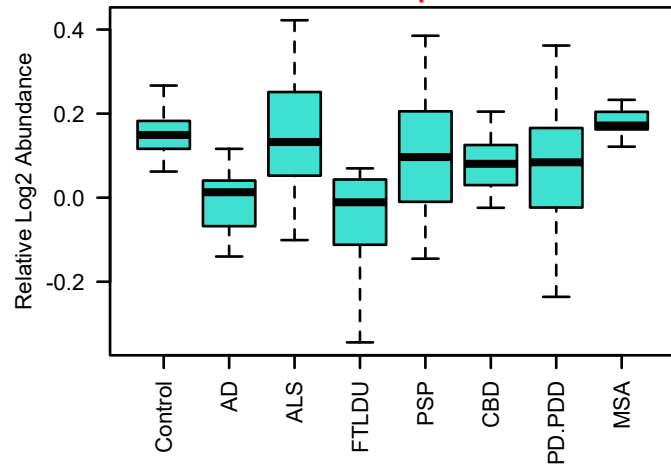
bicor=0.12, p=0.28
cor=0.14, p=0.2



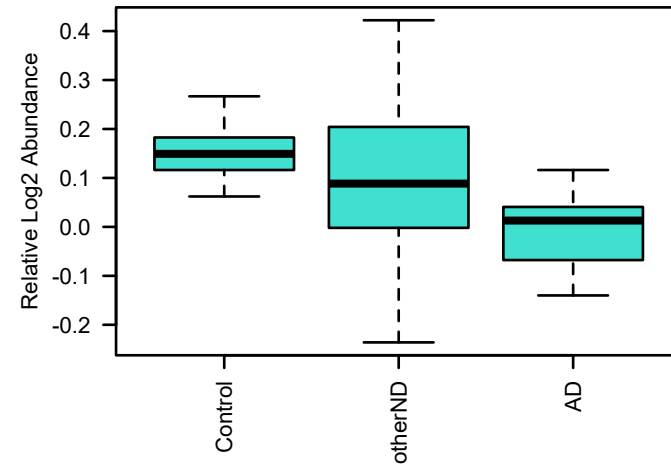
bicor=0.081, p=0.42
cor=0.023, p=0.82



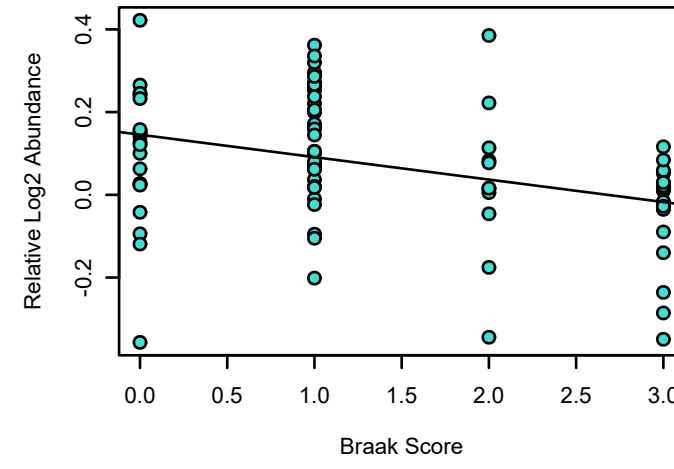
DNAJC6 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0021



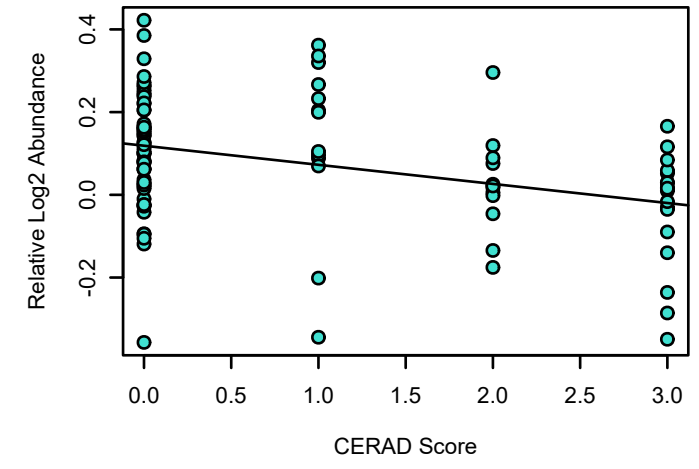
DNAJC6 UPenn Mixed PRM
K-W ANOVA p: 0.0045



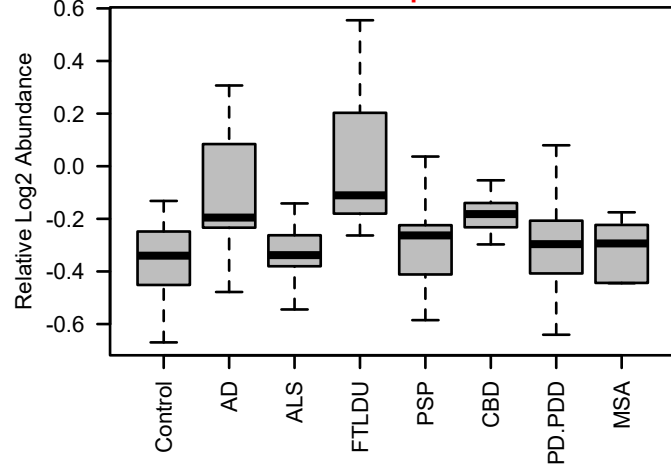
bicor=-0.35, p=0.00098
cor=-0.36, p=0.00077



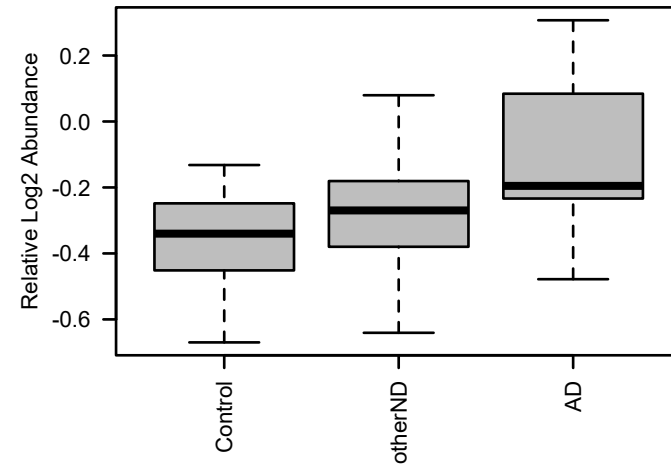
bicor=-0.37, p=0.00014
cor=-0.35, p=0.00036



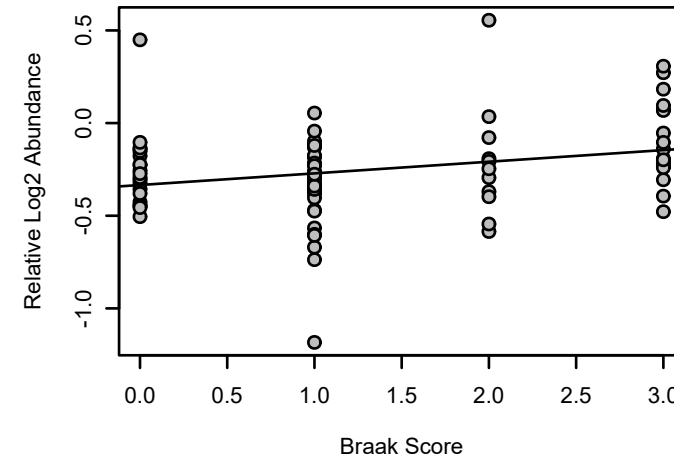
WDR1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.00014



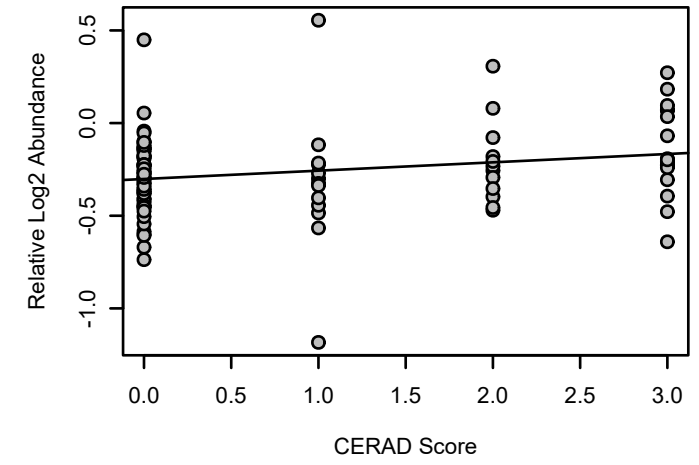
WDR1 UPenn Mixed PRM
K-W ANOVA p: 0.0035



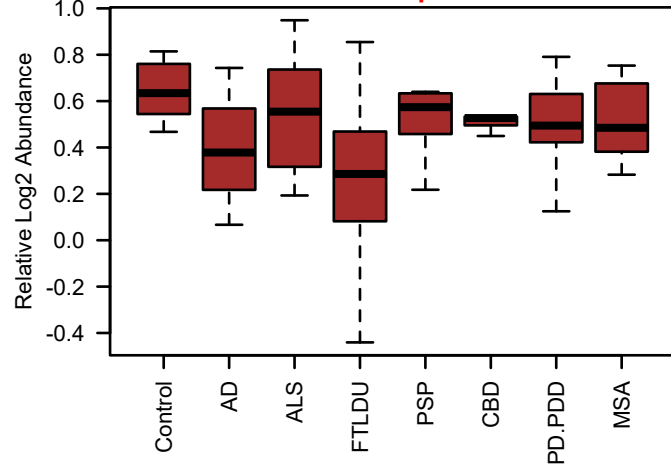
bicor=0.29, p=0.0071
cor=0.27, p=0.013



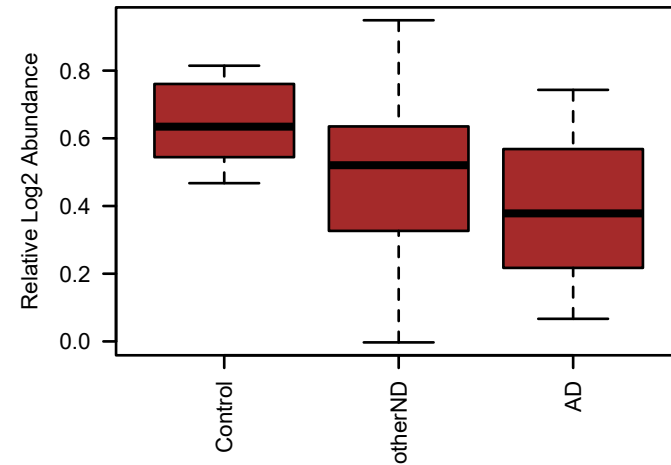
bicor=0.27, p=0.0074
cor=0.22, p=0.028



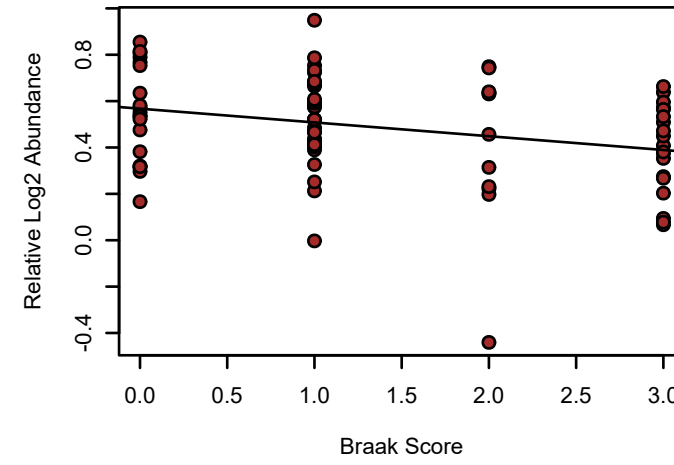
NDUFS7 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0018



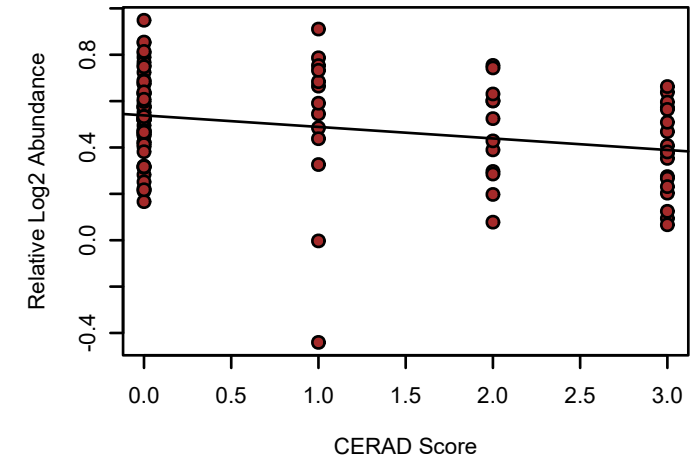
NDUFS7 UPenn Mixed PRM
K-W ANOVA p: 0.0031



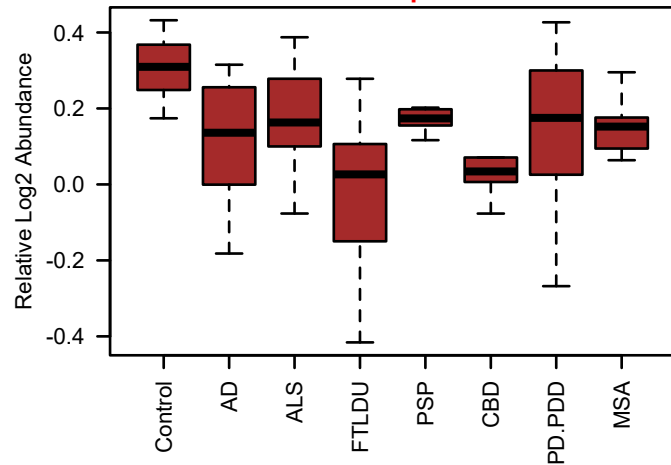
bicor=-0.3, p=0.0058
cor=-0.29, p=0.0075



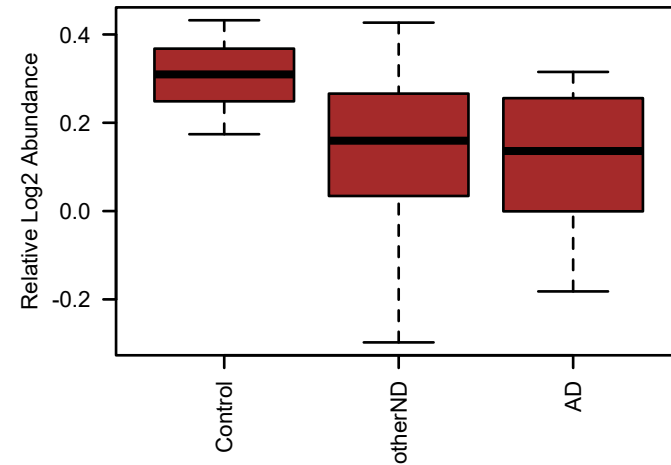
bicor=-0.28, p=0.005
cor=-0.27, p=0.0066



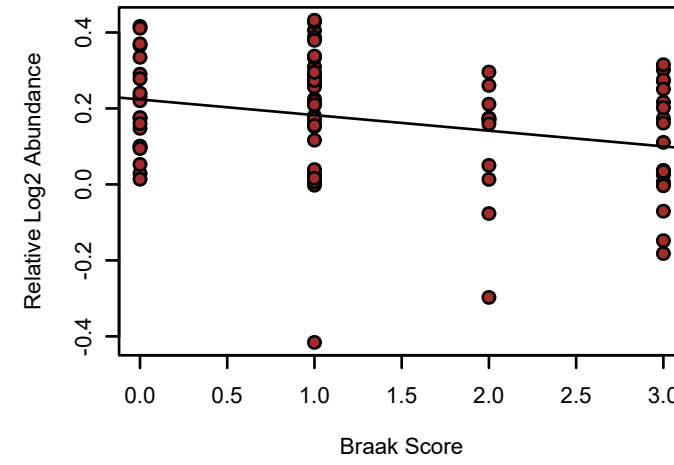
NDUFS2 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.00013



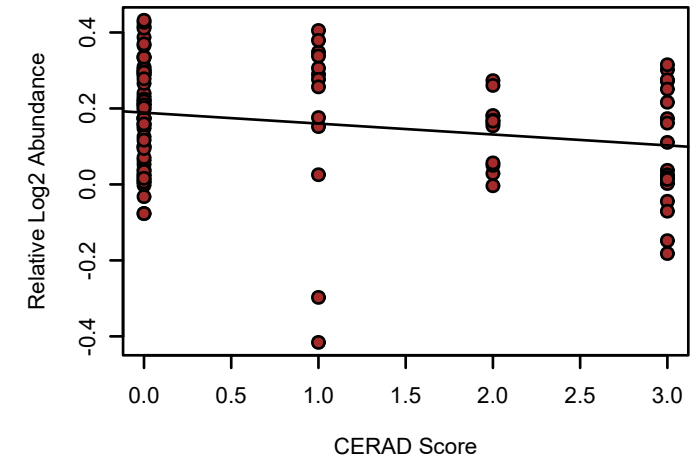
NDUFS2 UPenn Mixed PRM
K-W ANOVA p: 0.00028



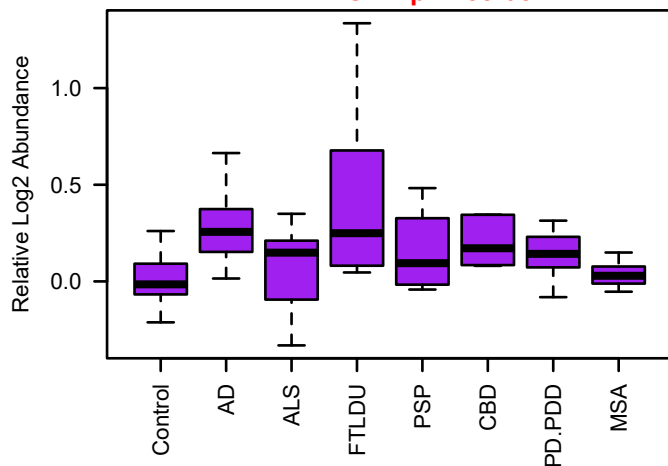
bicor=-0.28, p=0.01
cor=-0.28, p=0.0099



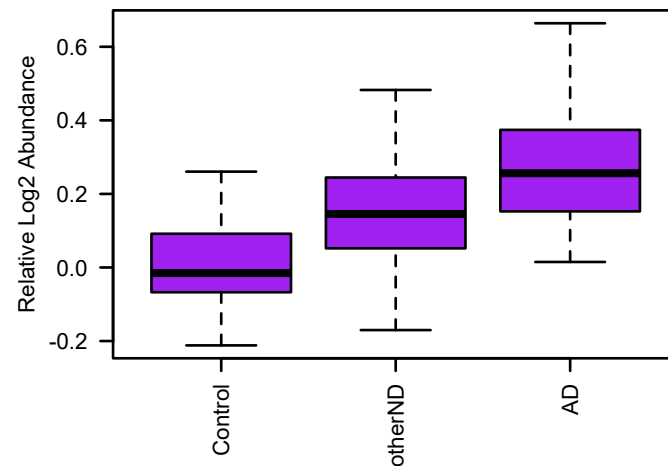
bicor=-0.22, p=0.027
cor=-0.22, p=0.028



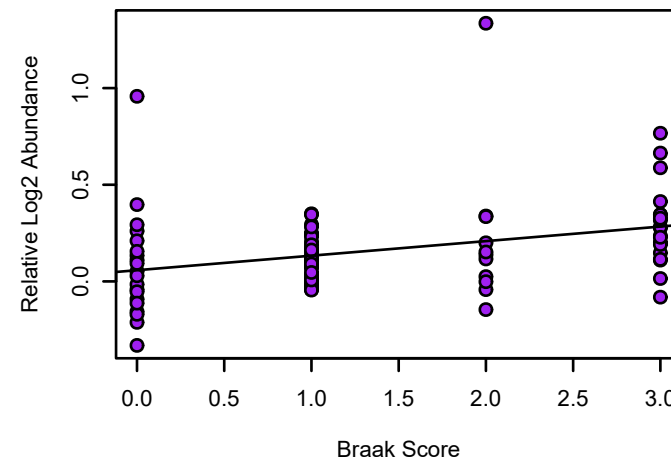
H2AFY UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 4.8e-05



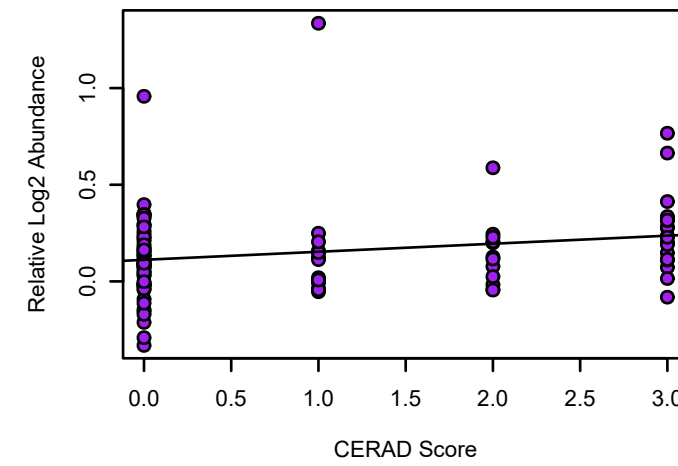
H2AFY UPenn Mixed PRM
K-W ANOVA p: 0.00093



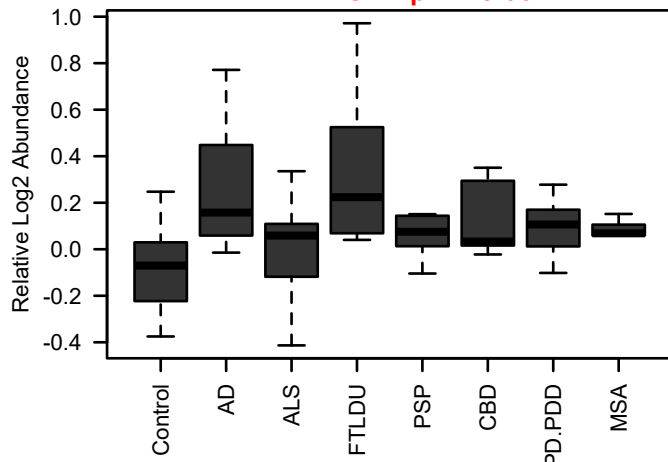
bicor=0.41, p=0.00012
cor=0.34, p=0.0016



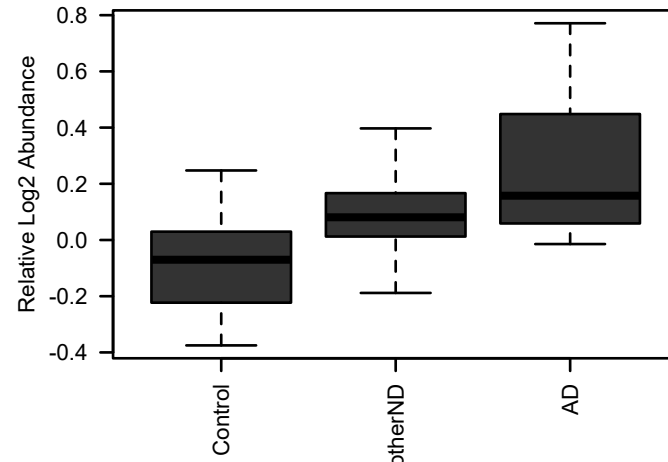
bicor=0.26, p=0.0081
cor=0.22, p=0.028



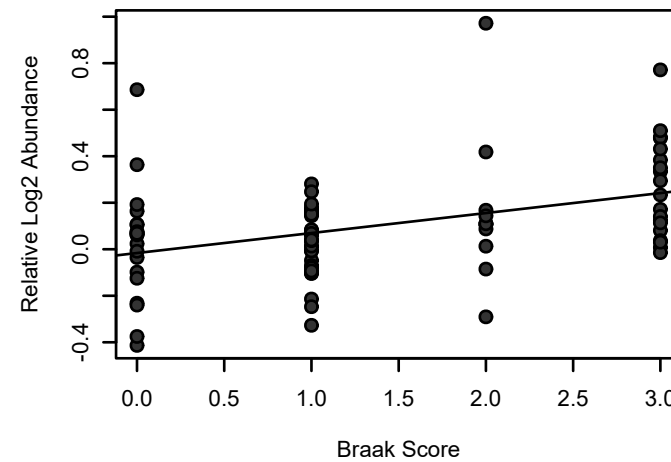
H2AFY2 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 7.1e-06



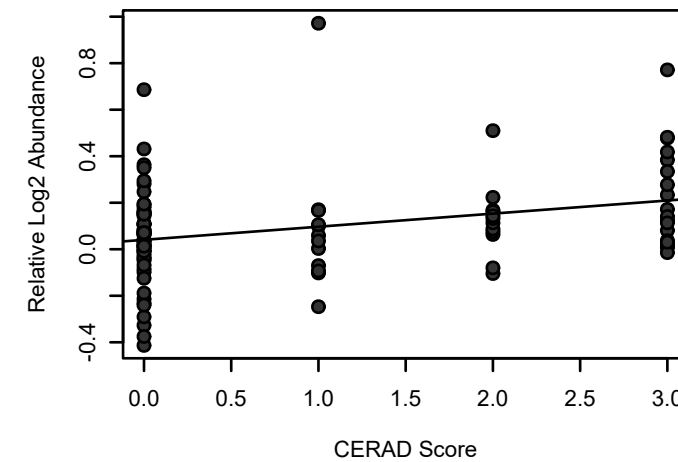
H2AFY2 UPenn Mixed PRM
K-W ANOVA p: 3.9e-05



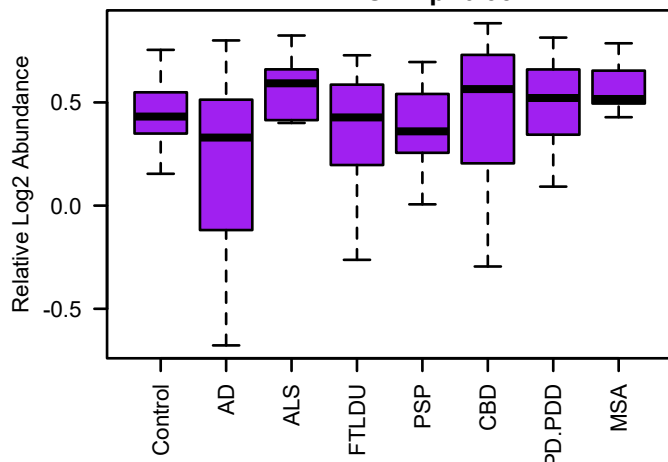
bicor=0.39, p=0.00025
cor=0.4, p=0.00016



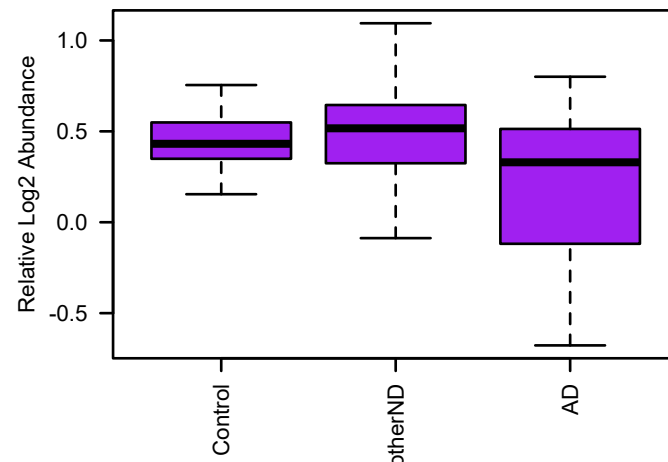
bicor=0.31, p=0.0018
cor=0.31, p=0.0017



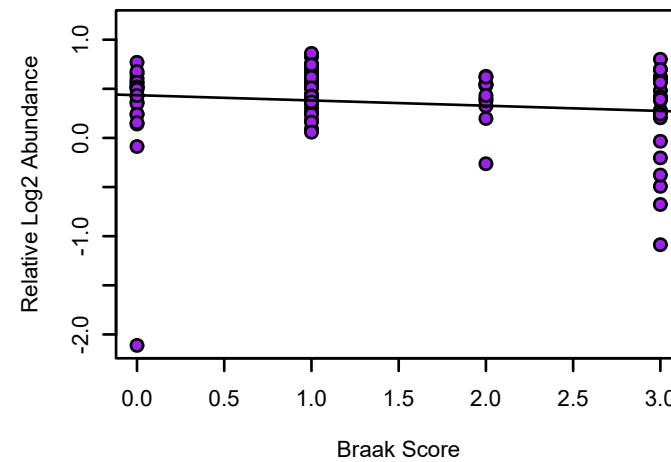
PSIP1 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.35



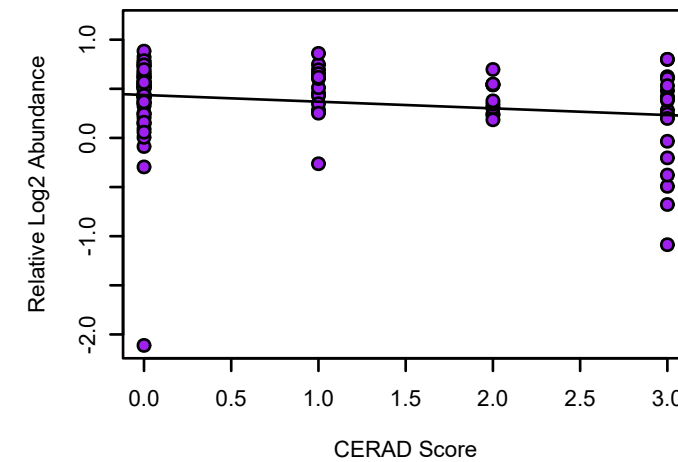
PSIP1 UPenn Mixed PRM
K-W ANOVA p: 0.043



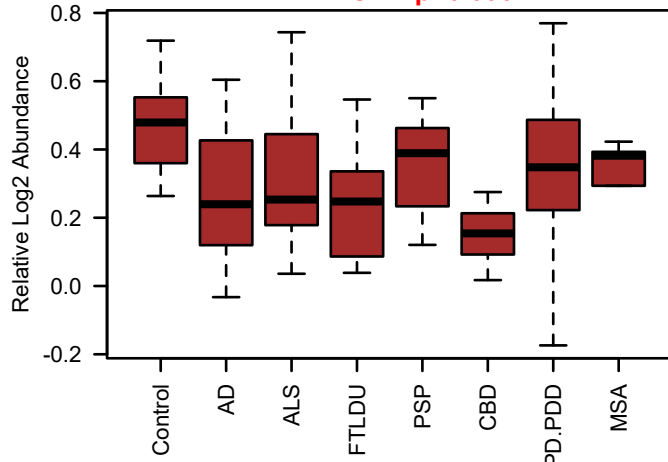
bicor=-0.14, p=0.21
cor=-0.13, p=0.24



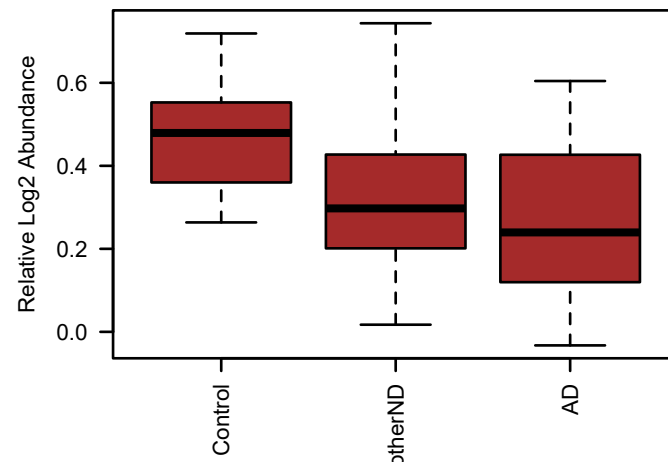
bicor=-0.19, p=0.059
cor=-0.2, p=0.046



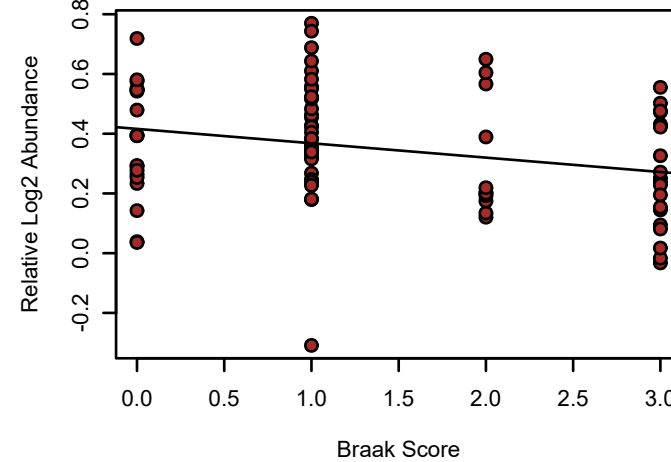
NDUFS3 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0061



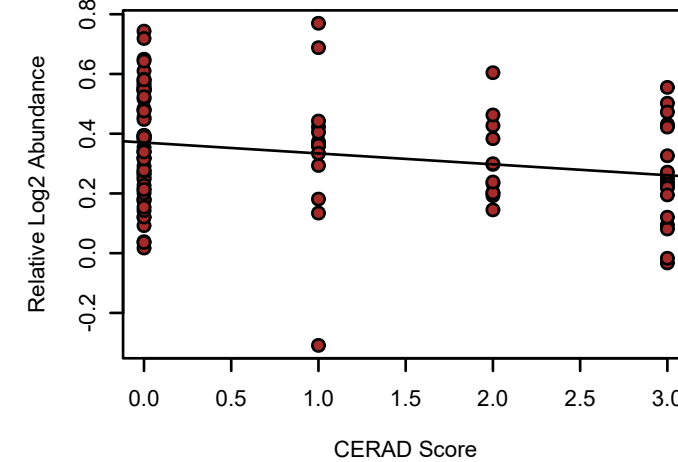
NDUFS3 UPenn Mixed PRM
K-W ANOVA p: 0.0056



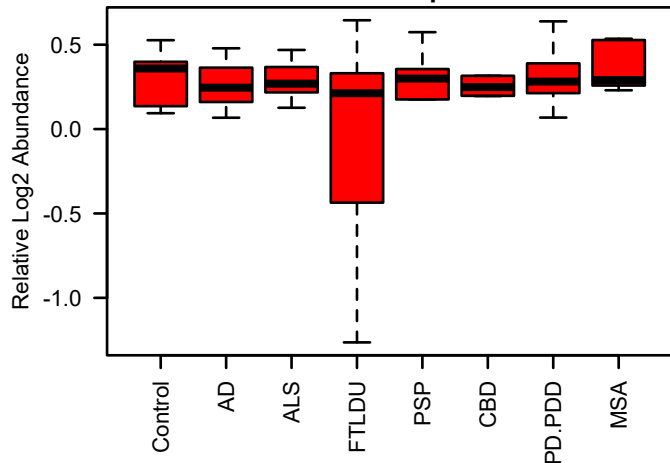
bicor=-0.25, p=0.021
cor=-0.26, p=0.017



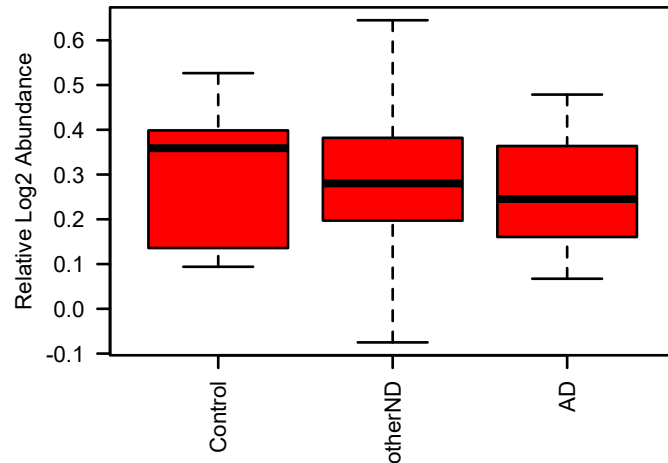
bicor=-0.23, p=0.019
cor=-0.23, p=0.021



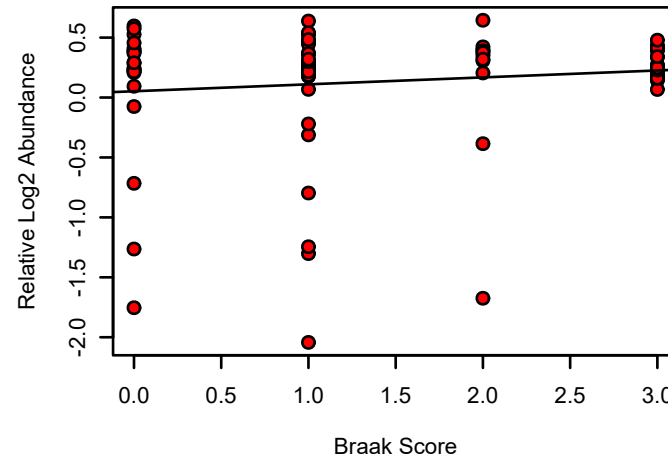
PALM red MEGA module member
M6 red MEGA module member
K-W ANOVA p: 0.28



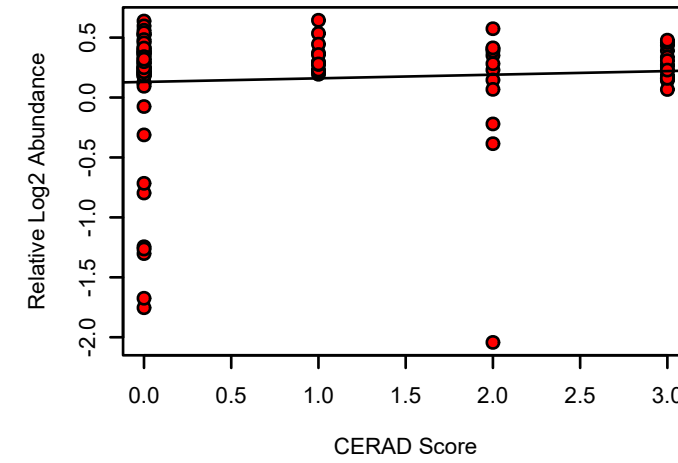
PALM UPenn Mixed PRM
K-W ANOVA p: 0.85



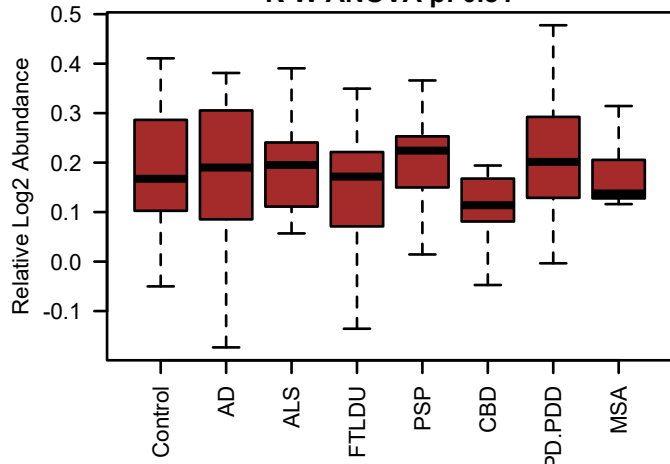
bicor=-0.028, p=0.8
cor=0.12, p=0.28



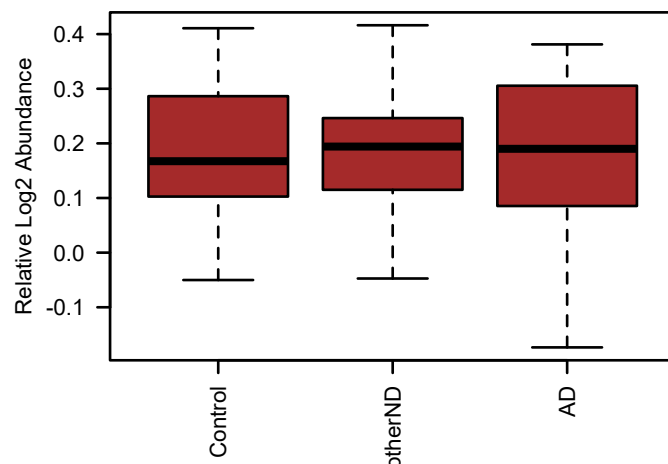
bicor=-0.15, p=0.13
cor=0.073, p=0.47



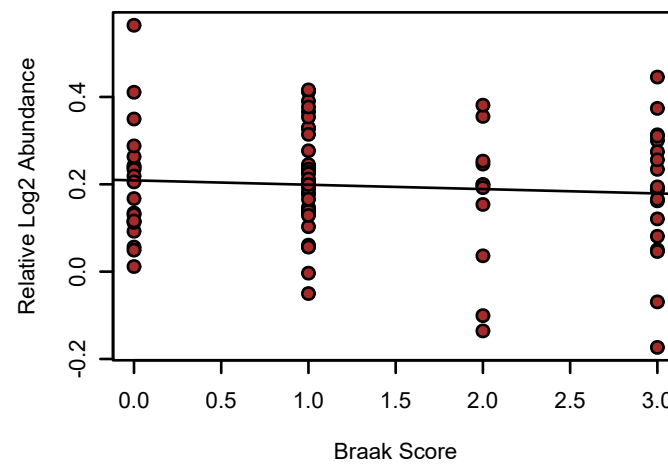
ATP5H UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.81



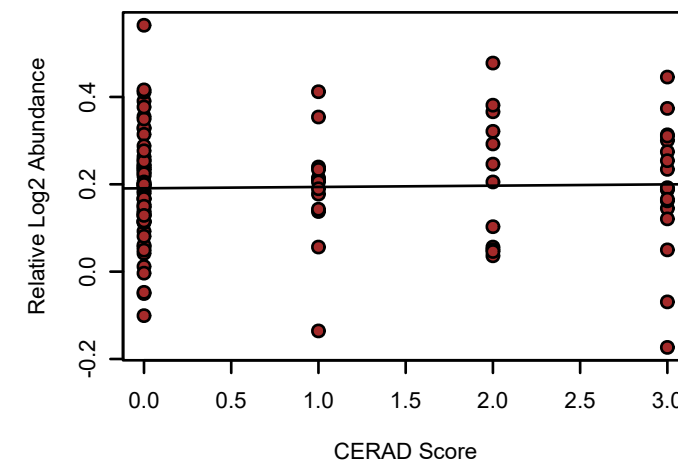
ATP5H UPenn Mixed PRM
K-W ANOVA p: 0.84



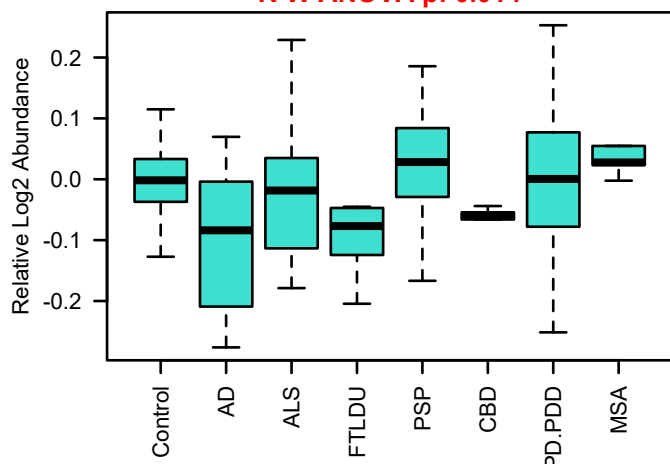
bicor=-0.031, p=0.78
cor=-0.08, p=0.47



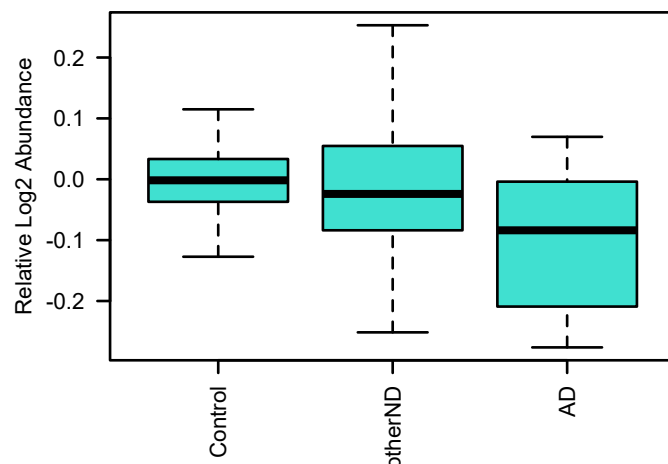
bicor=0.057, p=0.57
cor=0.027, p=0.79



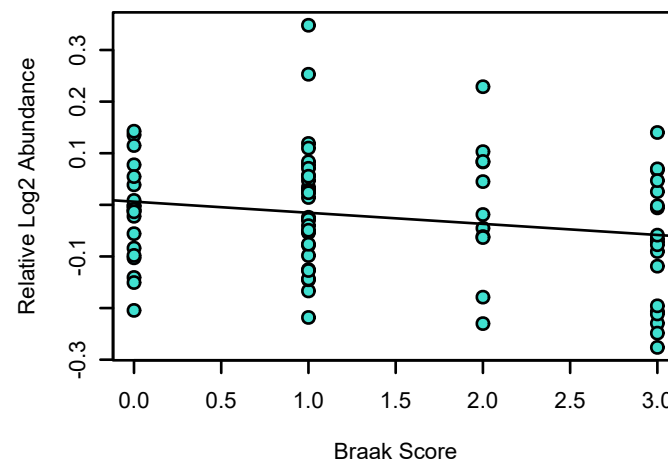
AP2A2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.014



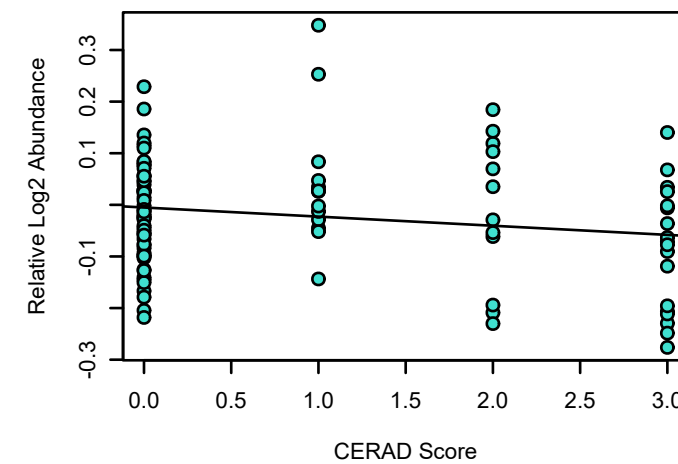
AP2A2 UPenn Mixed PRM
K-W ANOVA p: 0.014



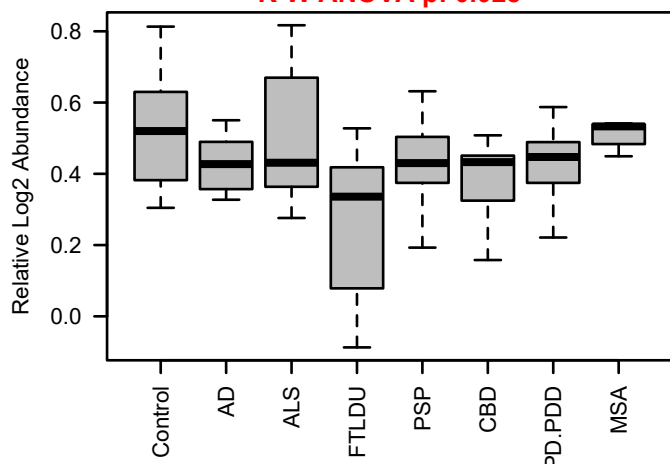
bicor=-0.19, p=0.076
cor=-0.2, p=0.068



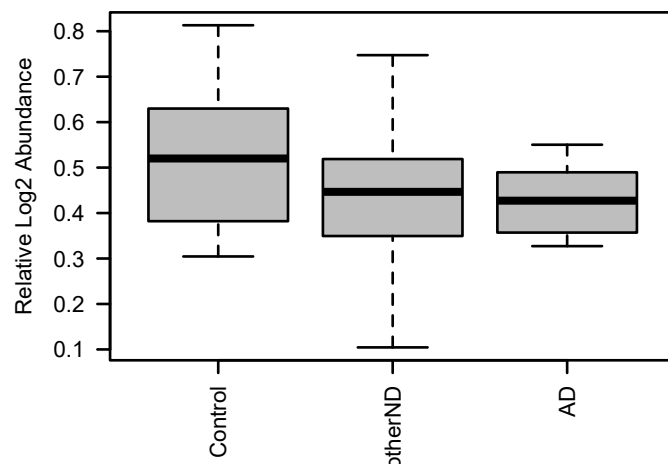
bicor=-0.17, p=0.084
cor=-0.18, p=0.073



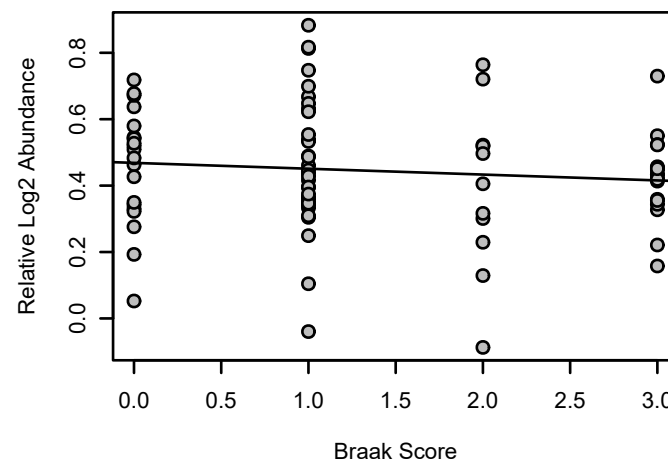
DIRAS1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.028



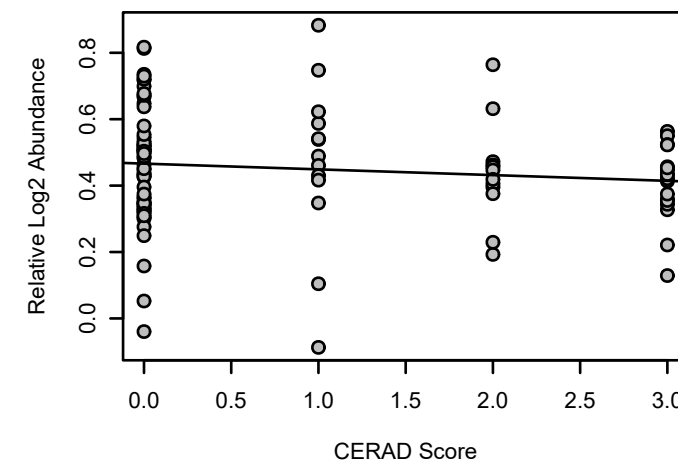
DIRAS1 UPenn Mixed PRM
K-W ANOVA p: 0.24



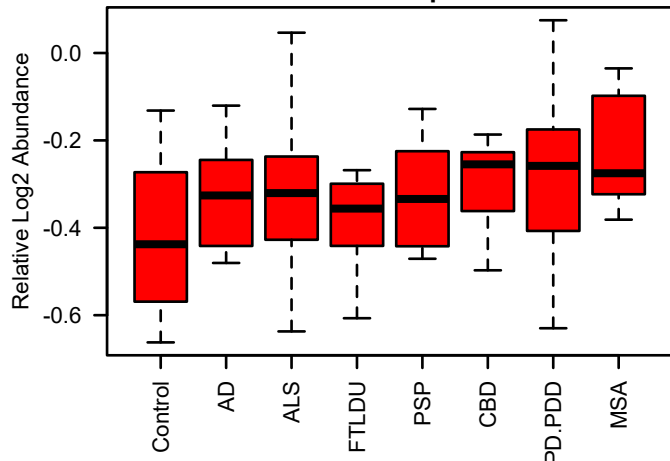
bicor=-0.092, p=0.4
cor=-0.1, p=0.37



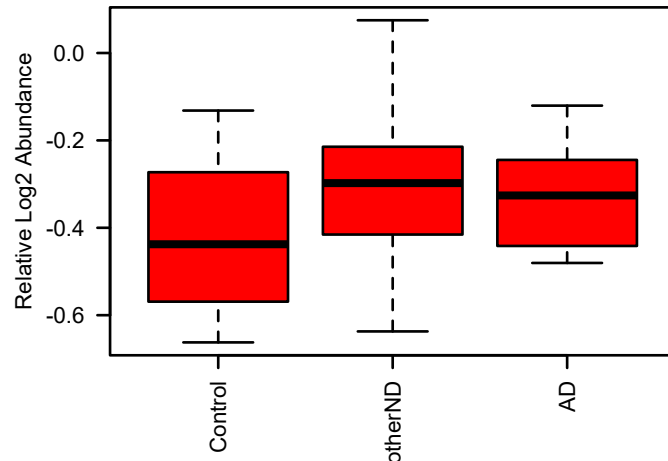
bicor=-0.14, p=0.17
cor=-0.12, p=0.23



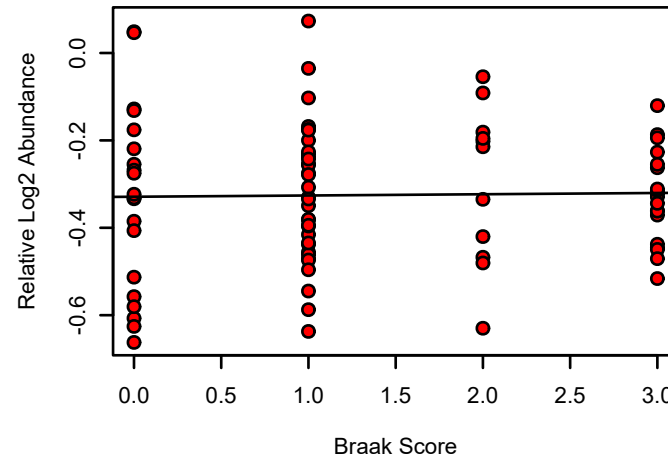
RTN3 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.17



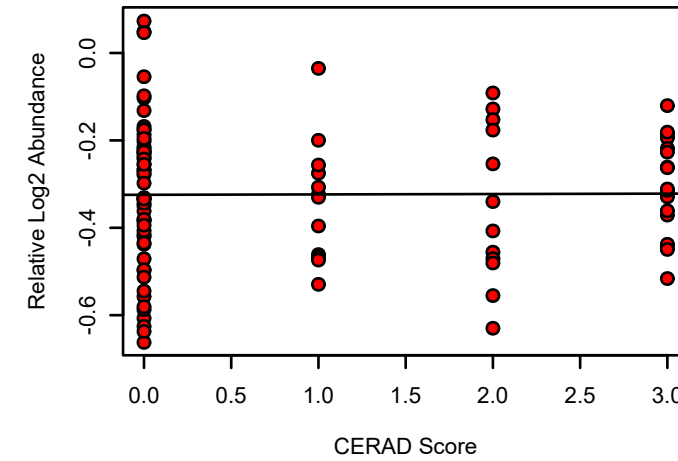
RTN3 UPenn Mixed PRM
K-W ANOVA p: 0.024



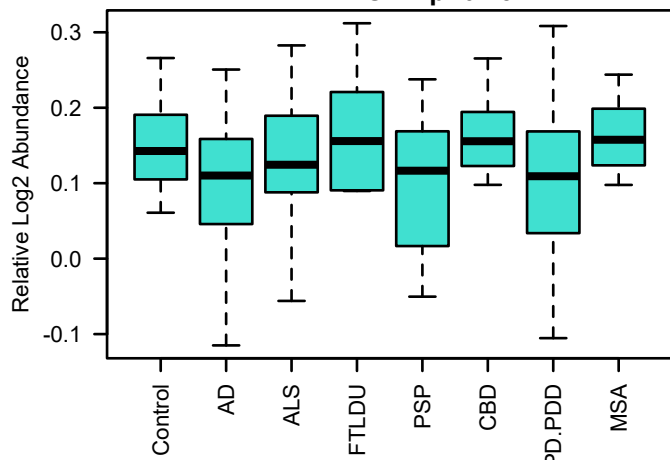
bicor=0.032, p=0.77
cor=0.019, p=0.86



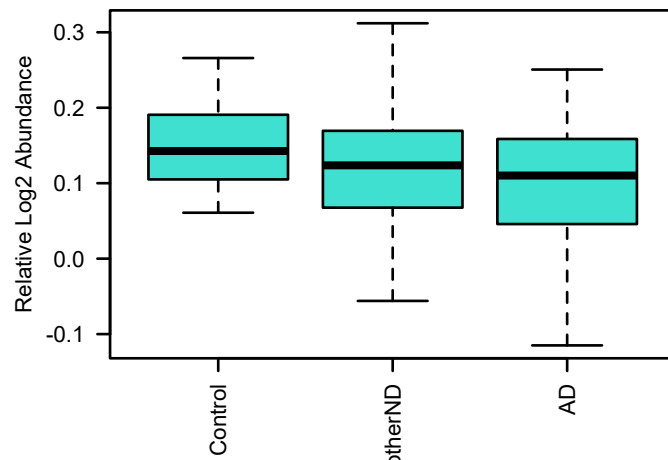
bicor=0.013, p=0.9
cor=0.0066, p=0.95



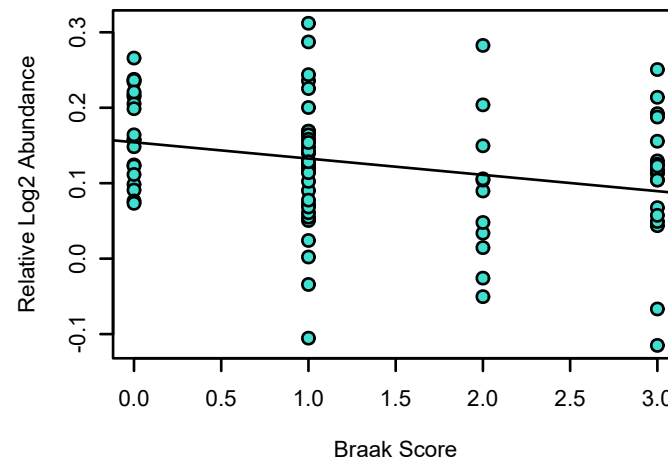
LETM1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.15



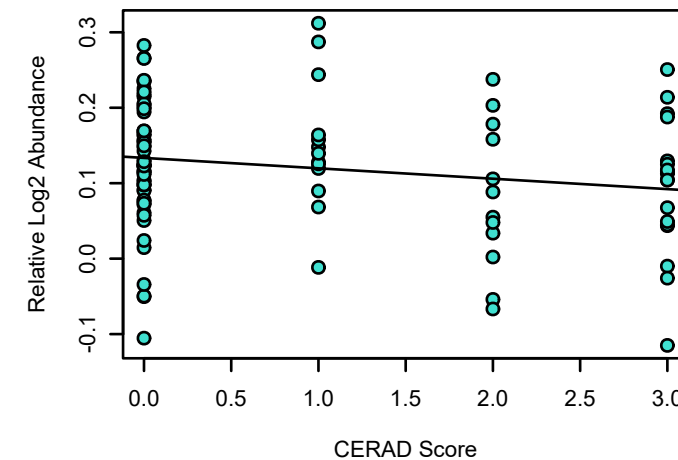
LETM1 UPenn Mixed PRM
K-W ANOVA p: 0.21



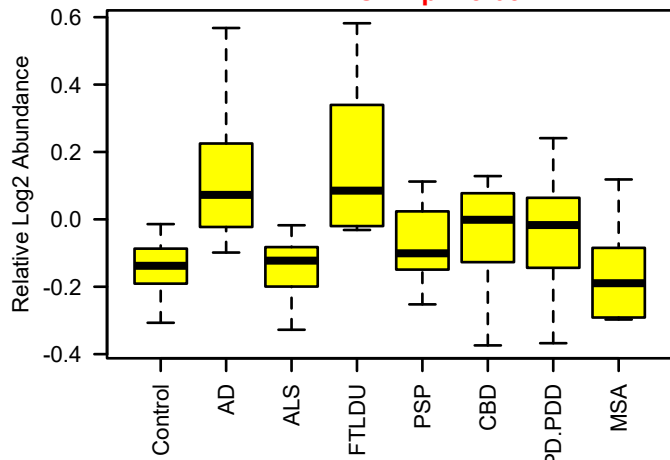
bicor=-0.25, p=0.02
cor=-0.27, p=0.013



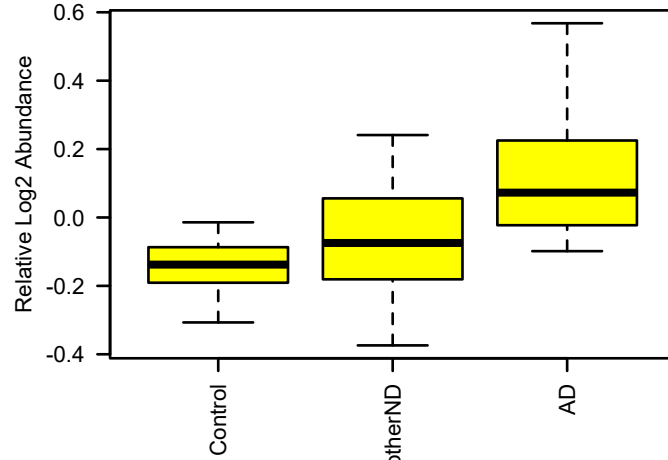
bicor=-0.19, p=0.058
cor=-0.19, p=0.058



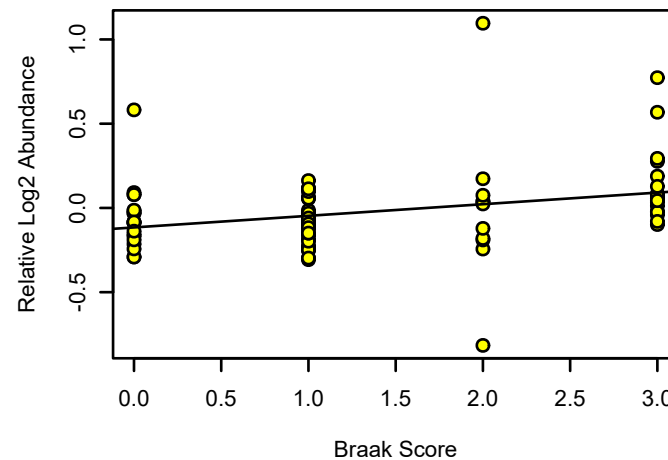
PGLS UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1e-05



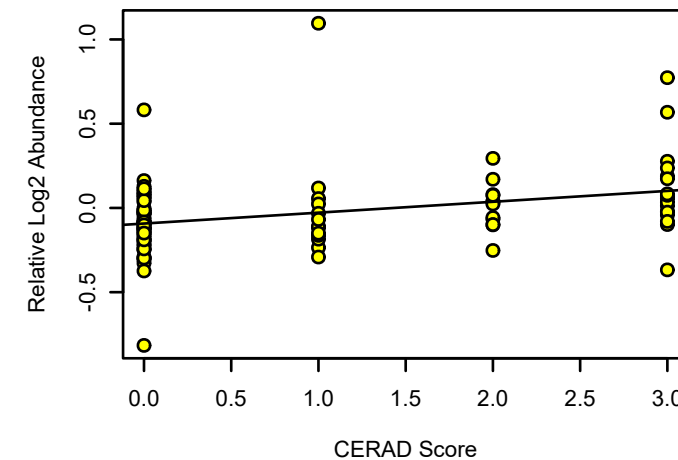
PGLS UPenn Mixed PRM
K-W ANOVA p: 0.001



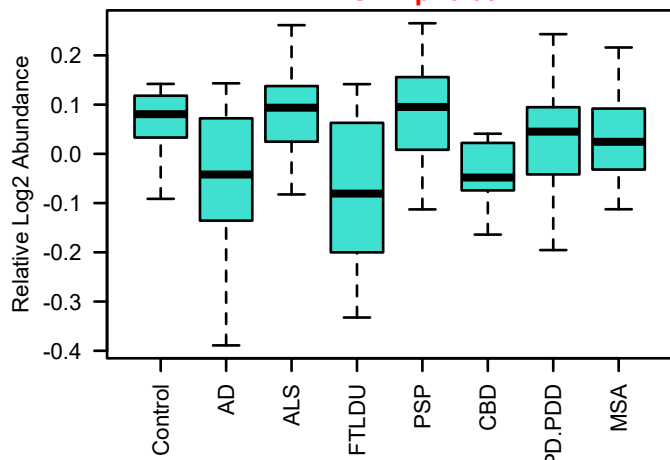
bicor=0.36, p=0.00072
cor=0.31, p=0.0041



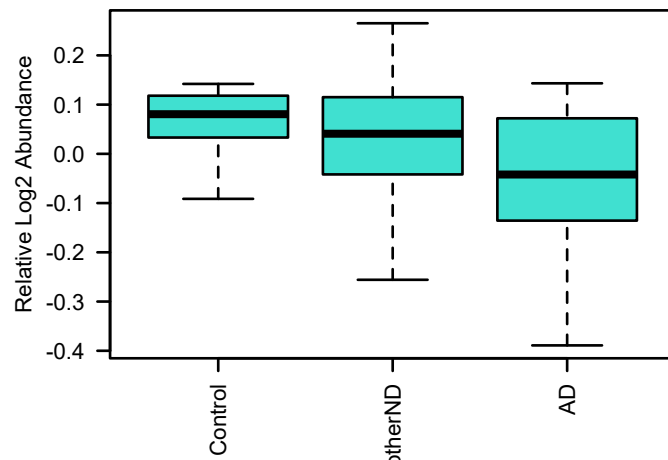
bicor=0.37, p=0.00016
cor=0.33, p=8e-04



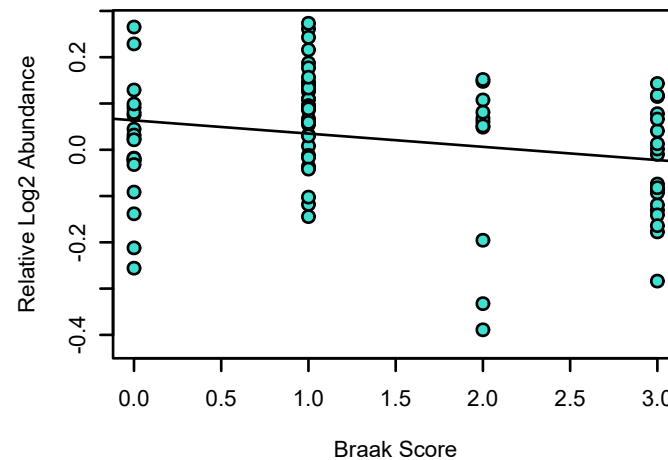
RAB3D UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0072



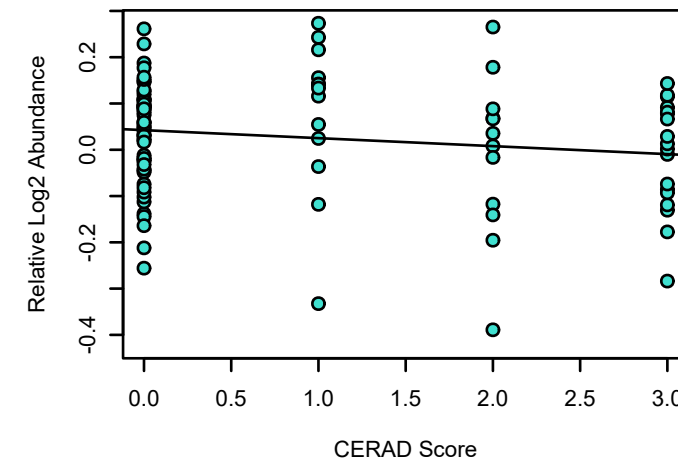
RAB3D UPenn Mixed PRM
K-W ANOVA p: 0.018

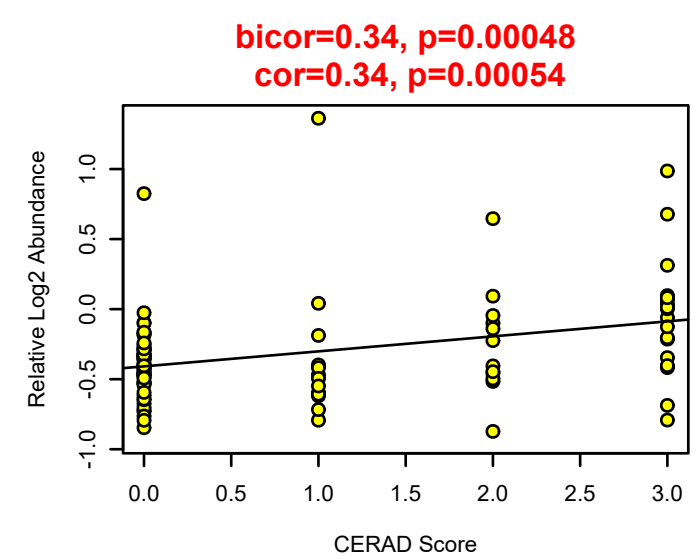
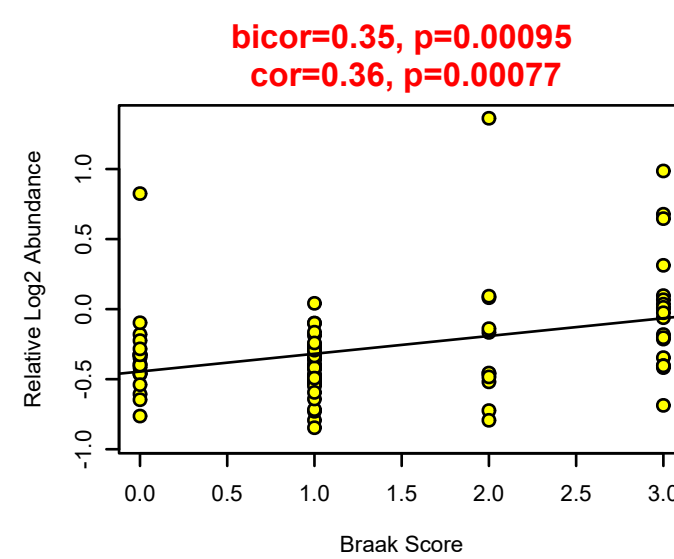
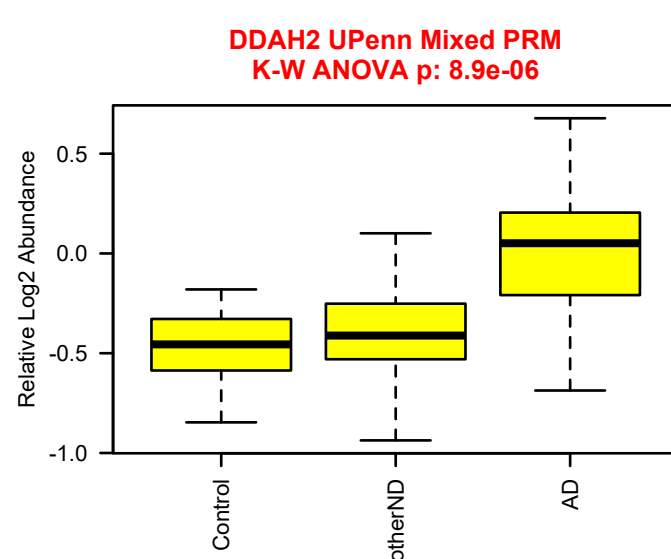
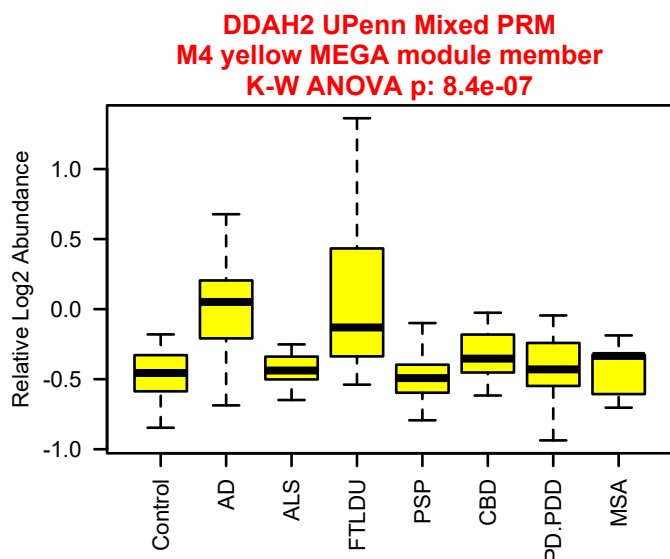
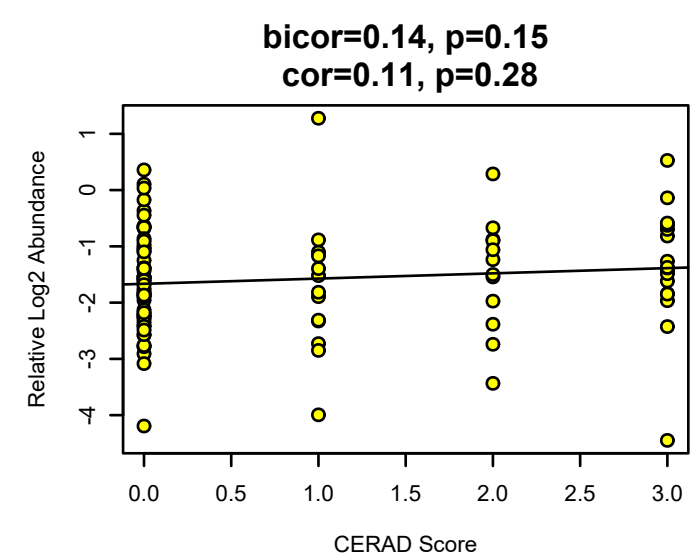
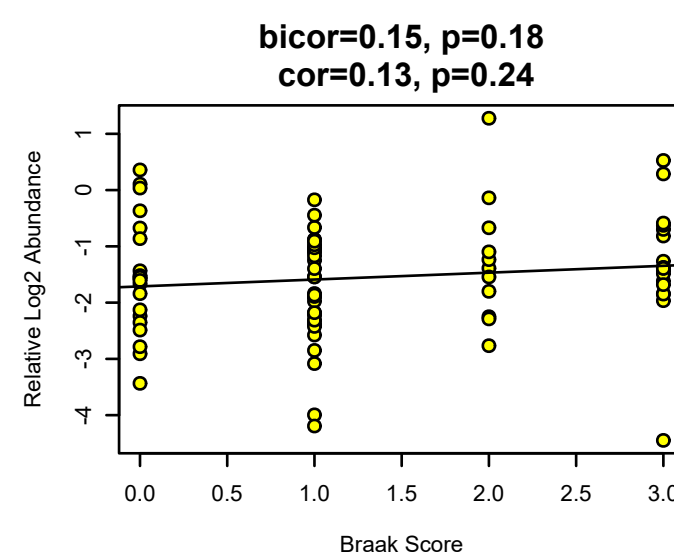
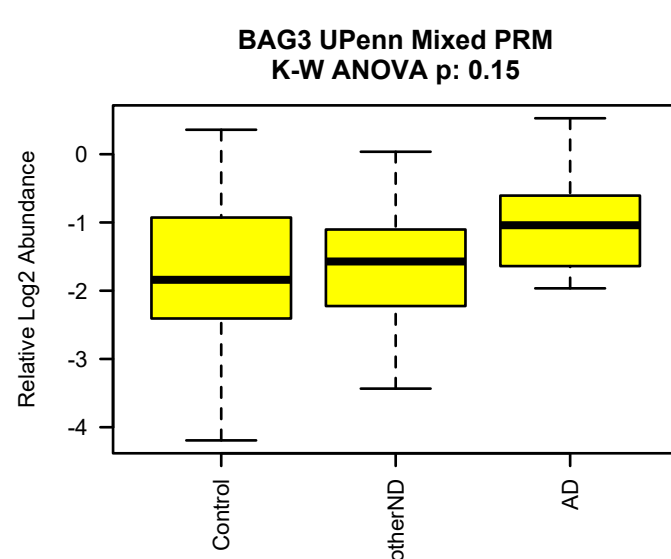
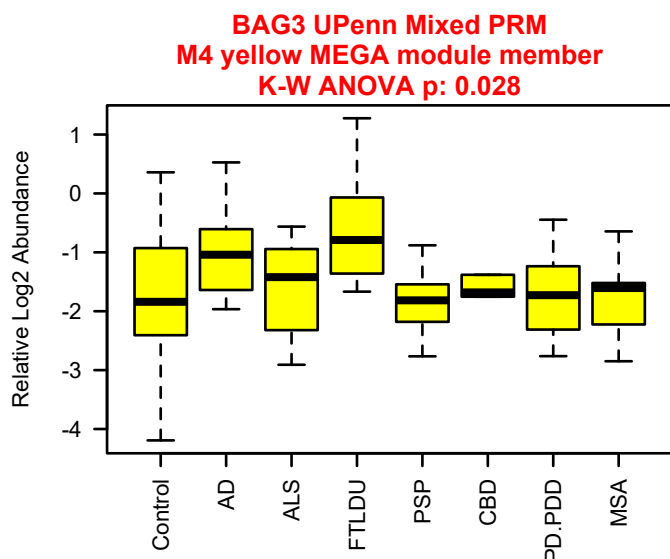
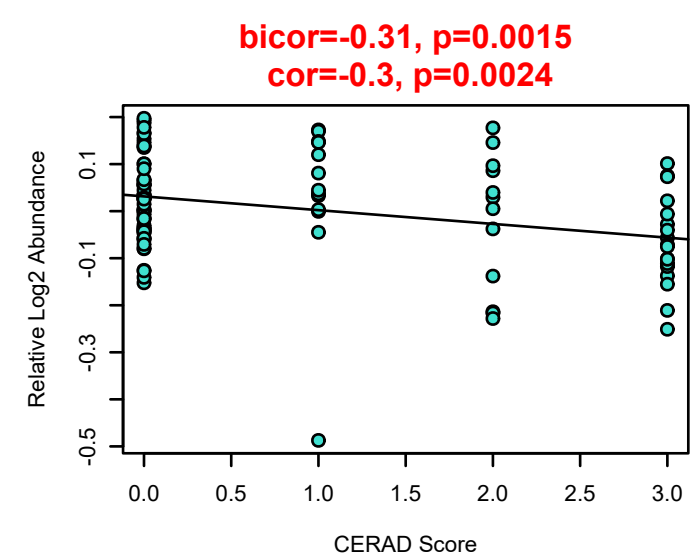
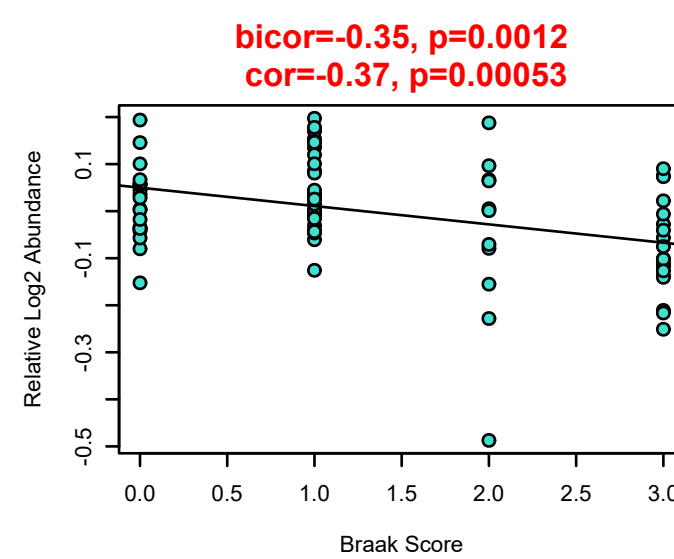
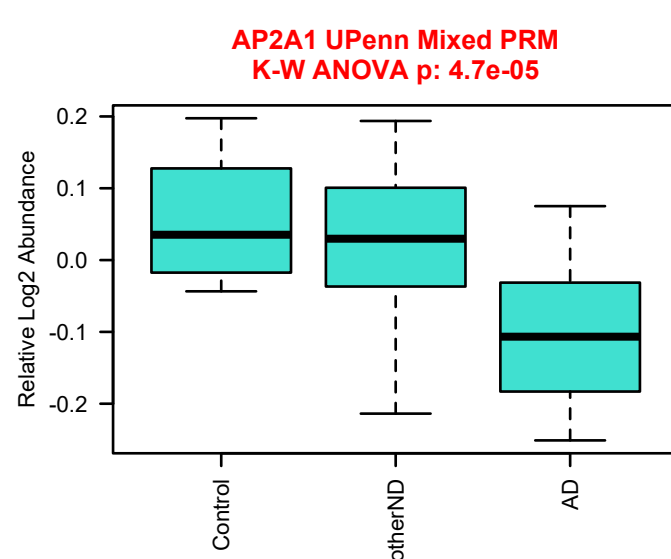
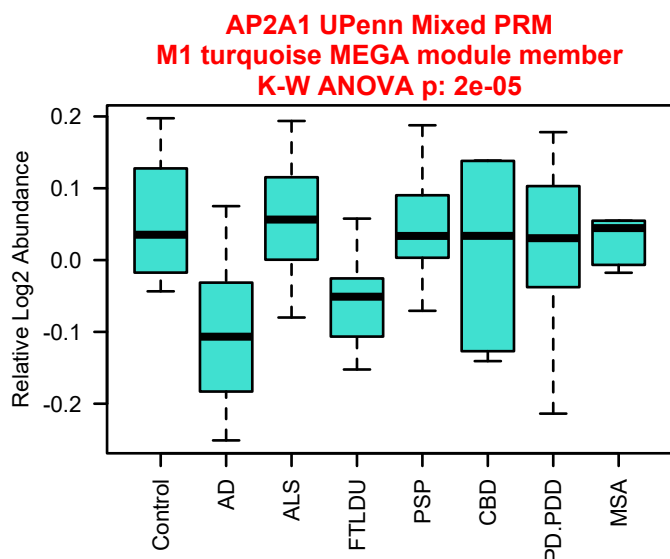
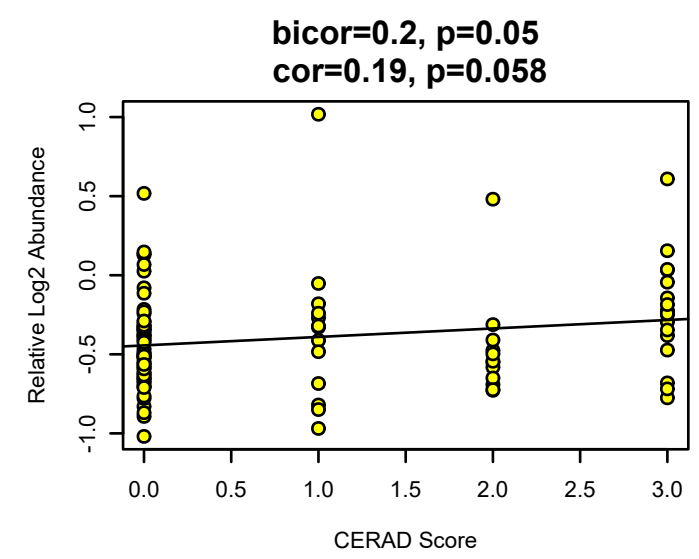
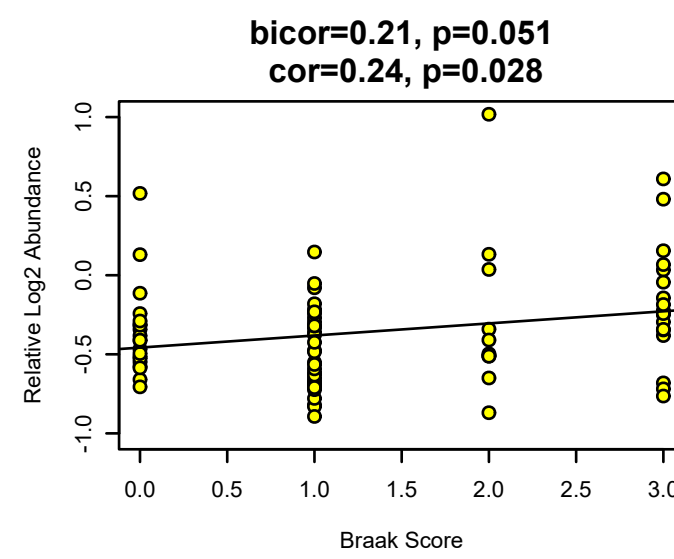
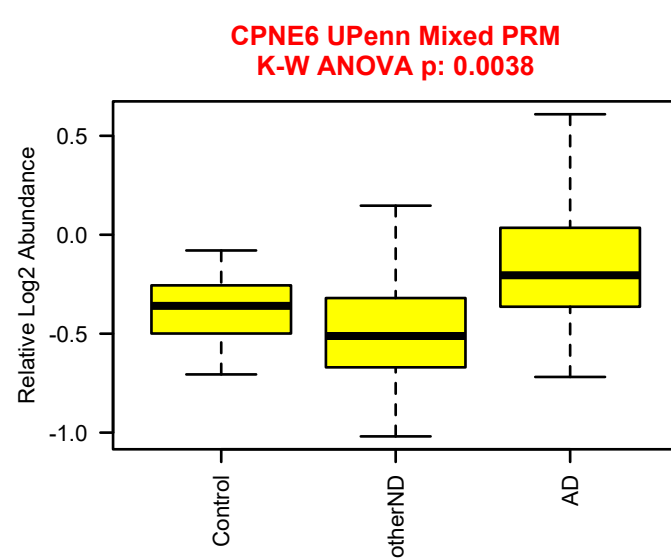
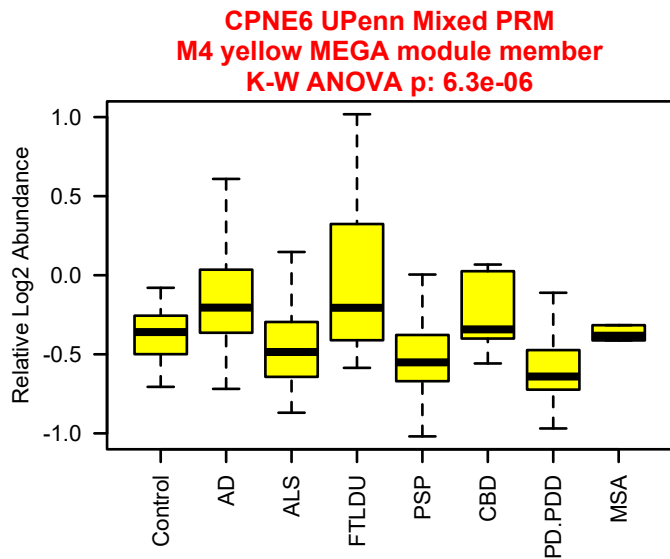


bicor=-0.25, p=0.023
cor=-0.23, p=0.035

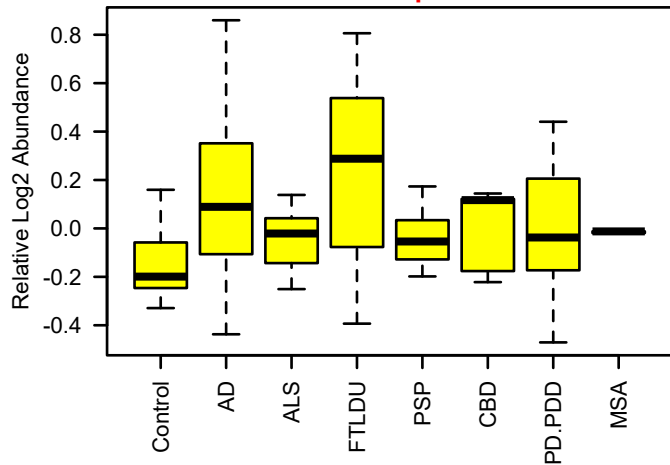


bicor=-0.14, p=0.15
cor=-0.16, p=0.11

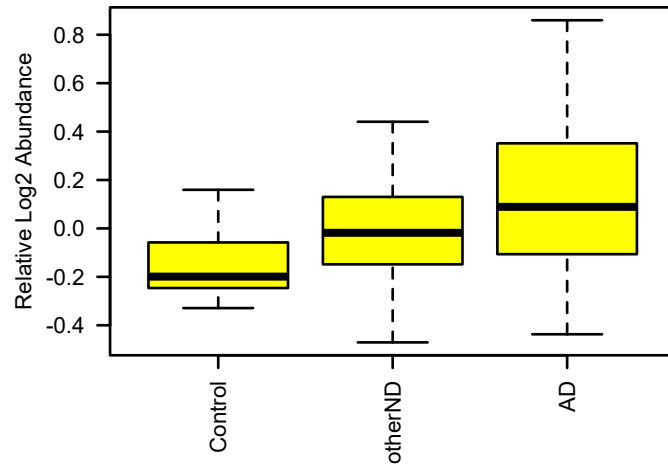




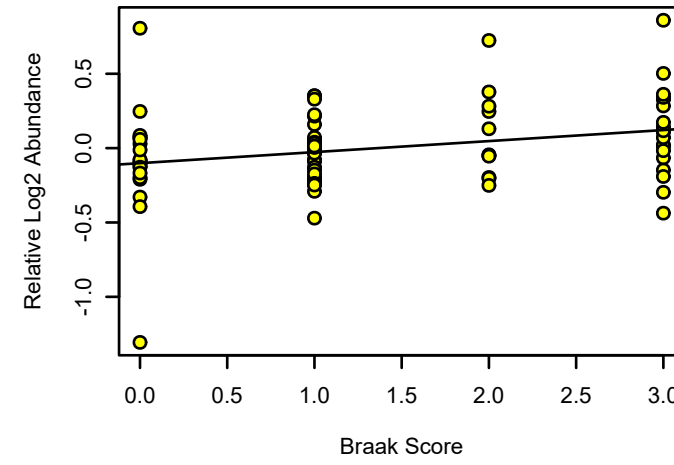
AK1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.0049



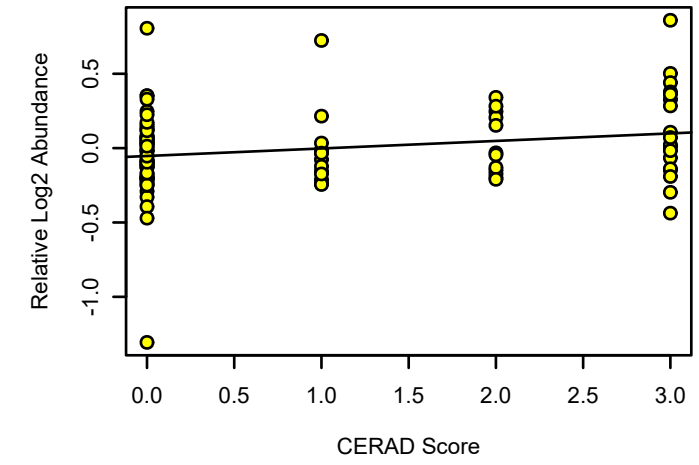
AK1 UPenn Mixed PRM
K-W ANOVA p: 0.0014



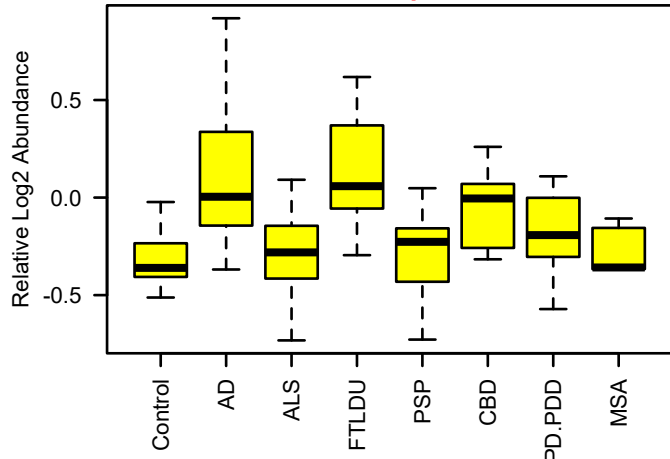
bicor=0.27, p=0.015
cor=0.28, p=0.0099



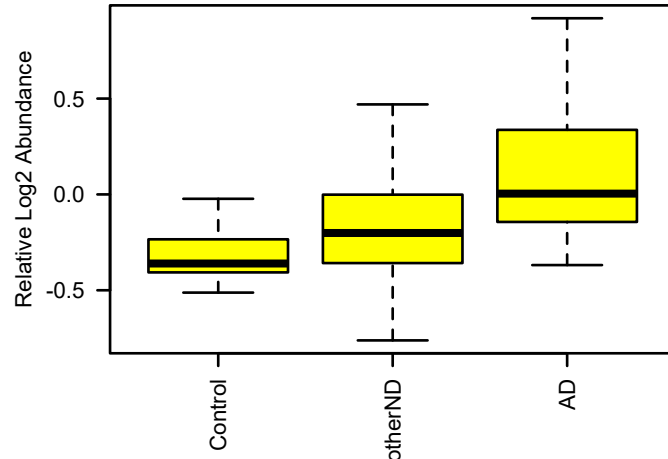
bicor=0.19, p=0.057
cor=0.22, p=0.028



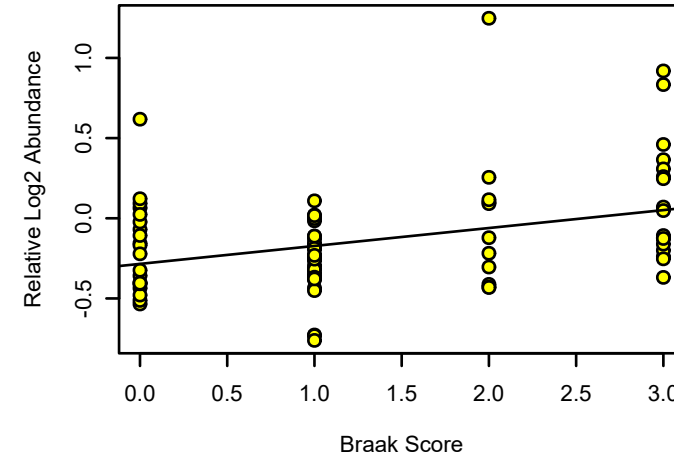
LMNA UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 7.1e-06



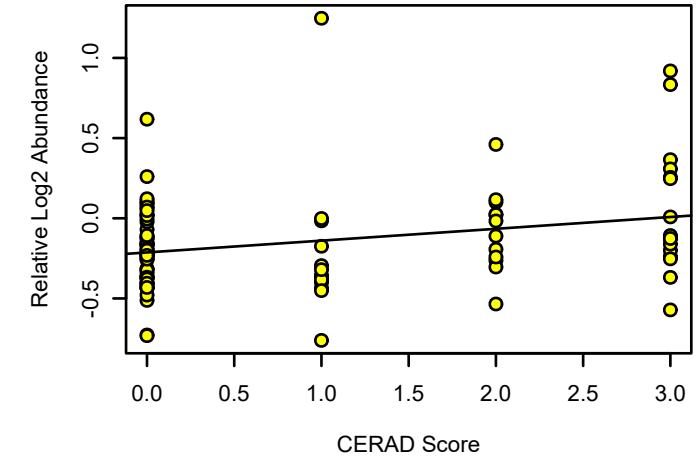
LMNA UPenn Mixed PRM
K-W ANOVA p: 0.00021



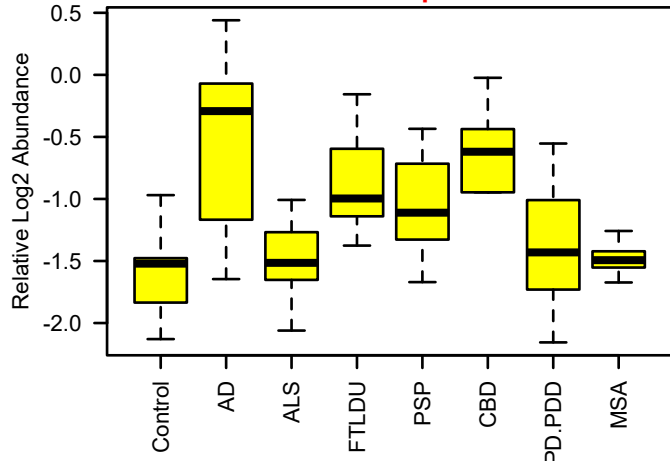
bicor=0.34, p=0.0013
cor=0.36, p=0.00077



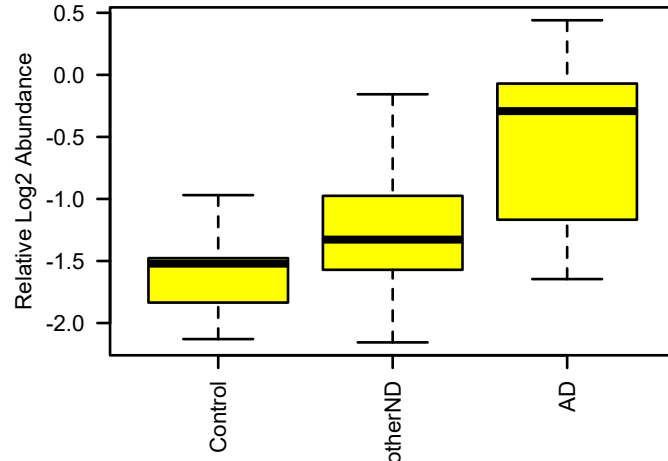
bicor=0.25, p=0.011
cor=0.28, p=0.0048



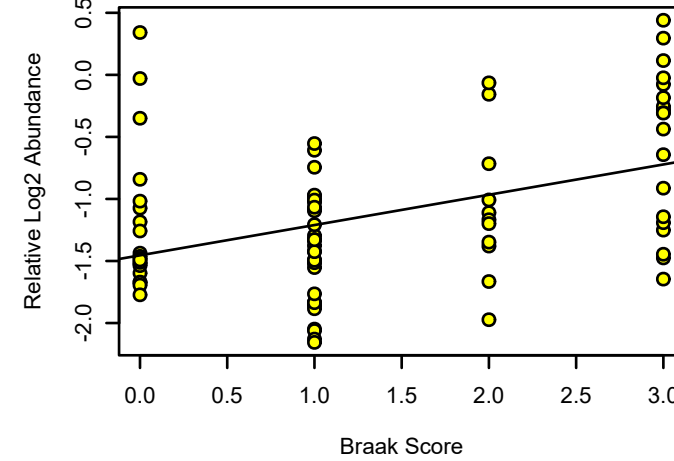
CSTB UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 8e-08



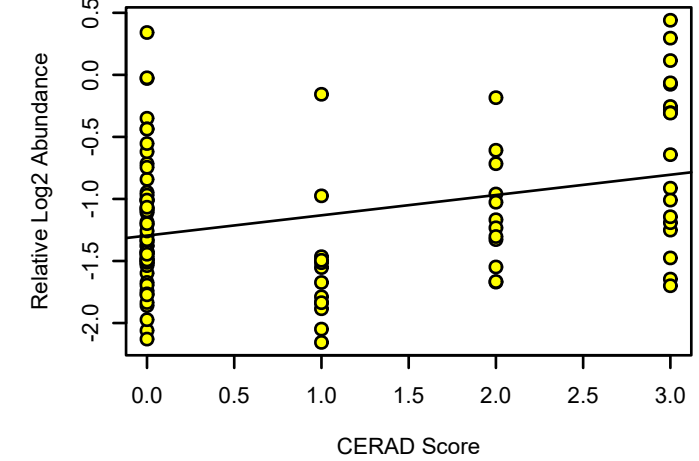
CSTB UPenn Mixed PRM
K-W ANOVA p: 7.8e-08



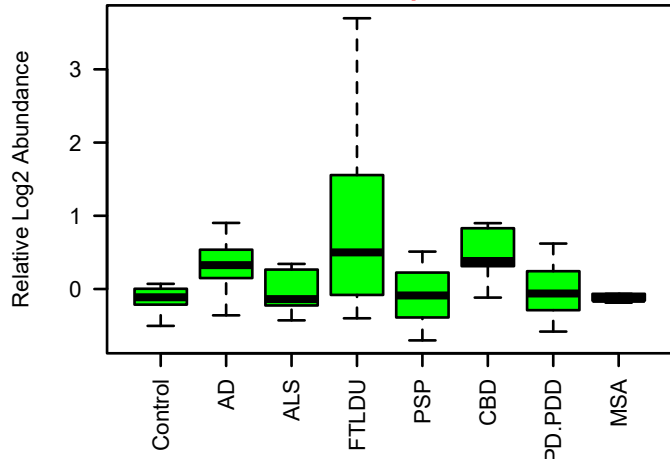
bicor=0.43, p=5.4e-05
cor=0.42, p=7e-05



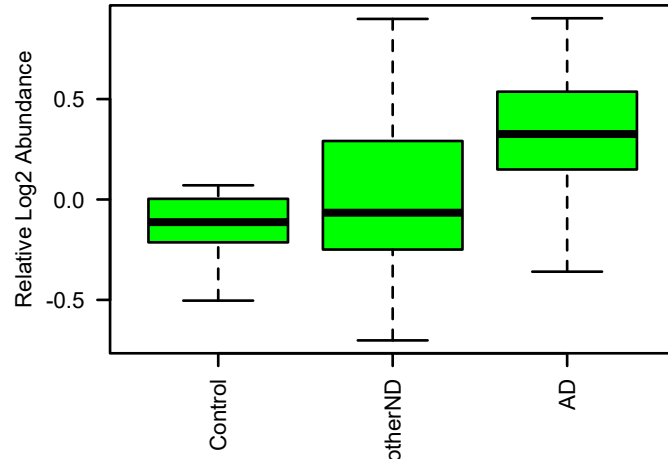
bicor=0.29, p=0.0032
cor=0.33, p=8e-04



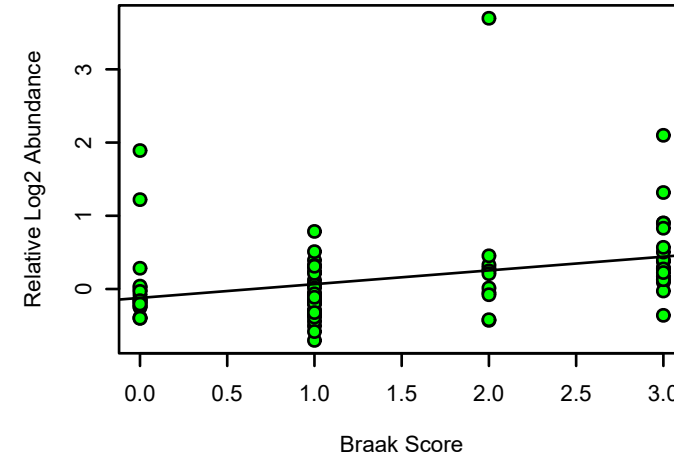
ANXA1 UPenn Mixed PRM
M5 green MEGA module member
K-W ANOVA p: 6.6e-05



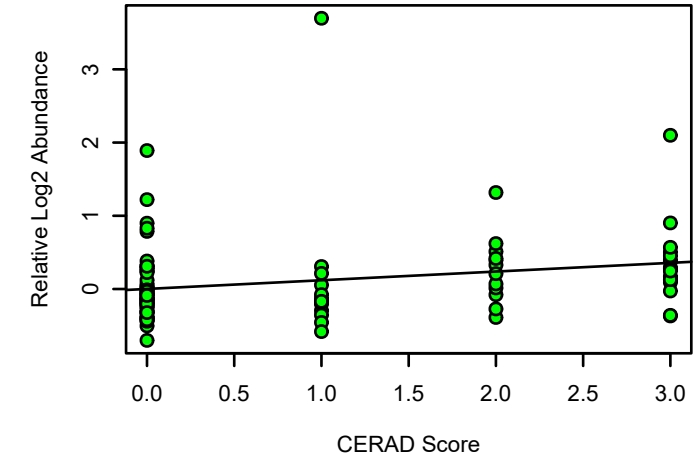
ANXA1 UPenn Mixed PRM
K-W ANOVA p: 0.017



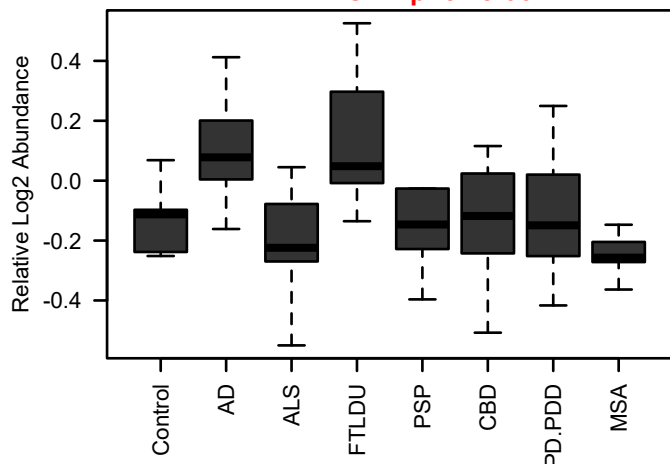
bicor=0.46, p=9.3e-06
cor=0.32, p=0.003



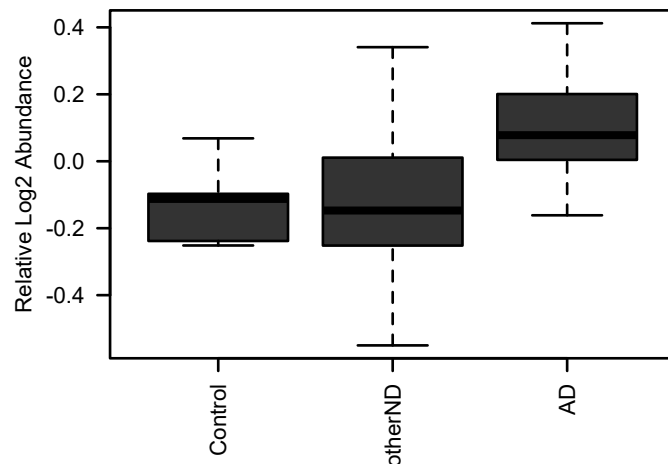
bicor=0.34, p=5e-04
cor=0.24, p=0.016



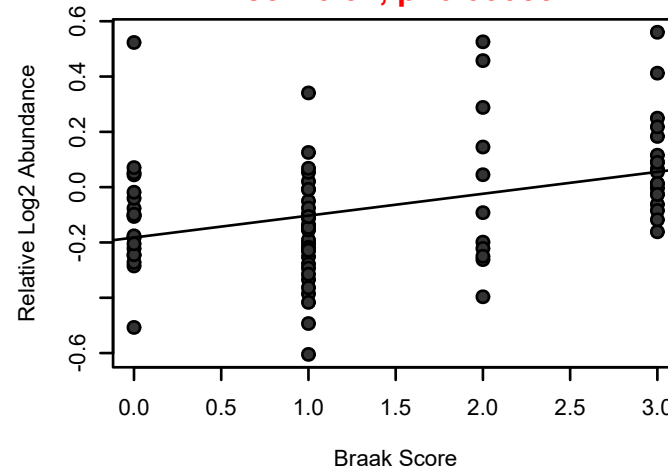
CAPNS2 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 5.4e-06



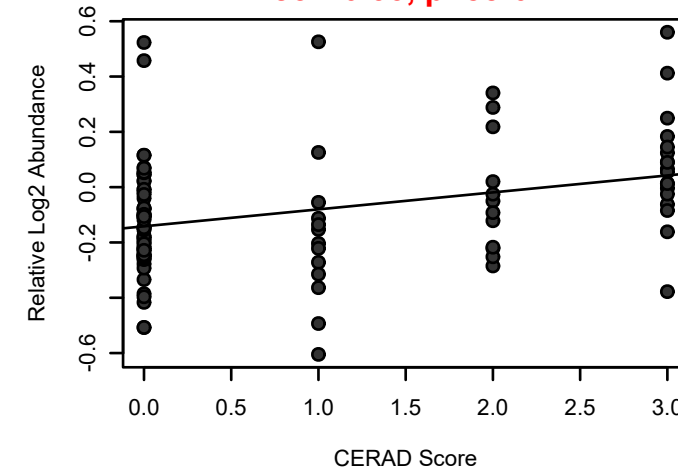
CAPNS2 UPenn Mixed PRM
K-W ANOVA p: 0.00012



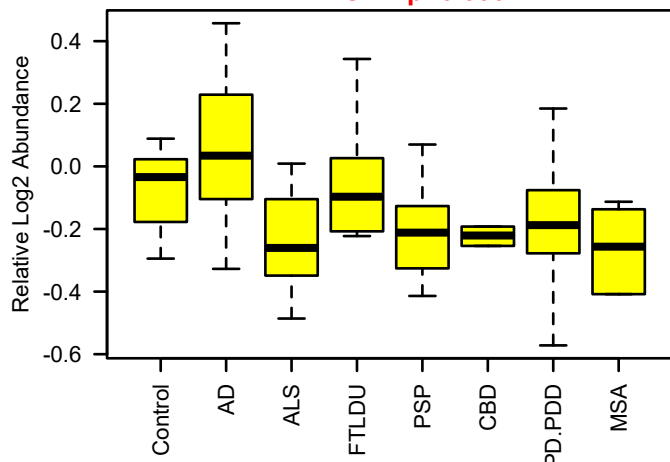
bicor=0.4, p=0.00013
cor=0.37, p=0.00053



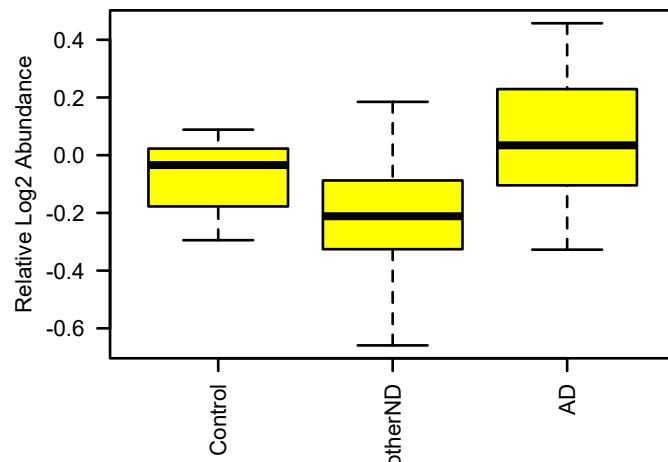
bicor=0.36, p=0.00025
cor=0.33, p=8e-04



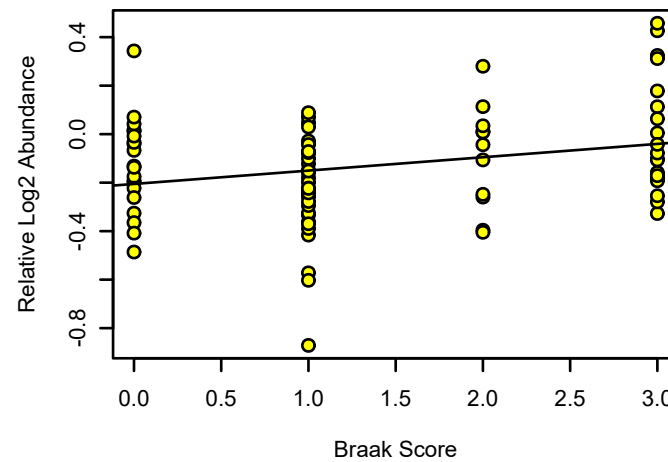
CAPNS1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.00012



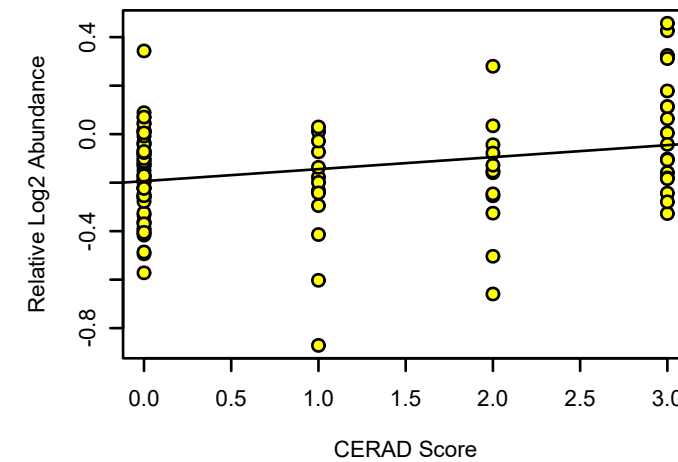
CAPNS1 UPenn Mixed PRM
K-W ANOVA p: 5.7e-06



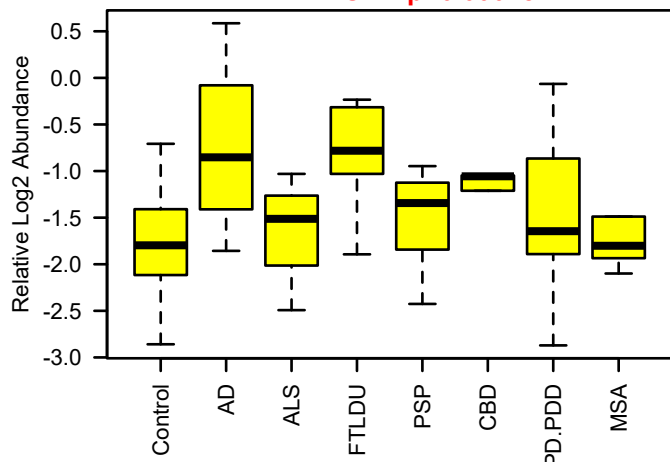
bicor=0.24, p=0.028
cor=0.27, p=0.013



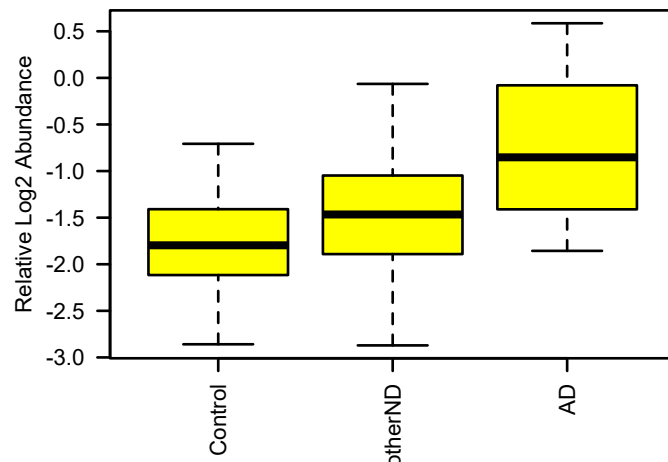
bicor=0.25, p=0.013
cor=0.27, p=0.0066



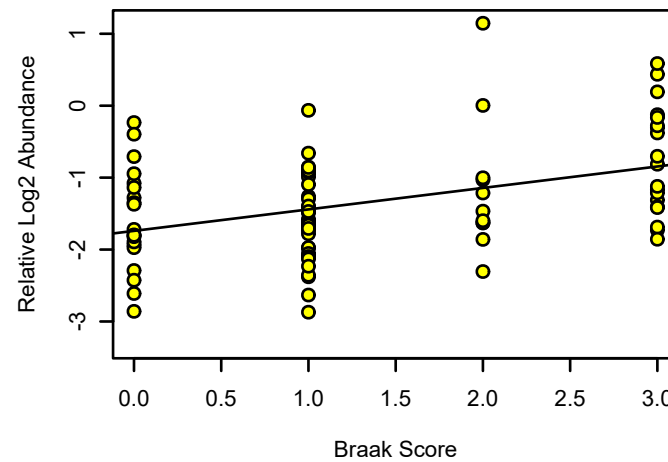
HSPB1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.00018



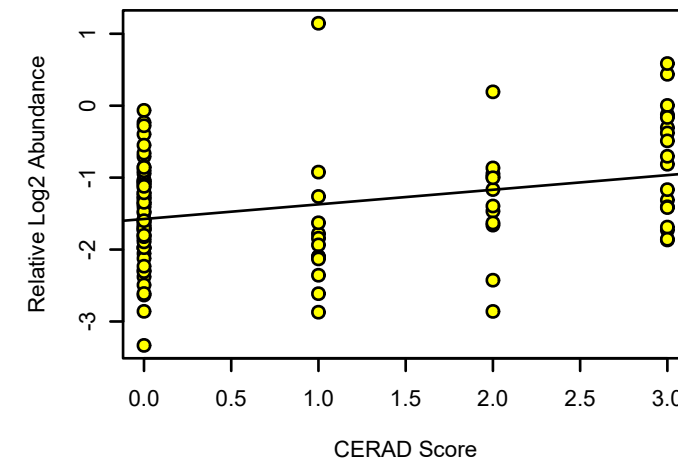
HSPB1 UPenn Mixed PRM
K-W ANOVA p: 3e-04



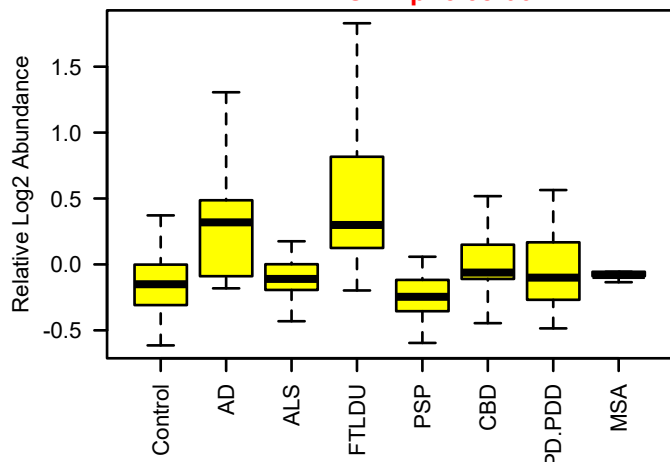
bicor=0.39, p=0.00024
cor=0.41, p=0.00011



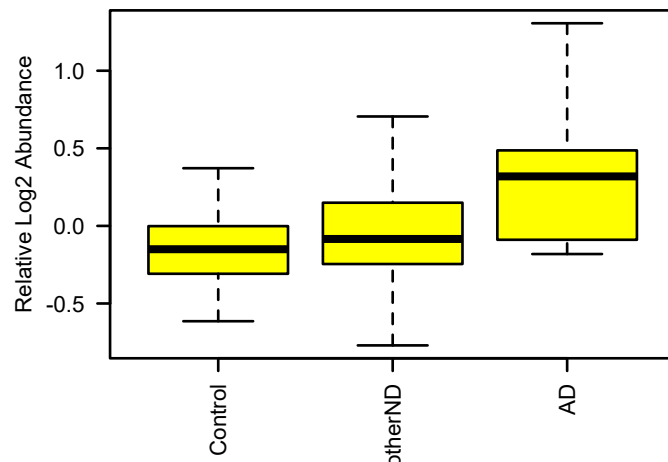
bicor=0.29, p=0.003
cor=0.3, p=0.0024



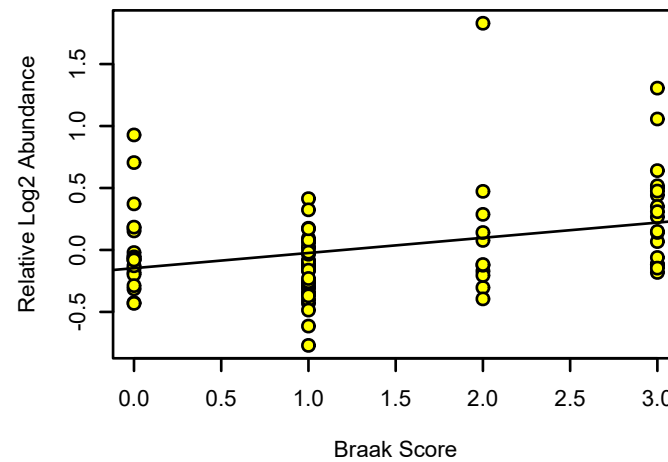
ITGB1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 5.3e-06



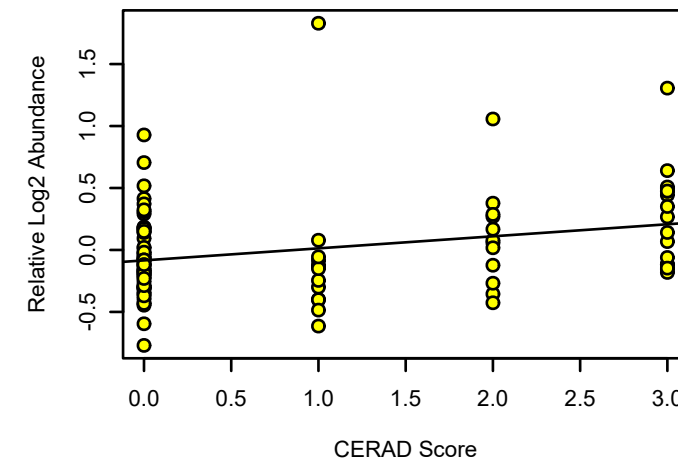
ITGB1 UPenn Mixed PRM
K-W ANOVA p: 0.0011

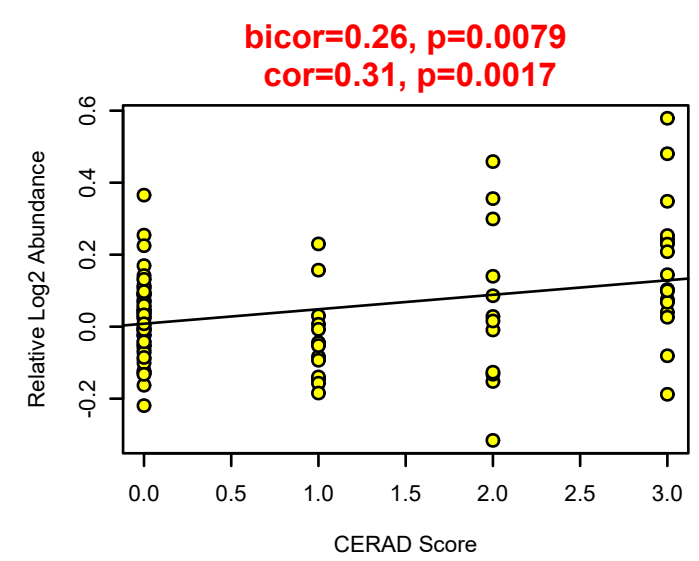
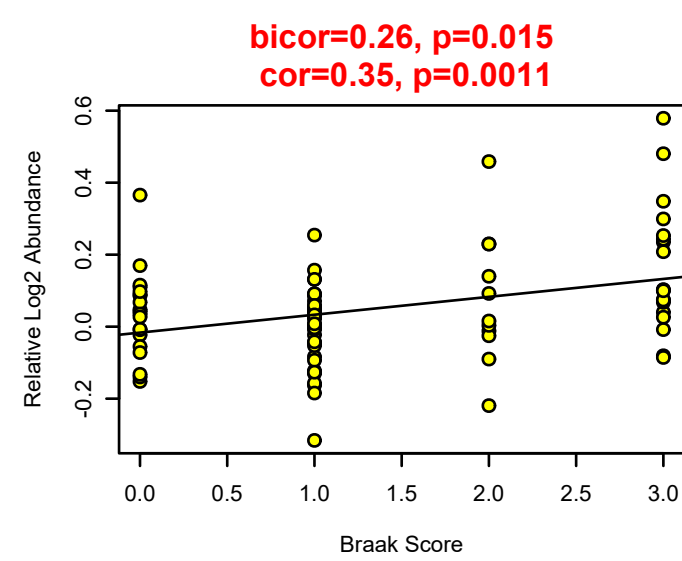
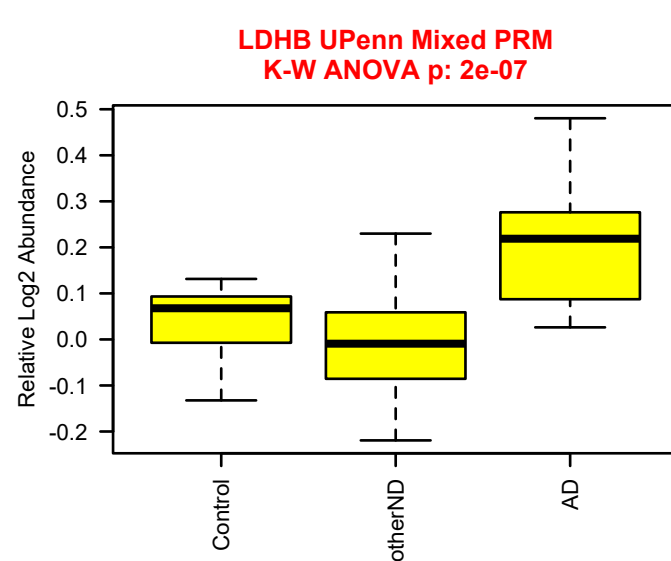
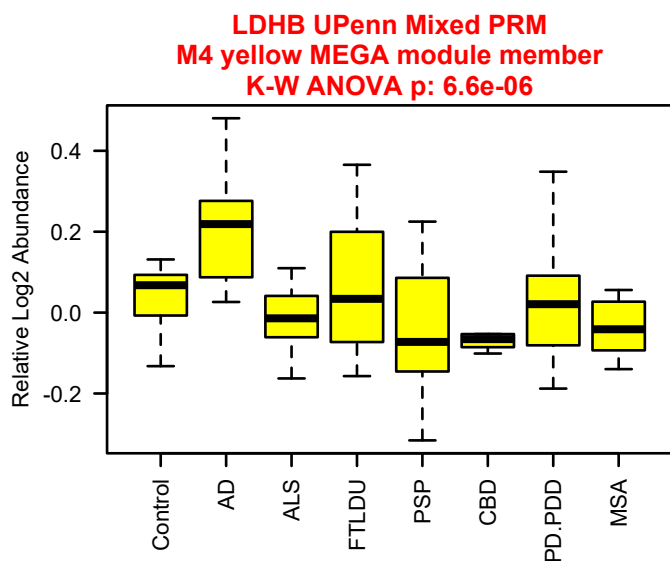
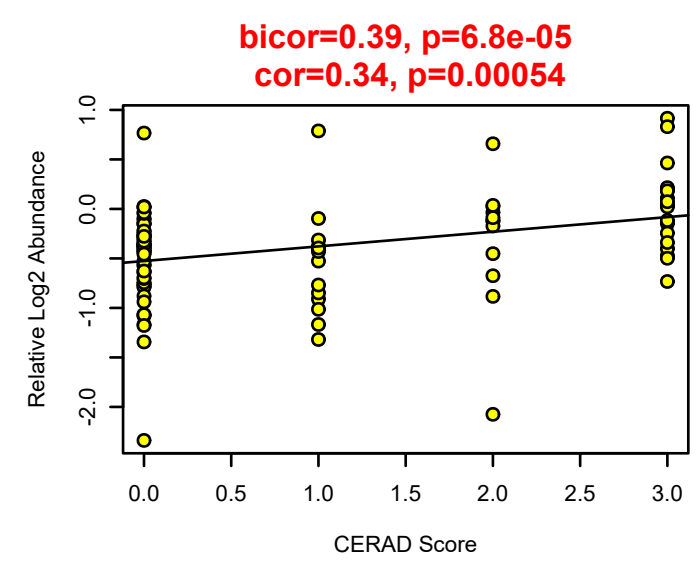
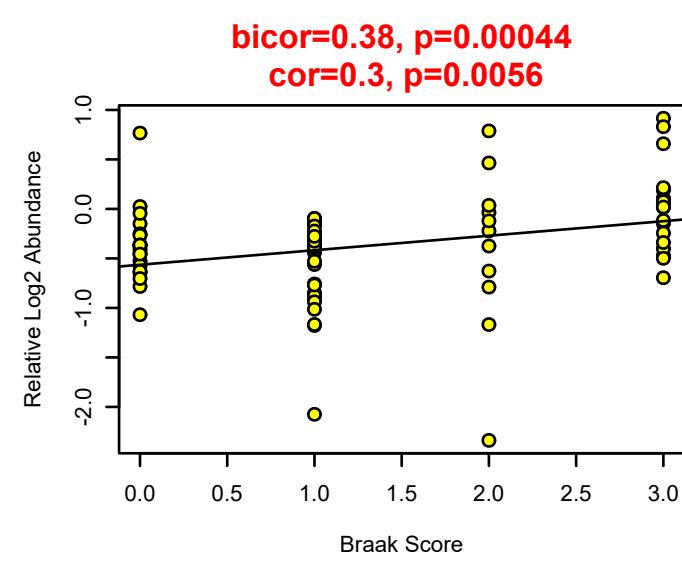
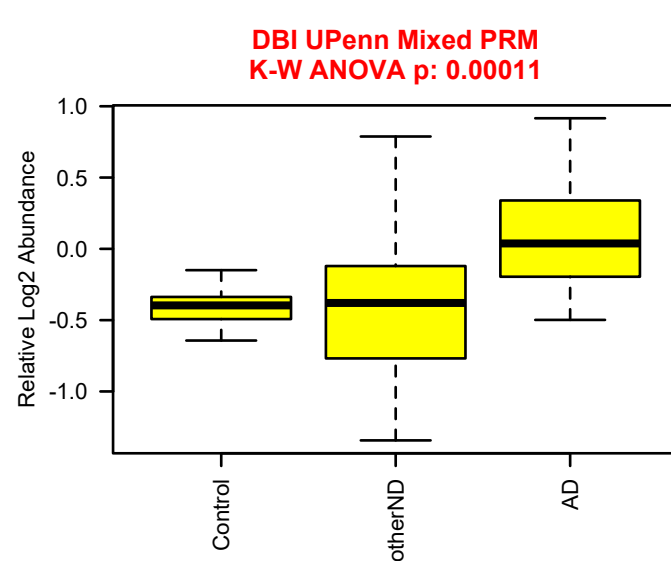
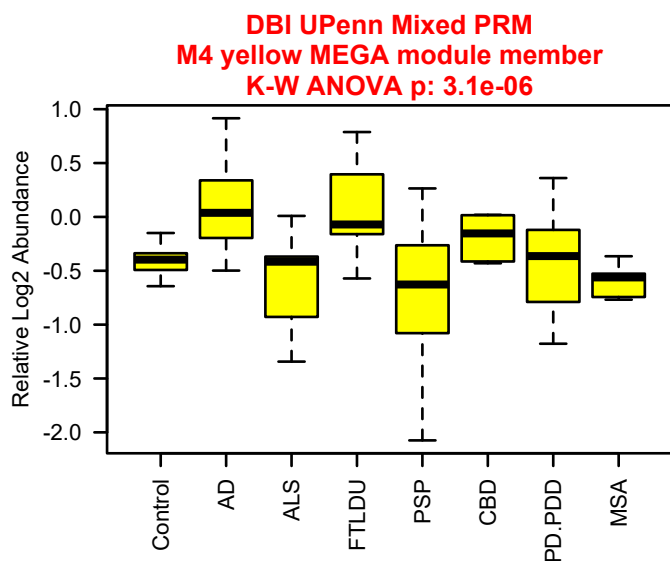
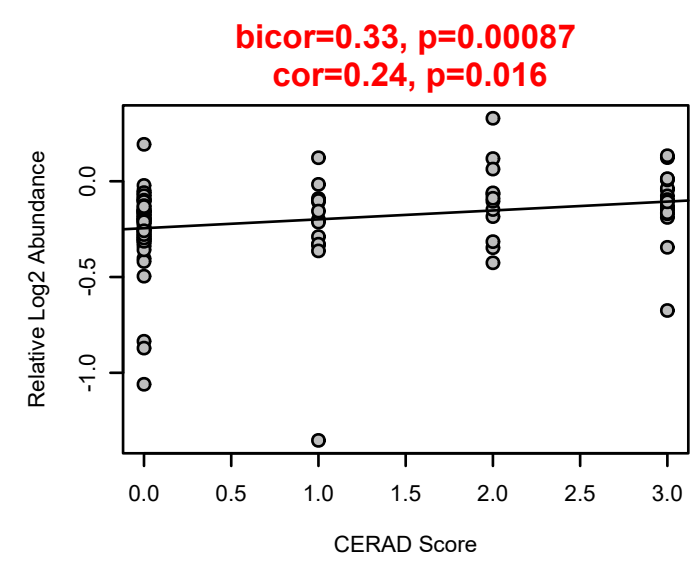
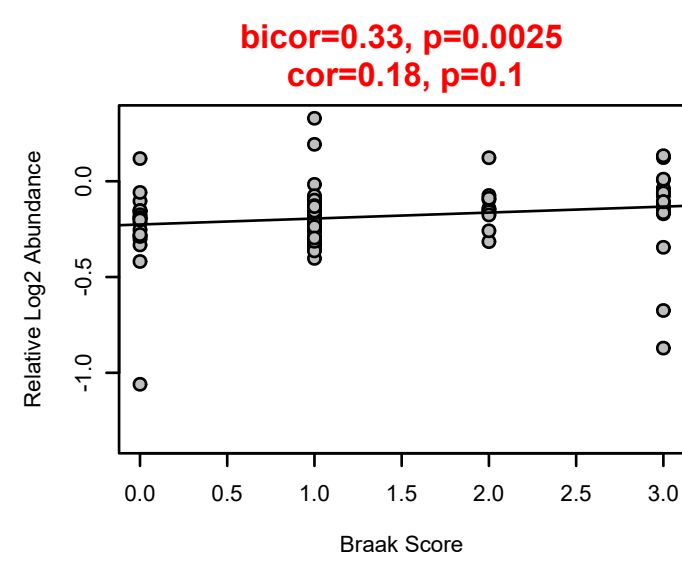
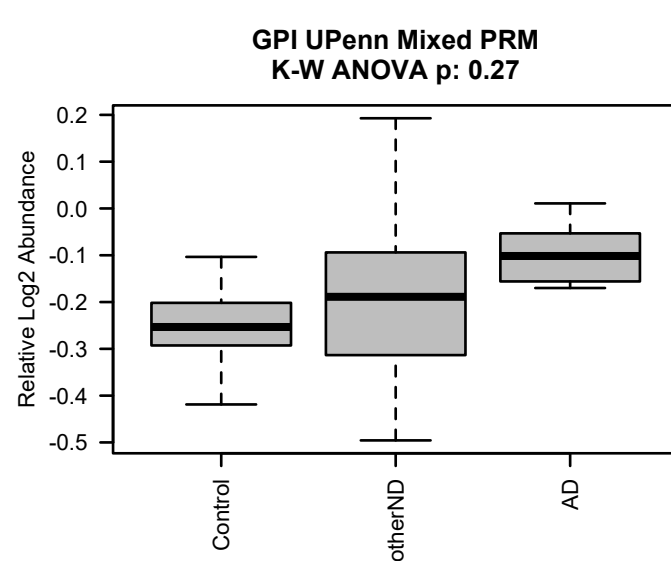
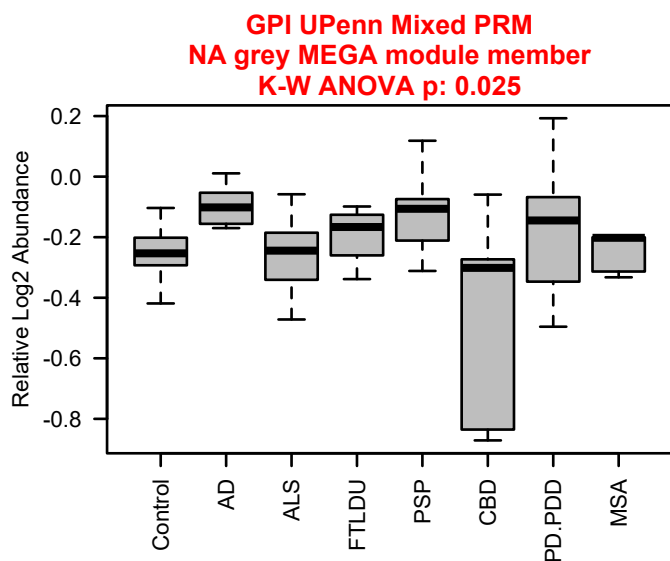
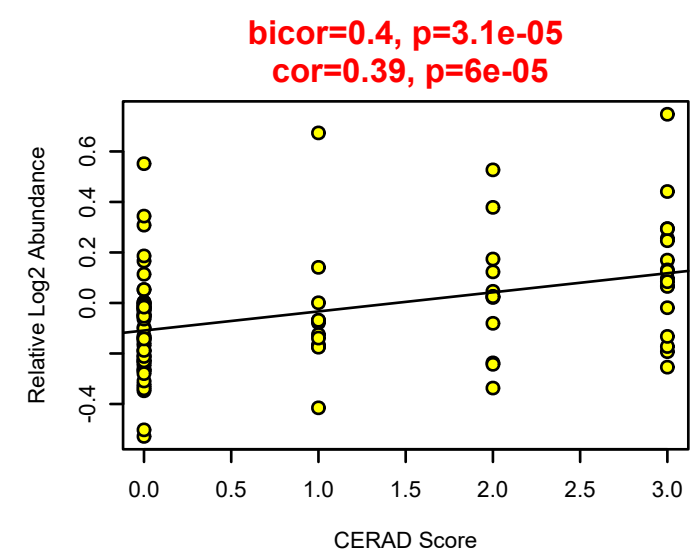
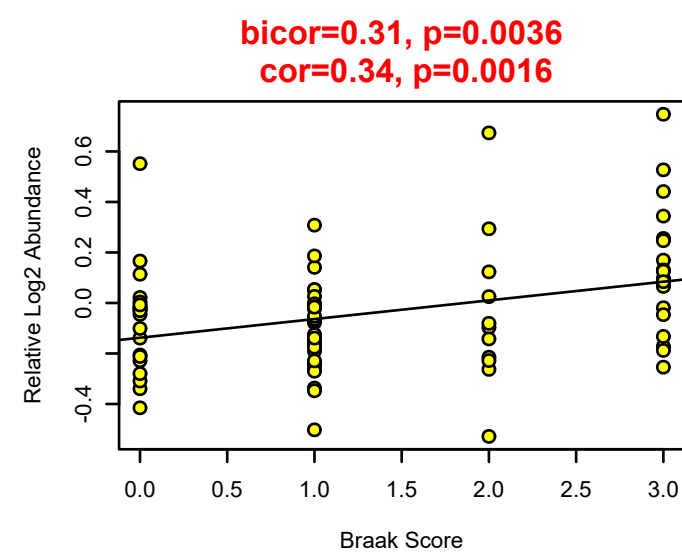
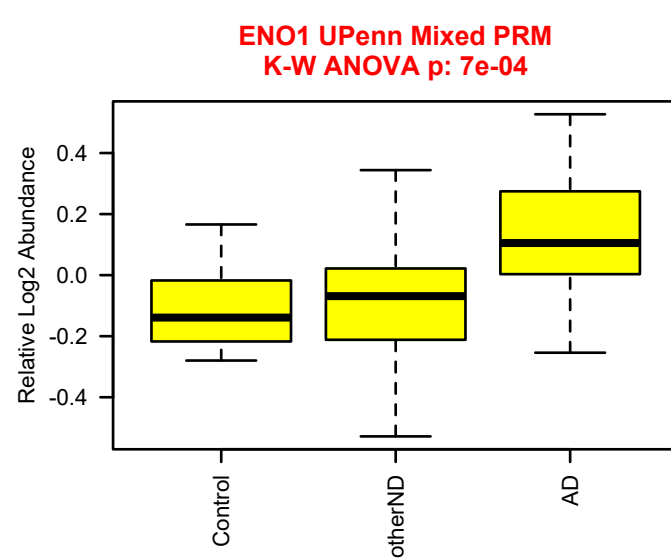
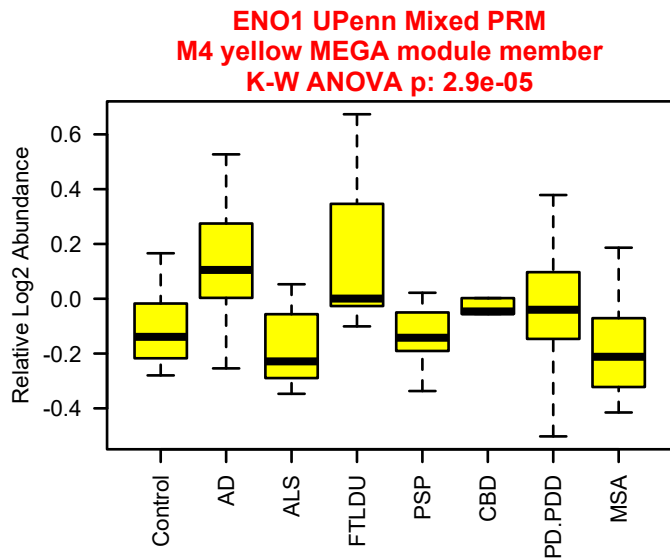


bicor=0.34, p=0.0014
cor=0.32, p=0.003

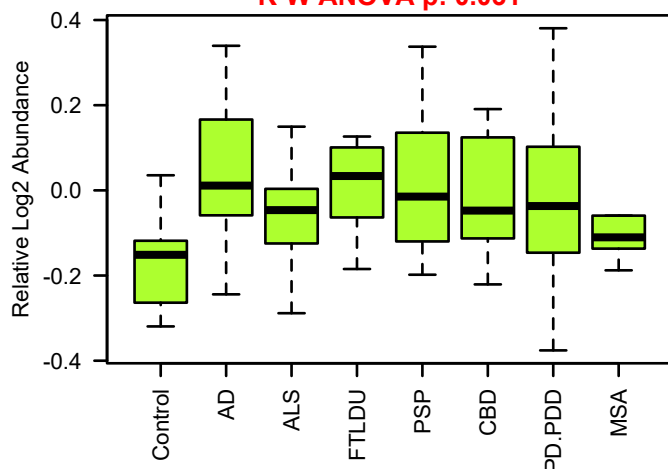


bicor=0.31, p=0.002
cor=0.29, p=0.0034

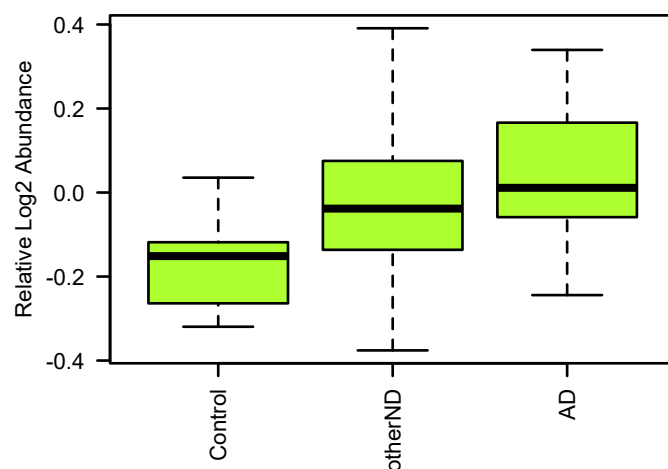




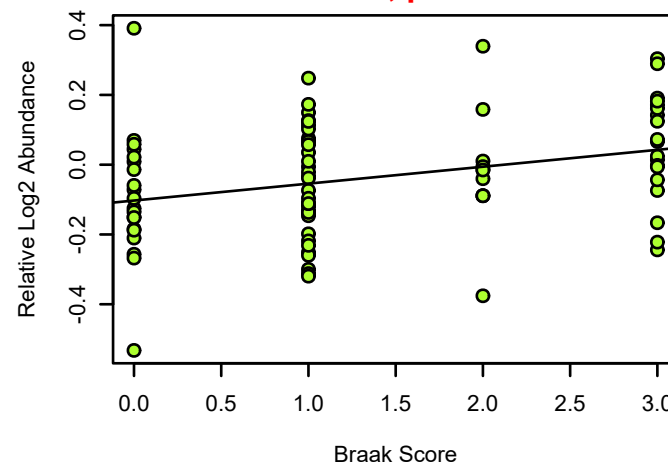
HSP90AA1 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.031



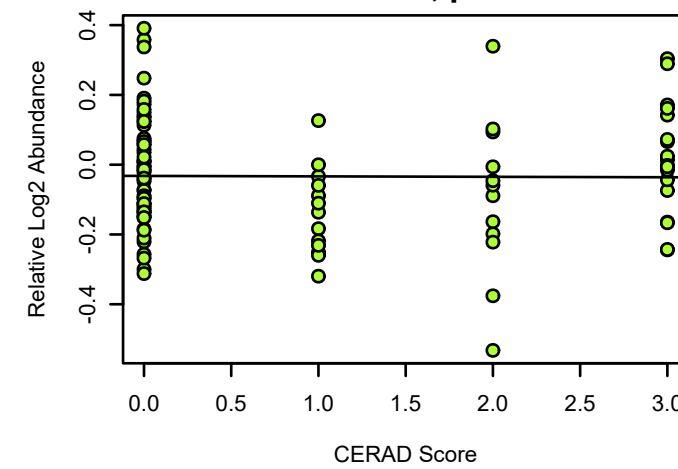
HSP90AA1 UPenn Mixed PRM
K-W ANOVA p: 0.0011



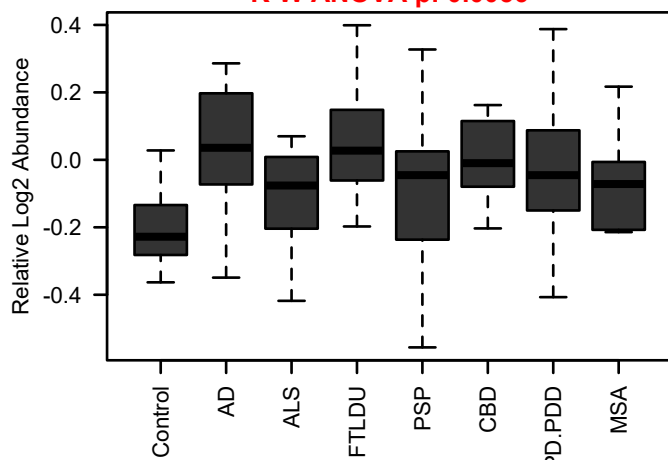
bicor=0.3, p=0.0051
cor=0.31, p=0.0041



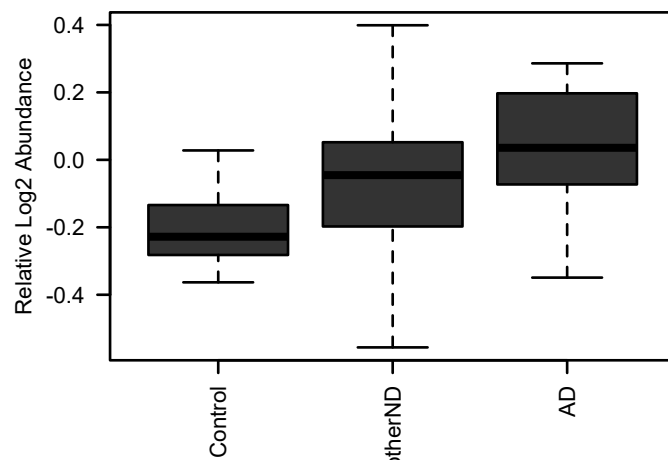
bicor=0.0047, p=0.96
cor=-0.009, p=0.93



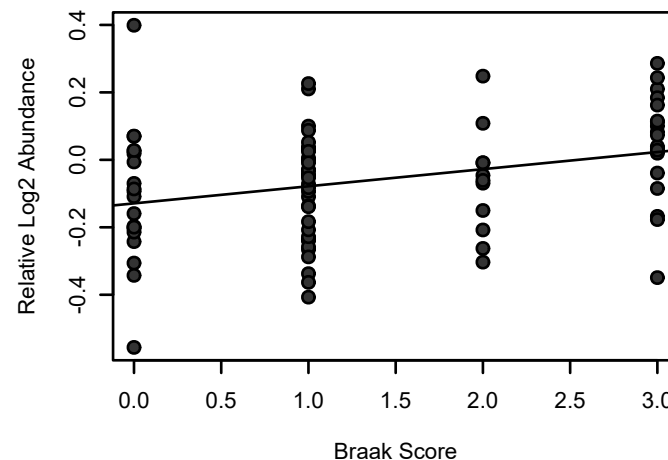
HSP90AA2P UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.0056



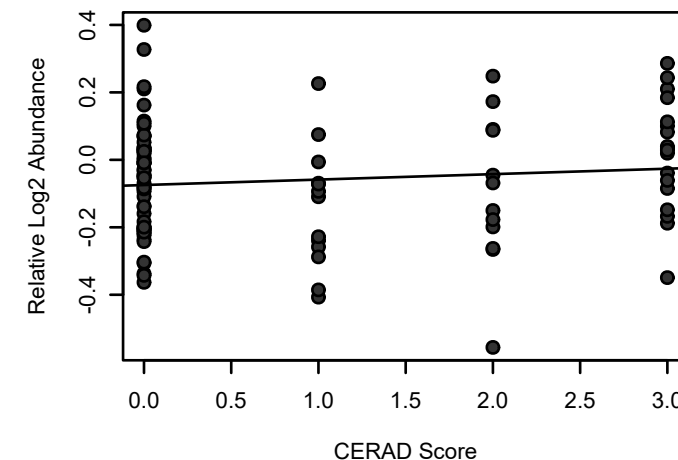
HSP90AA2P UPenn Mixed PRM
K-W ANOVA p: 0.00061



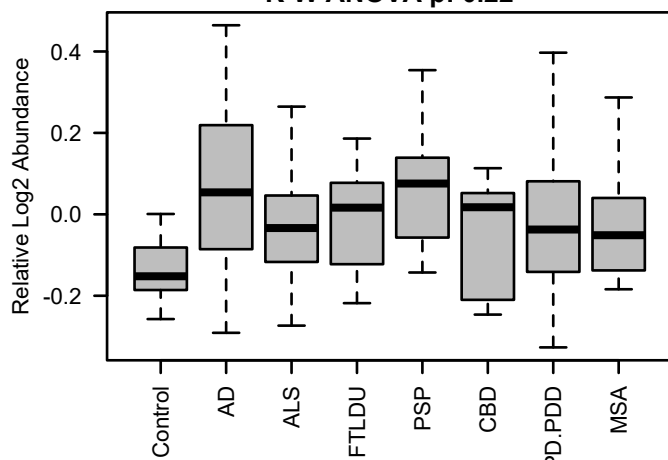
bicor=0.28, p=0.0091
cor=0.31, p=0.0041



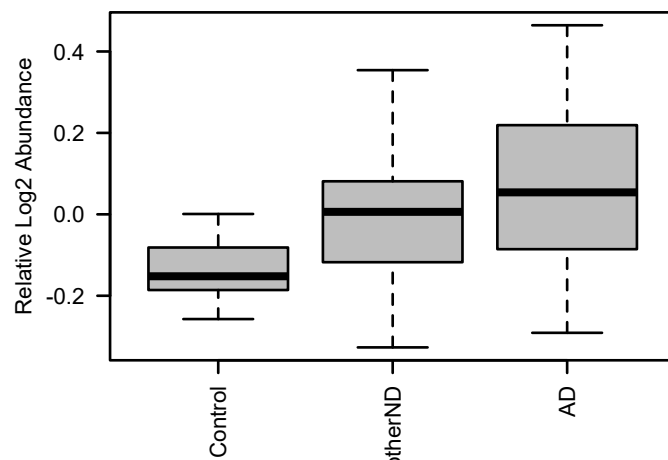
bicor=0.12, p=0.22
cor=0.11, p=0.28



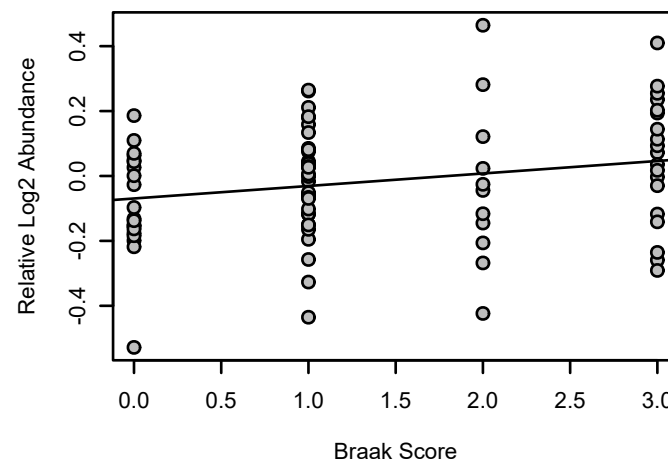
HSP90AB2P UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.22



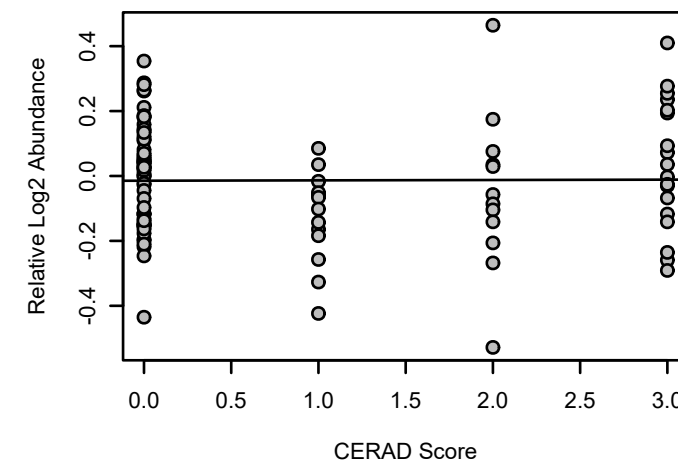
HSP90AB2P UPenn Mixed PRM
K-W ANOVA p: 0.017



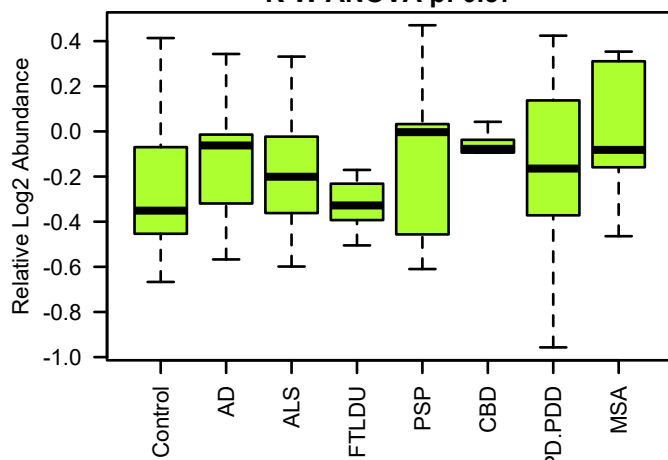
bicor=0.19, p=0.088
cor=0.23, p=0.035



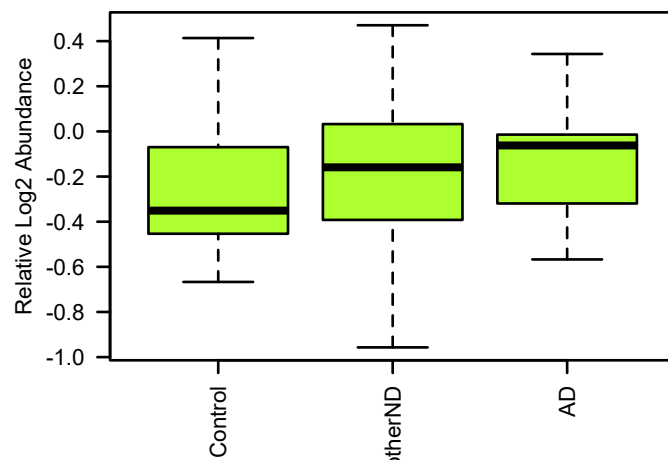
bicor=0.0026, p=0.98
cor=0.0071, p=0.94



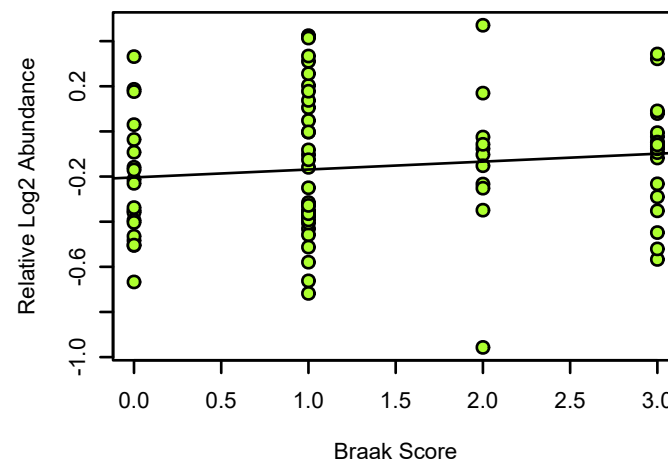
HSP90AB1 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.57



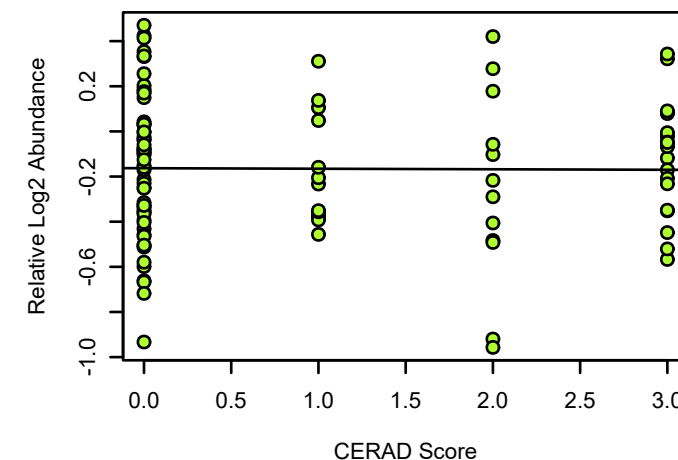
HSP90AB1 UPenn Mixed PRM
K-W ANOVA p: 0.41



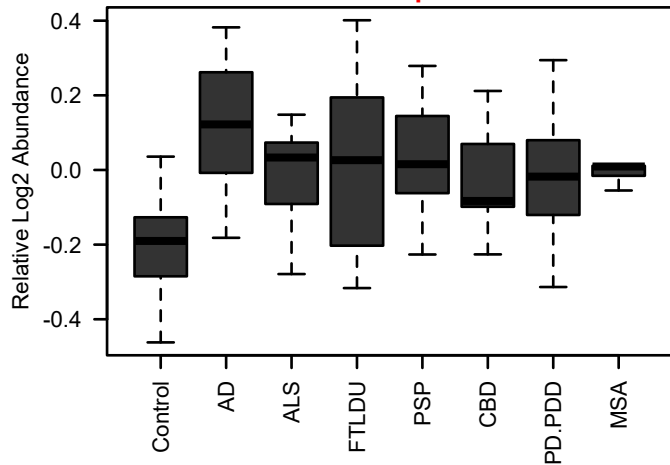
bicor=0.14, p=0.22
cor=0.13, p=0.24



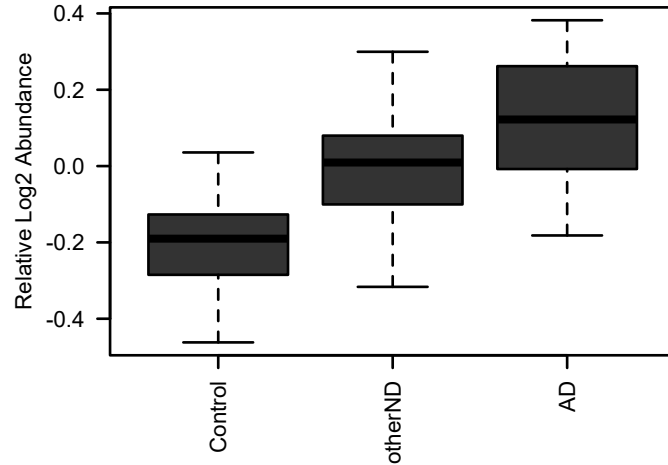
bicor=-0.0019, p=0.99
cor=-0.0089, p=0.93



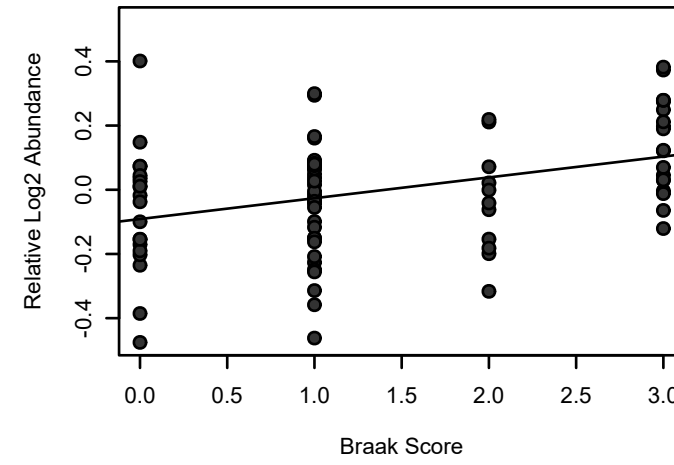
HSP90AB3P UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.0018



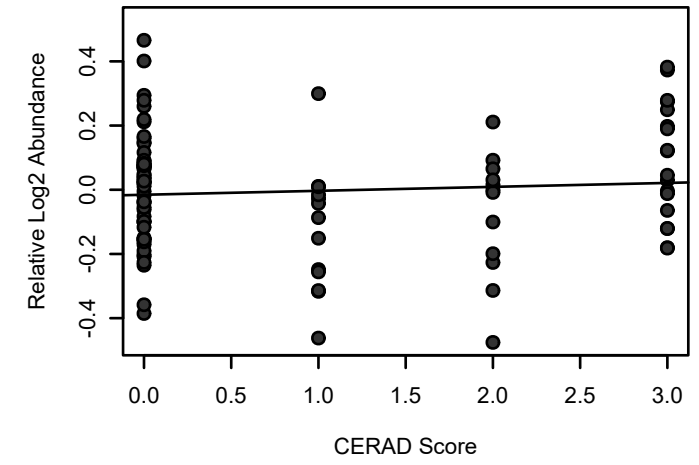
HSP90AB3P UPenn Mixed PRM
K-W ANOVA p: 1.8e-05



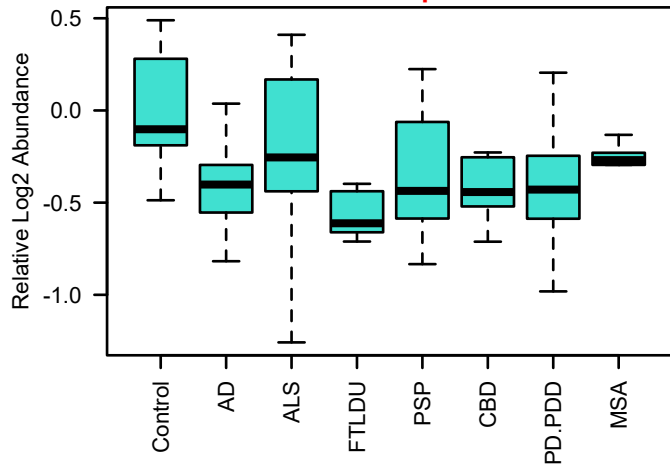
bicor=0.33, p=0.0019
cor=0.38, p=0.00036



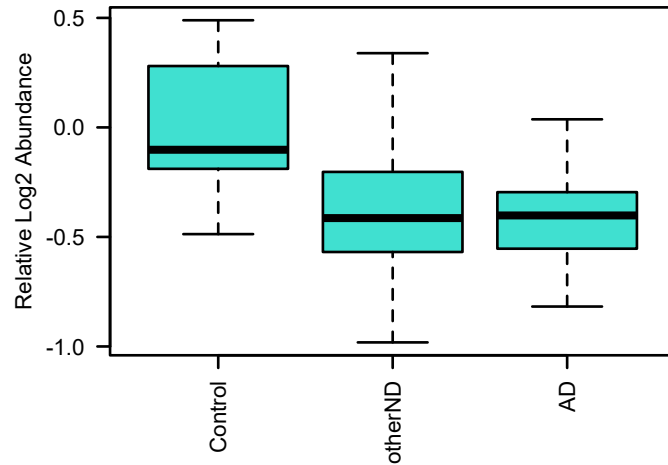
bicor=0.087, p=0.39
cor=0.078, p=0.44



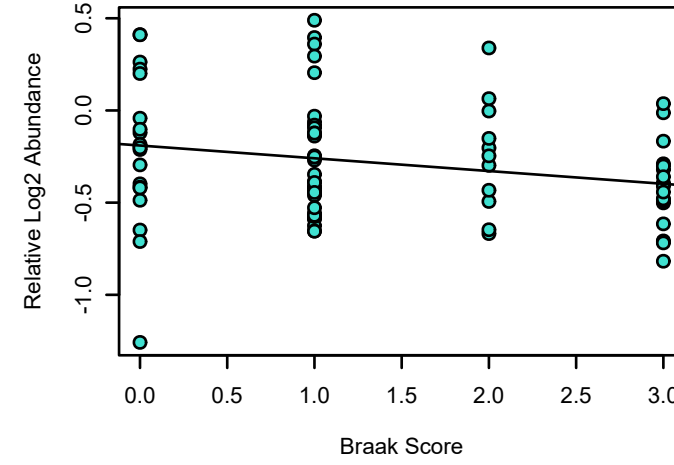
SYN UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 3e-04



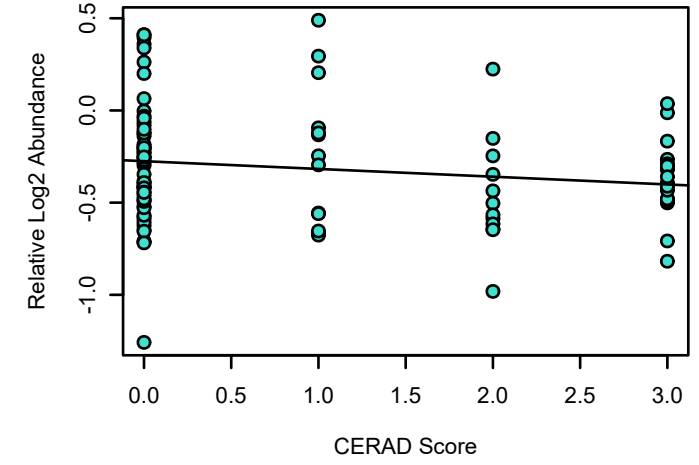
SYN UPenn Mixed PRM
K-W ANOVA p: 0.00012



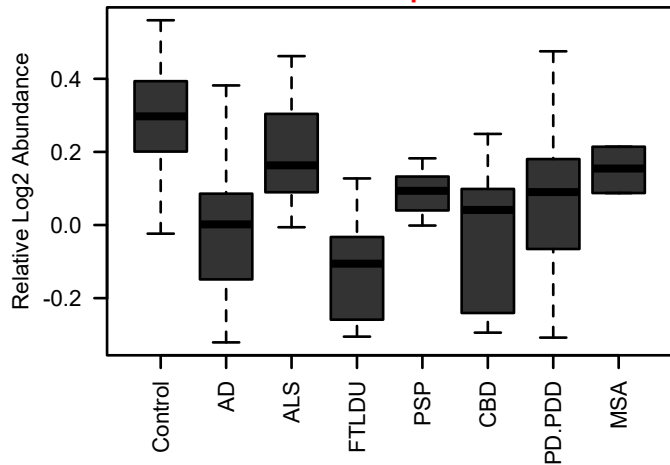
bicor=-0.22, p=0.044
cor=-0.23, p=0.035



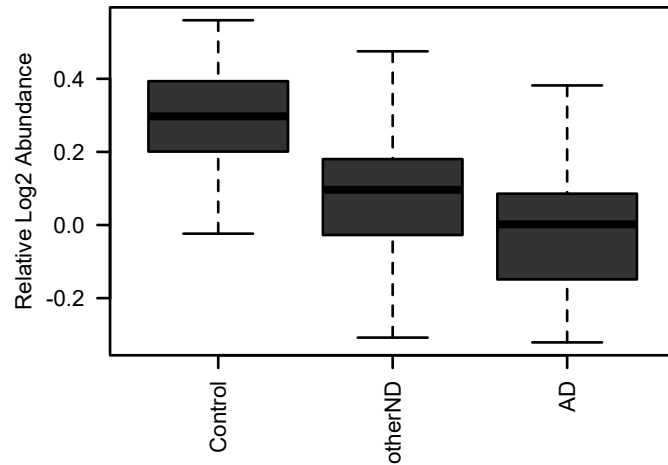
bicor=-0.16, p=0.11
cor=-0.16, p=0.11



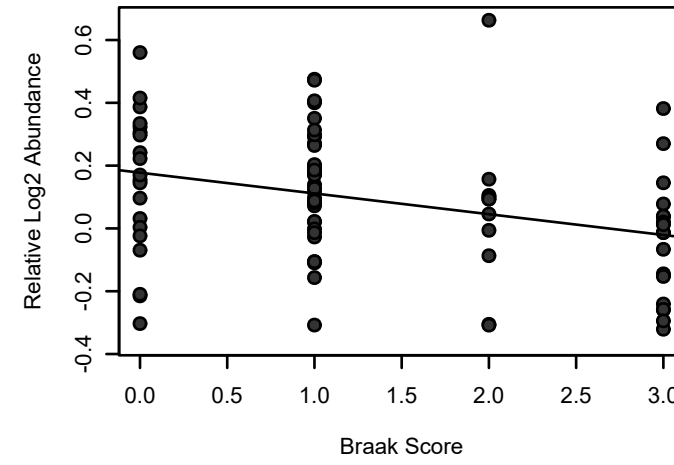
PDHA2 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 1.4e-06



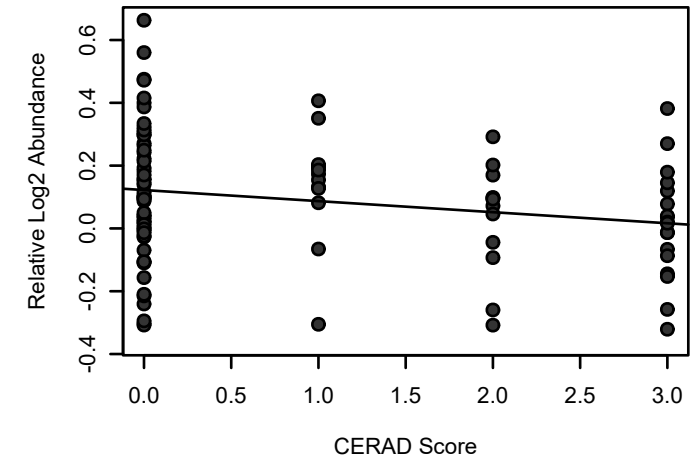
PDHA2 UPenn Mixed PRM
K-W ANOVA p: 4.4e-05



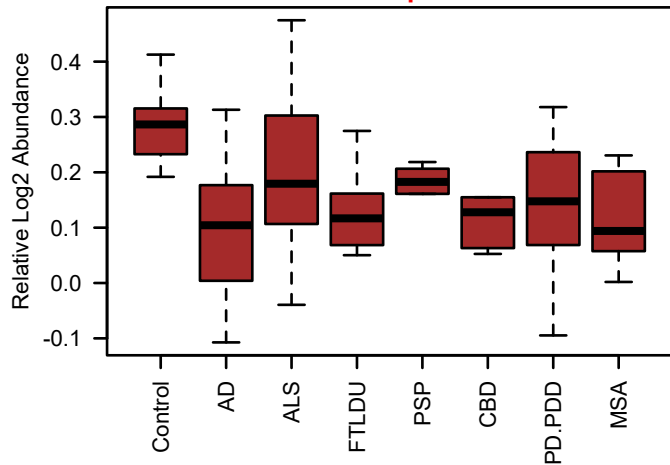
bicor=-0.34, p=0.0017
cor=-0.33, p=0.0022



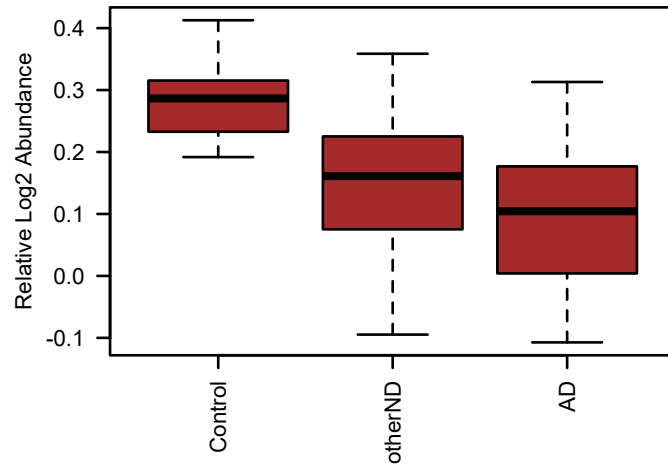
bicor=-0.2, p=0.041
cor=-0.21, p=0.036



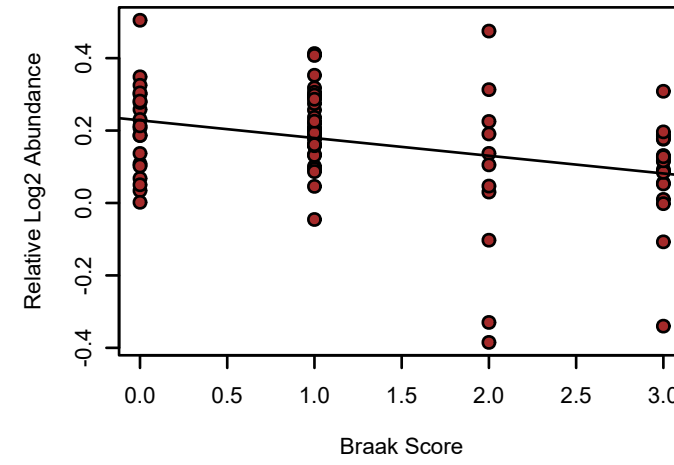
PDHA1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.00053



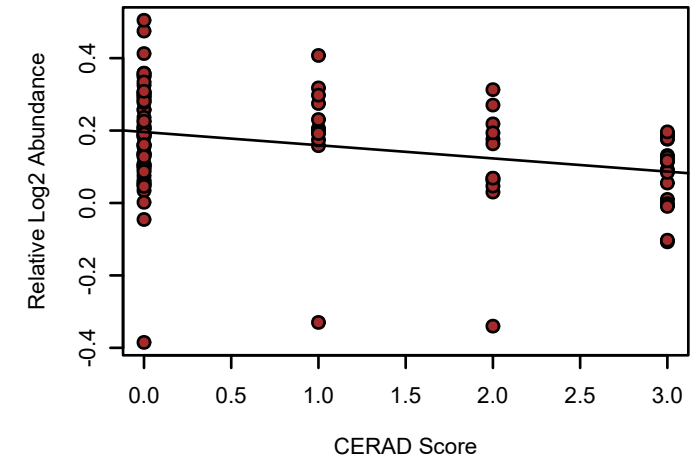
PDHA1 UPenn Mixed PRM
K-W ANOVA p: 2.1e-05



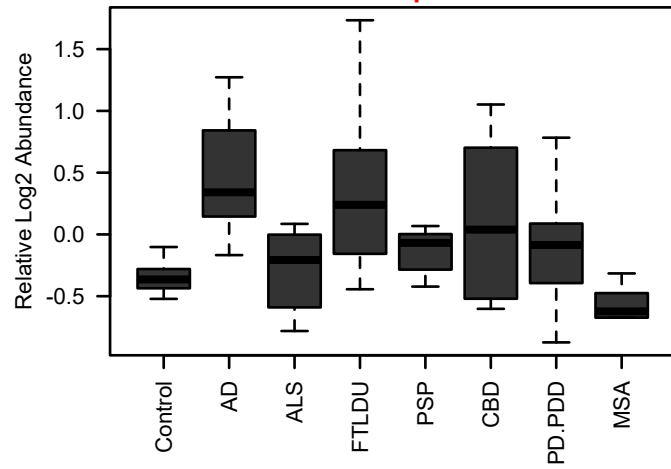
bicor=-0.35, p=0.0013
cor=-0.35, p=0.0011



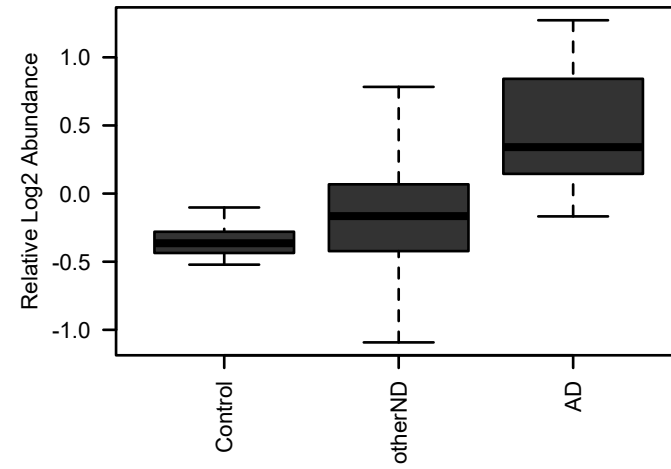
bicor=-0.36, p=0.00024
cor=-0.3, p=0.0024



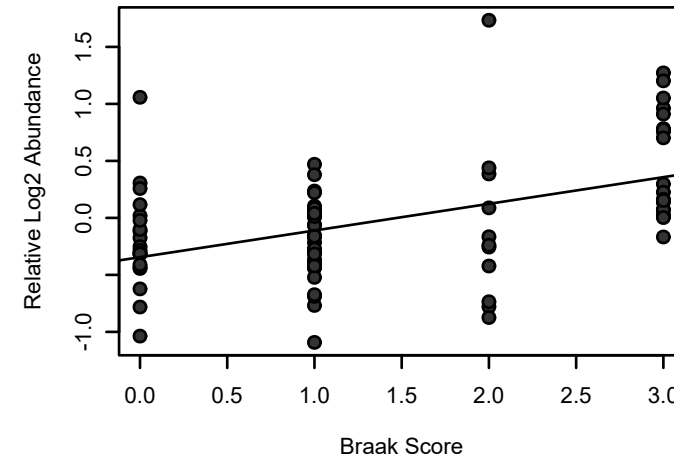
HPS6 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 4.2e-08



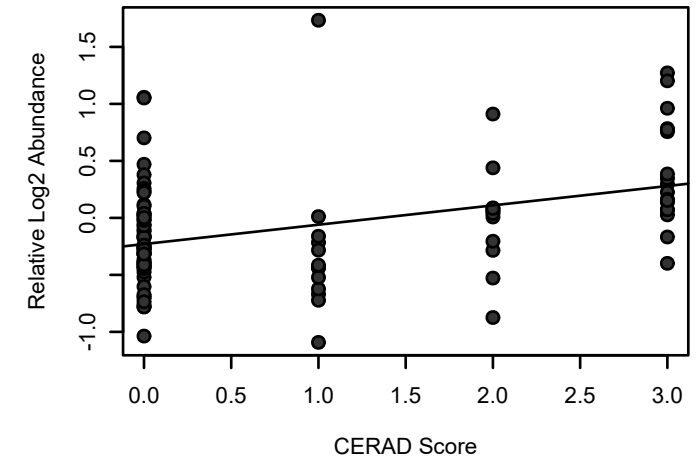
HPS6 UPenn Mixed PRM
K-W ANOVA p: 1.1e-06



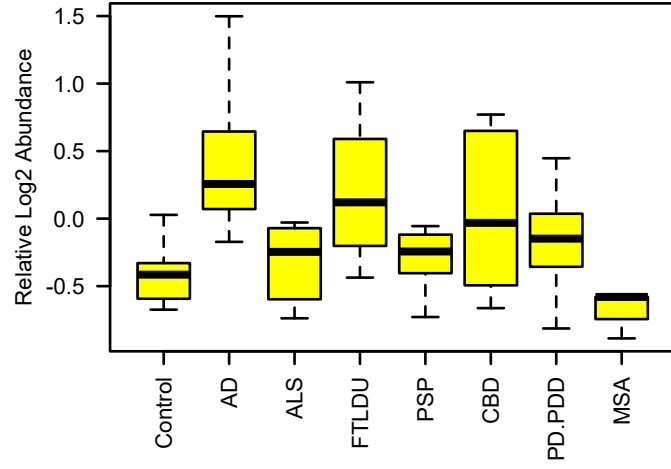
bicor=0.47, p=6.2e-06
cor=0.47, p=6.5e-06



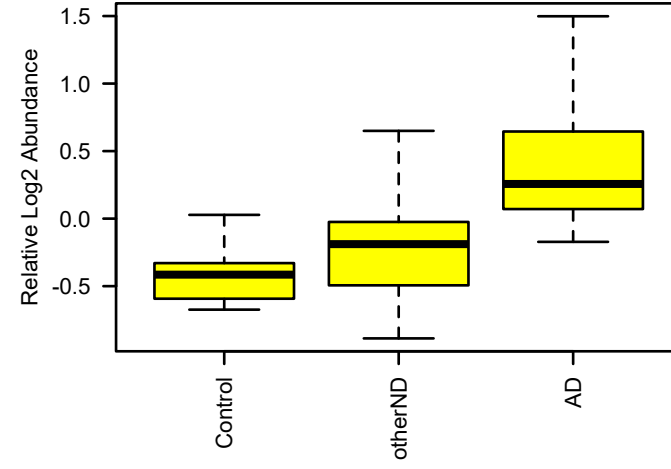
bicor=0.42, p=1.7e-05
cor=0.39, p=6e-05



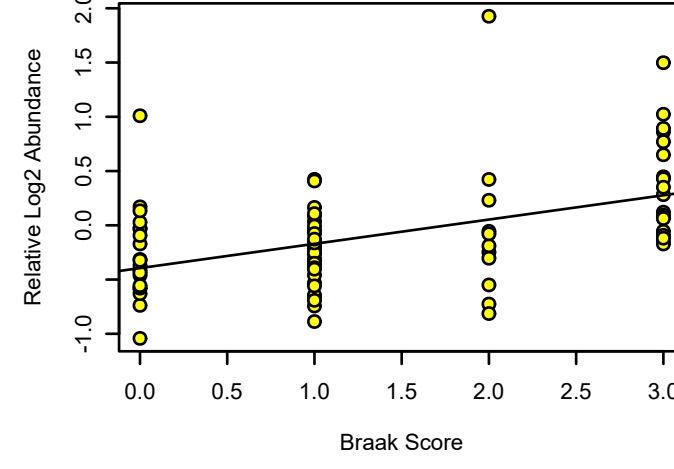
ANXA5 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 3.7e-08



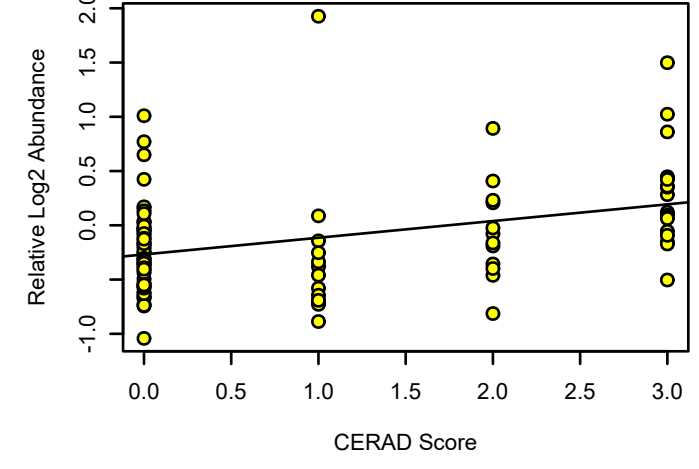
ANXA5 UPenn Mixed PRM
K-W ANOVA p: 1.4e-06



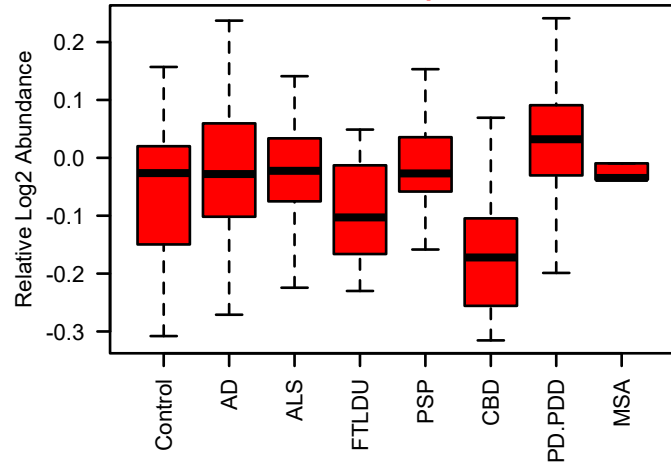
bicor=0.46, p=9.7e-06
cor=0.47, p=6.5e-06



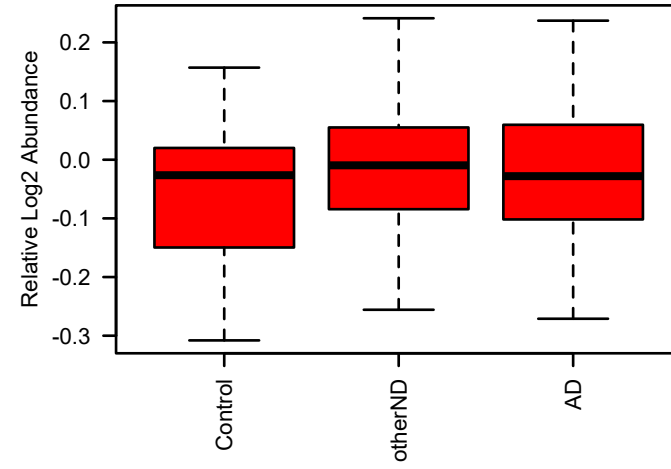
bicor=0.4, p=4.3e-05
cor=0.37, p=0.00015



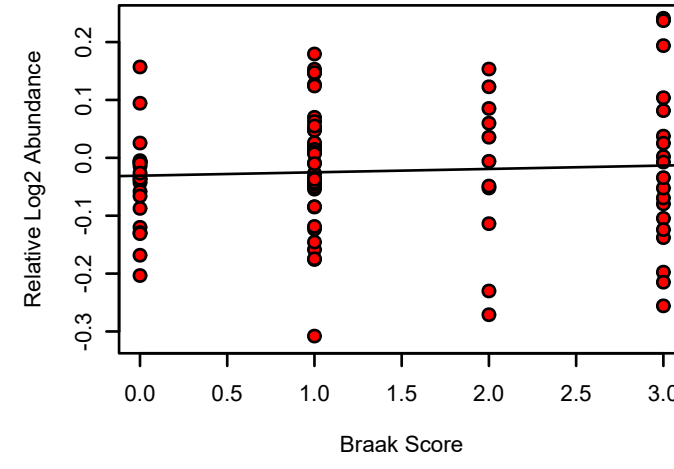
CLTA UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.014



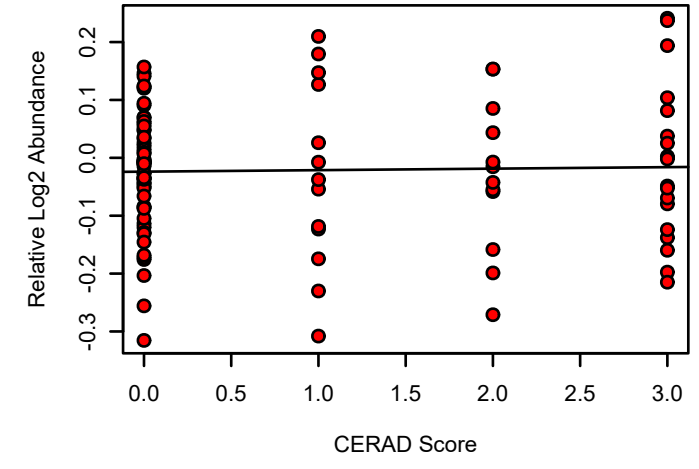
CLTA UPenn Mixed PRM
K-W ANOVA p: 0.51



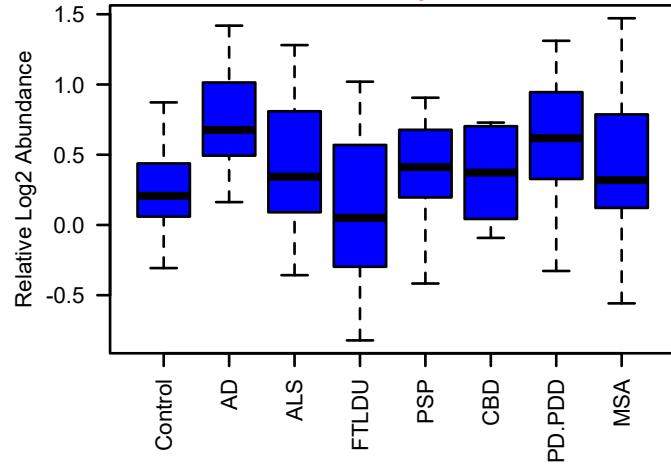
bicor=0.056, p=0.61
cor=0.054, p=0.63



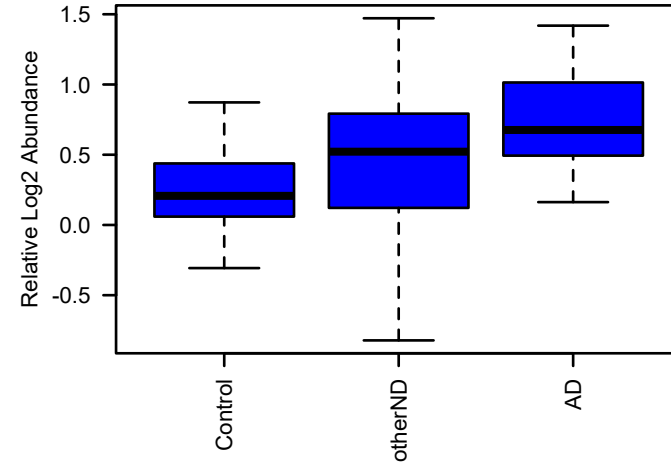
bicor=0.0069, p=0.95
cor=0.026, p=0.8



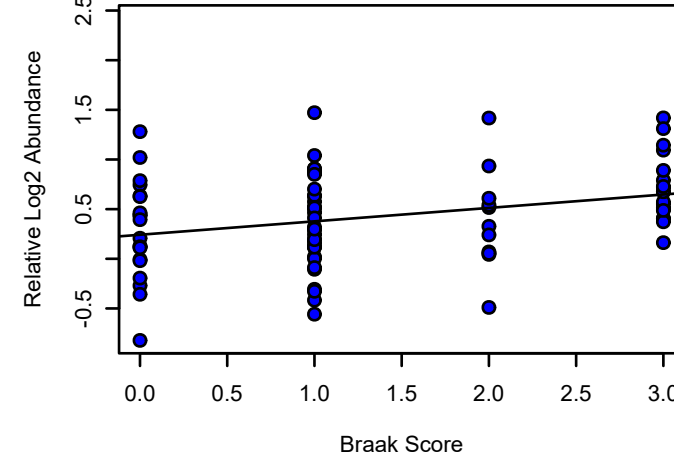
CNP UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.0081



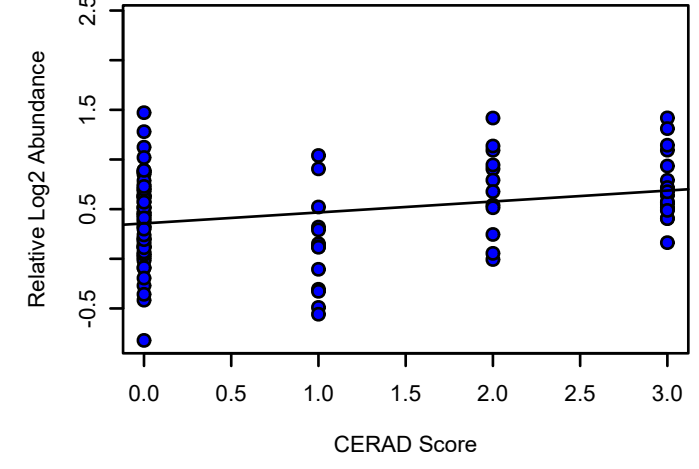
CNP UPenn Mixed PRM
K-W ANOVA p: 0.011



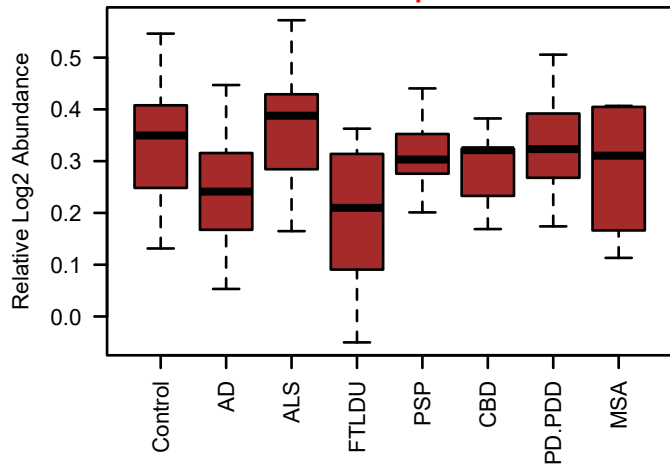
bicor=0.28, p=0.01
cor=0.31, p=0.0041



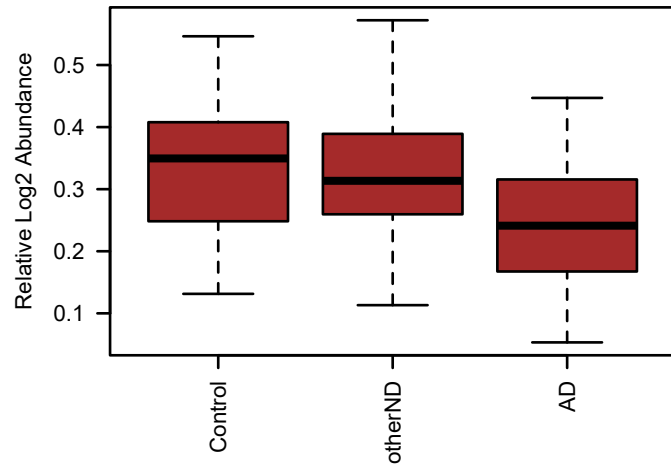
bicor=0.29, p=0.0036
cor=0.29, p=0.0034



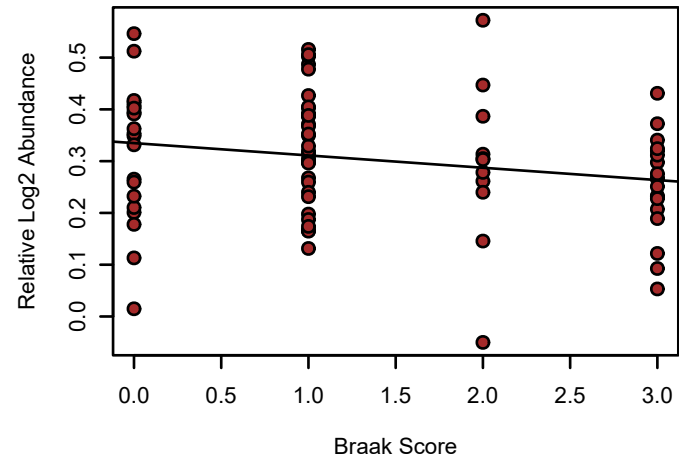
DLD UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0056



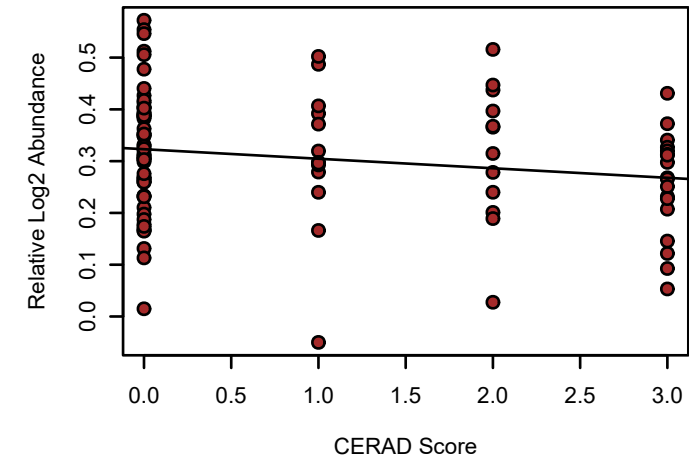
DLD UPenn Mixed PRM
K-W ANOVA p: 0.061



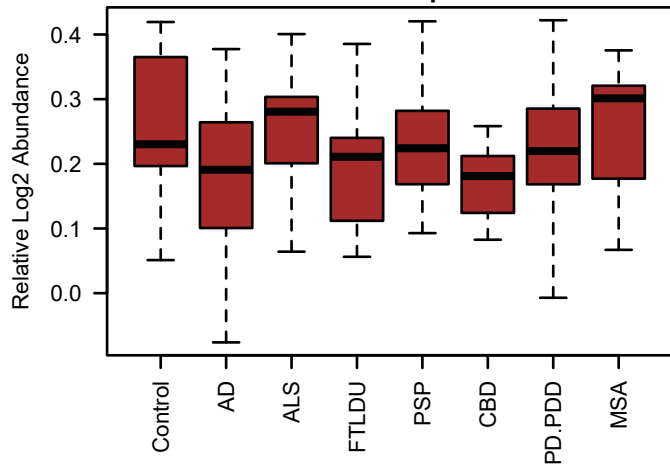
bicor=-0.21, p=0.054
cor=-0.21, p=0.055



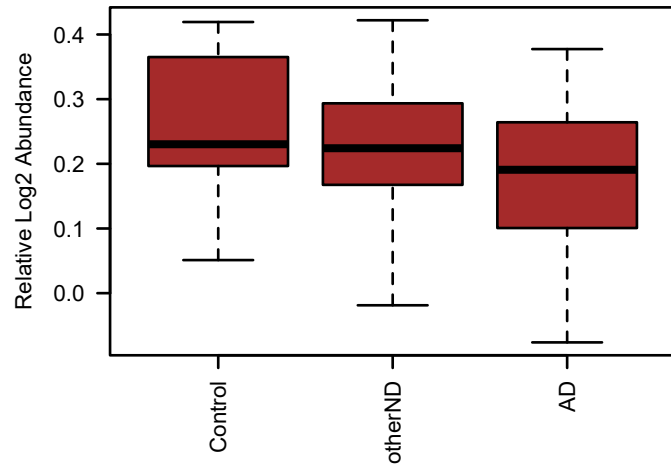
bicor=-0.18, p=0.07
cor=-0.18, p=0.073



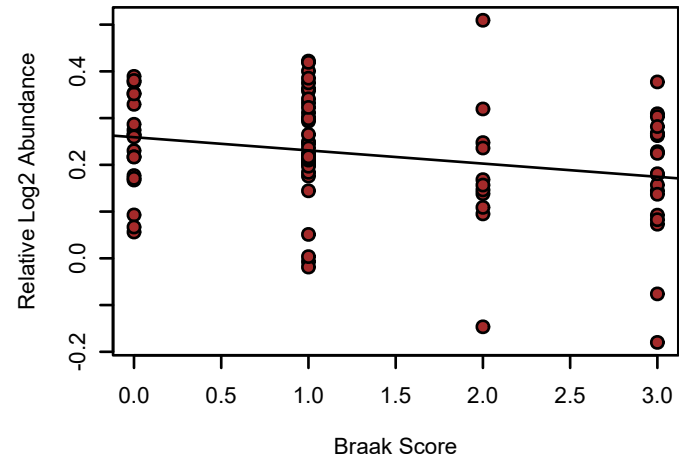
DLAT UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.13



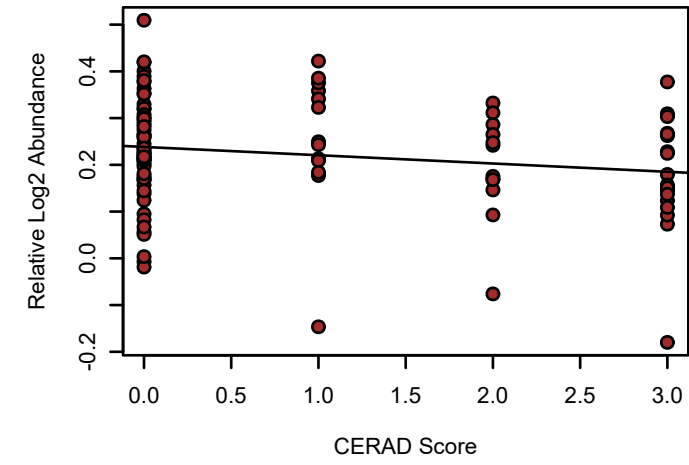
DLAT UPenn Mixed PRM
K-W ANOVA p: 0.048



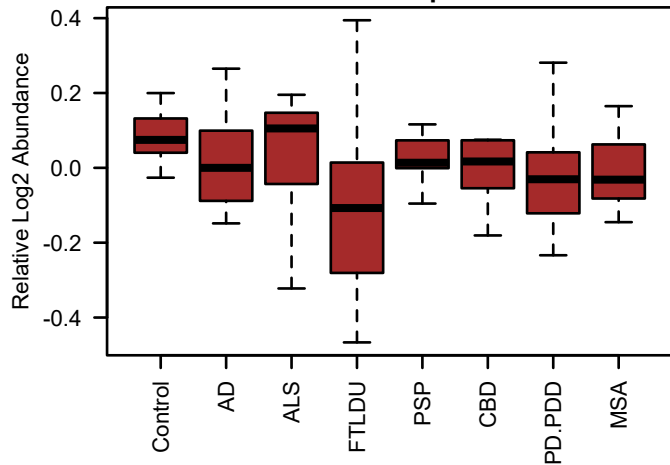
bicor=-0.22, p=0.048
cor=-0.24, p=0.028



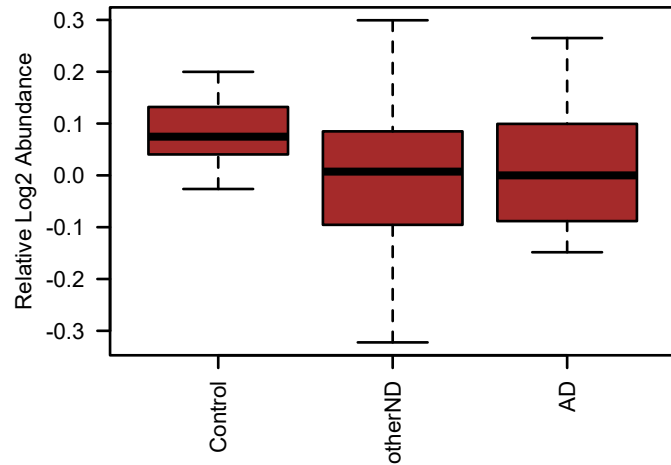
bicor=-0.16, p=0.12
cor=-0.18, p=0.073



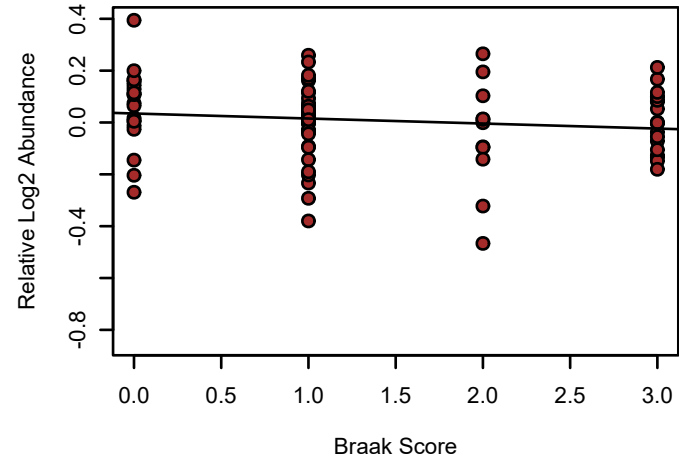
COX5B UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.18



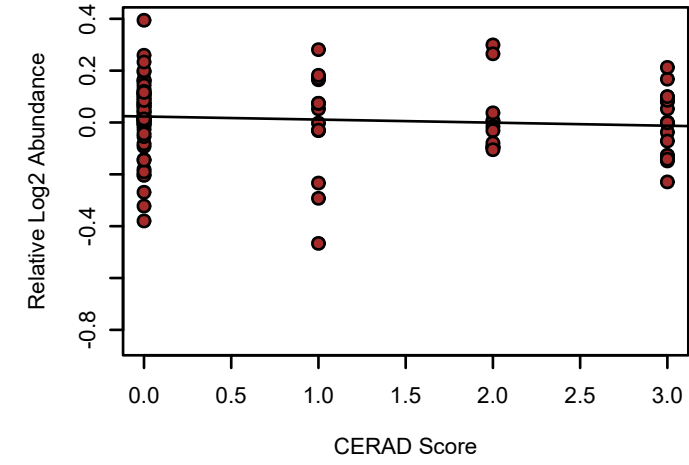
COX5B UPenn Mixed PRM
K-W ANOVA p: 0.1



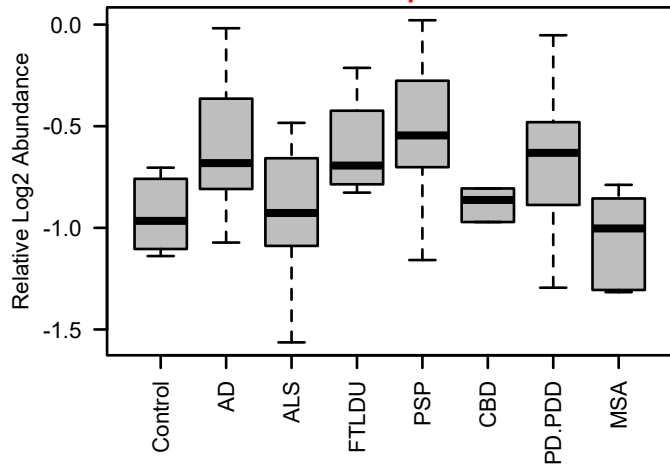
bicor=-0.14, p=0.2
cor=-0.14, p=0.2



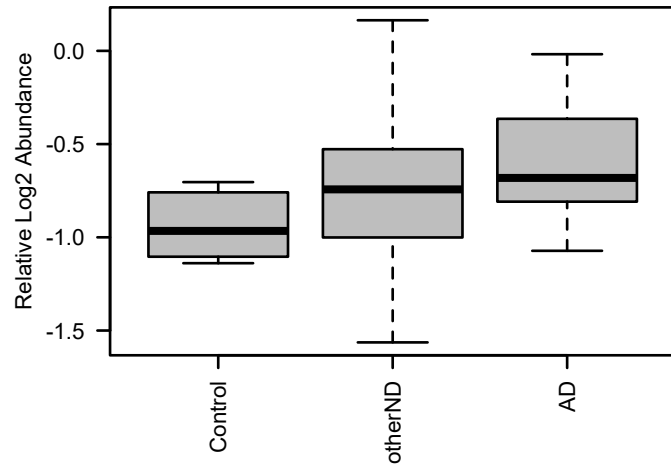
bicor=-0.13, p=0.2
cor=-0.096, p=0.34



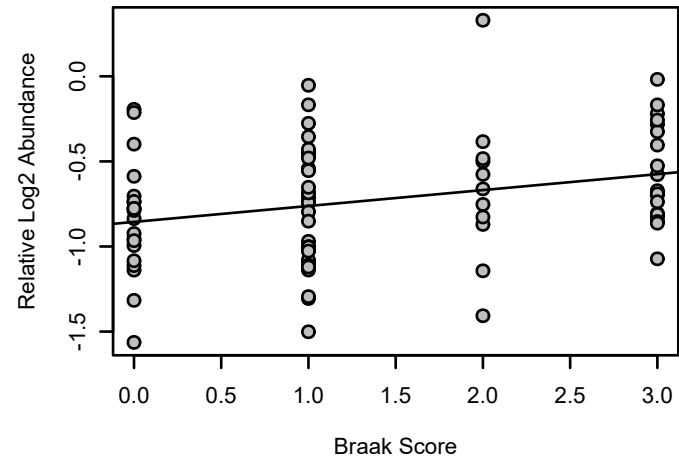
CHGA UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.00092



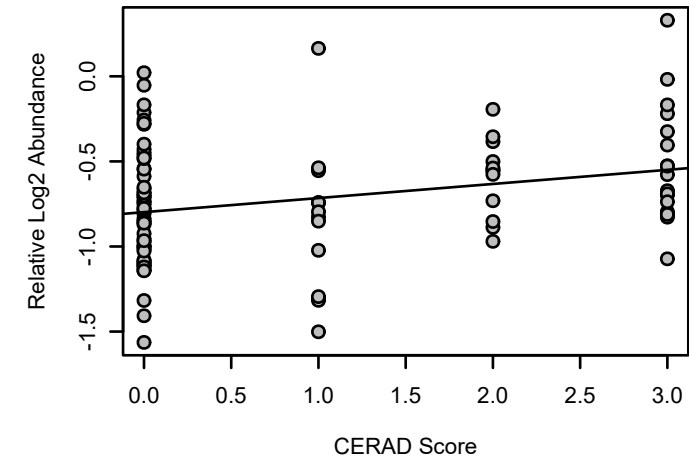
CHGA UPenn Mixed PRM
K-W ANOVA p: 0.011



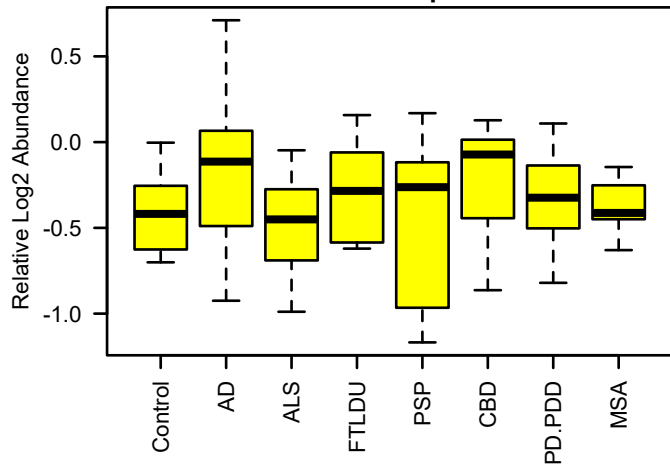
bicor=0.28, p=0.01
cor=0.28, p=0.0099



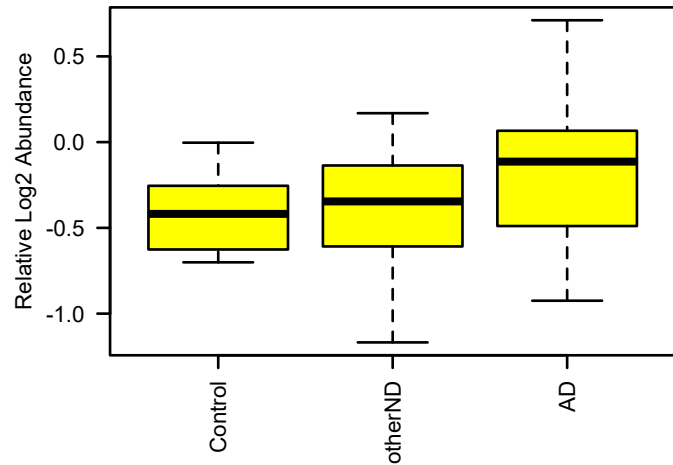
bicor=0.28, p=0.0054
cor=0.28, p=0.0048



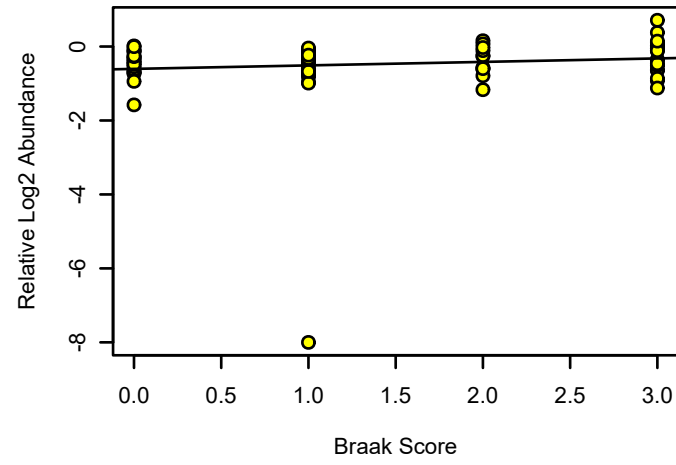
ESD UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.29



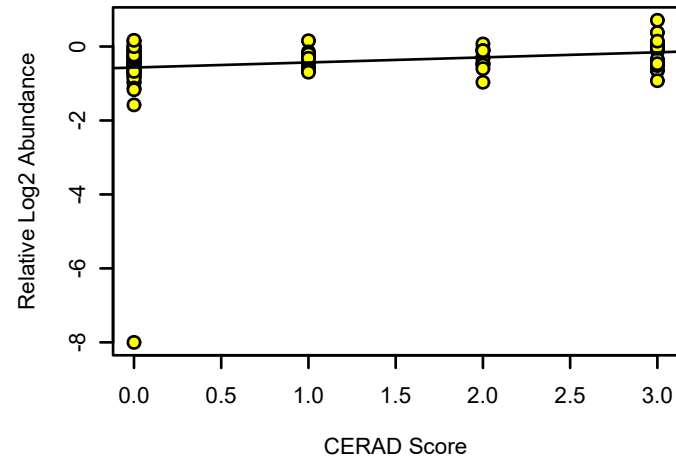
ESD UPenn Mixed PRM
K-W ANOVA p: 0.41



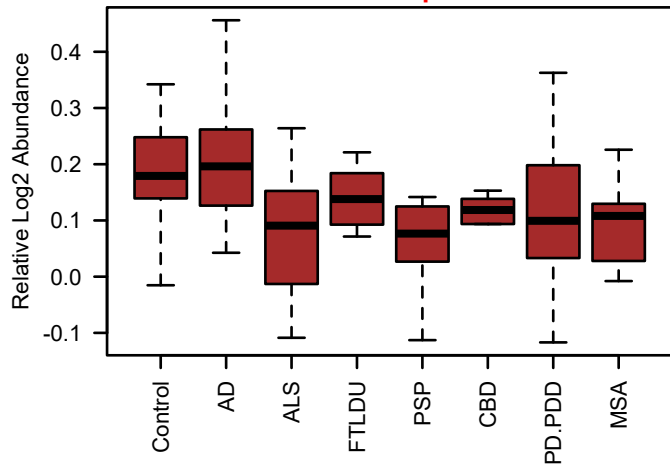
bicor=0.15, p=0.16
cor=0.11, p=0.32



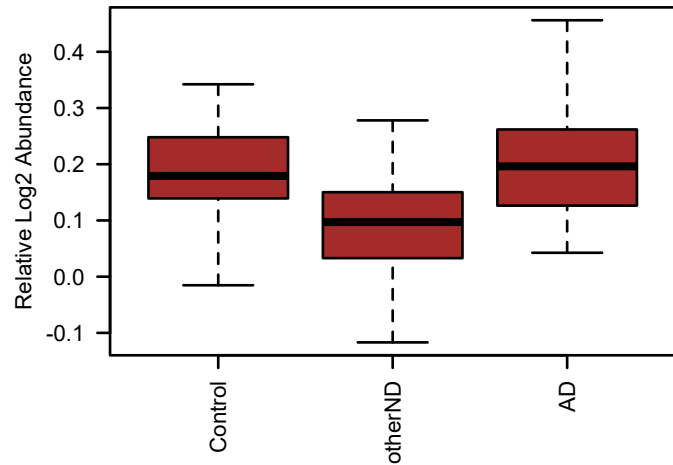
bicor=0.28, p=0.0041
cor=0.19, p=0.058



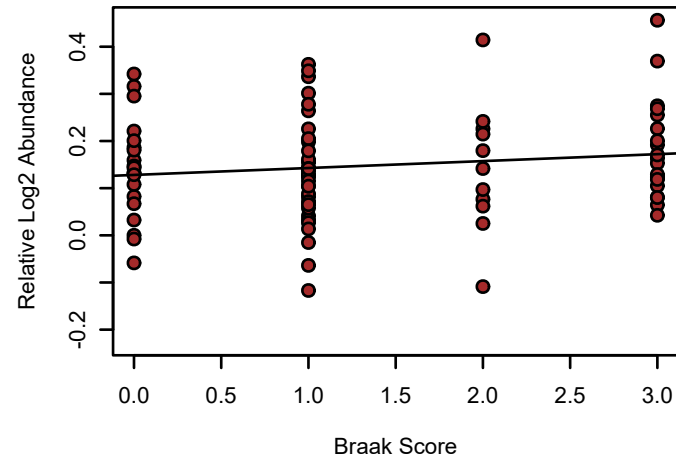
HSPD1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.004



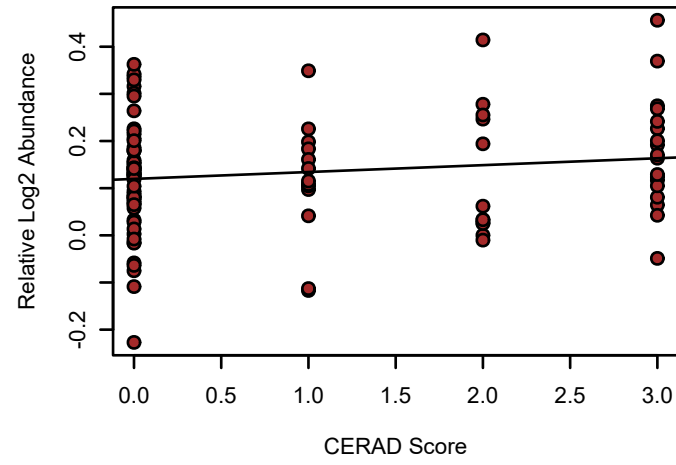
HSPD1 UPenn Mixed PRM
K-W ANOVA p: 0.00013



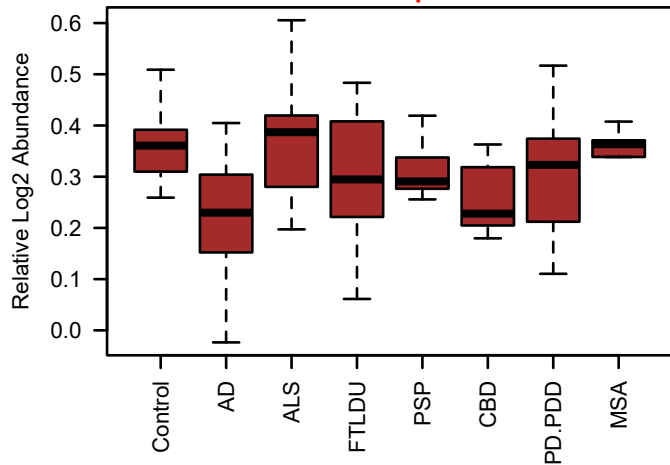
bicor=0.13, p=0.23
cor=0.14, p=0.2



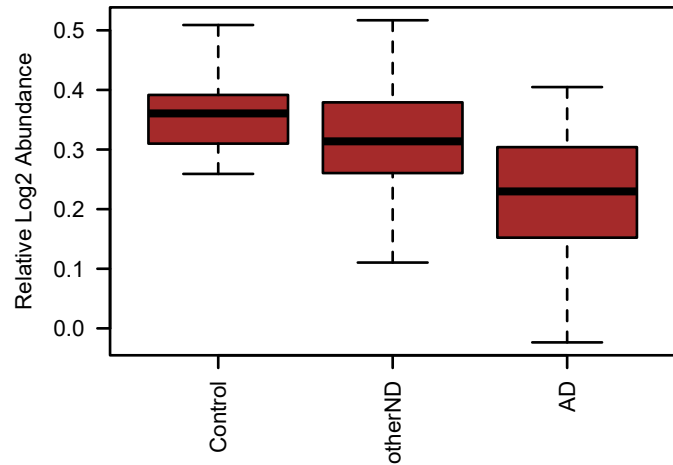
bicor=0.12, p=0.24
cor=0.14, p=0.16



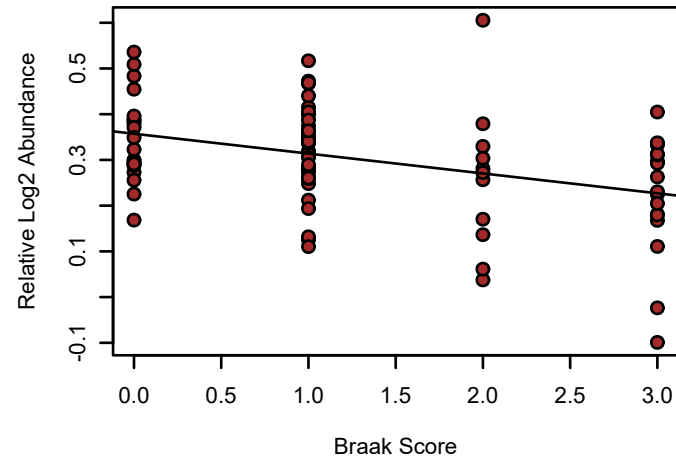
PDHB UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0019



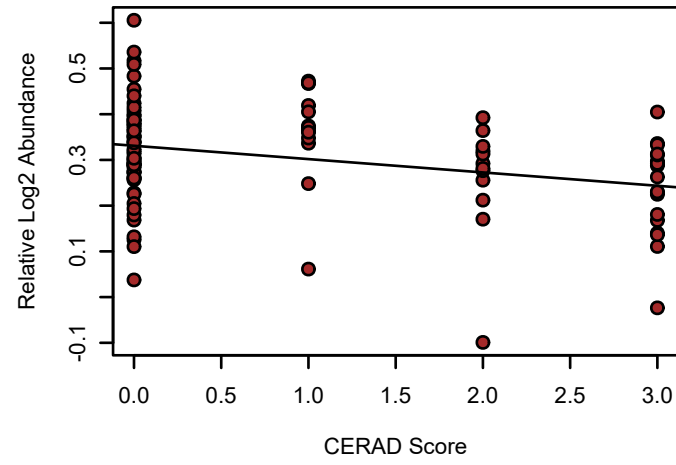
PDHB UPenn Mixed PRM
K-W ANOVA p: 2e-04



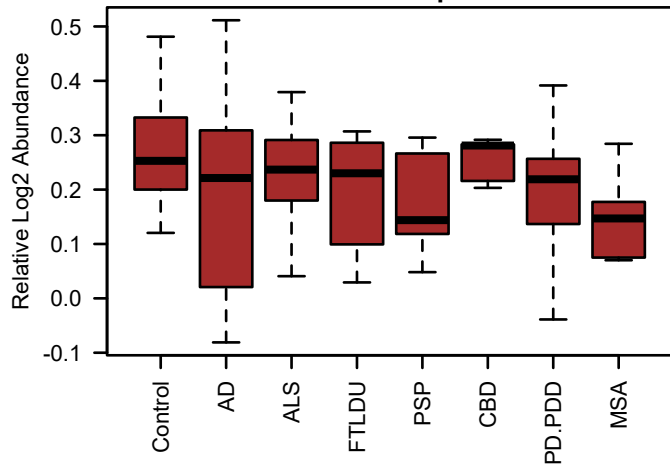
bicor=-0.36, p=0.00074
cor=-0.39, p=0.00025



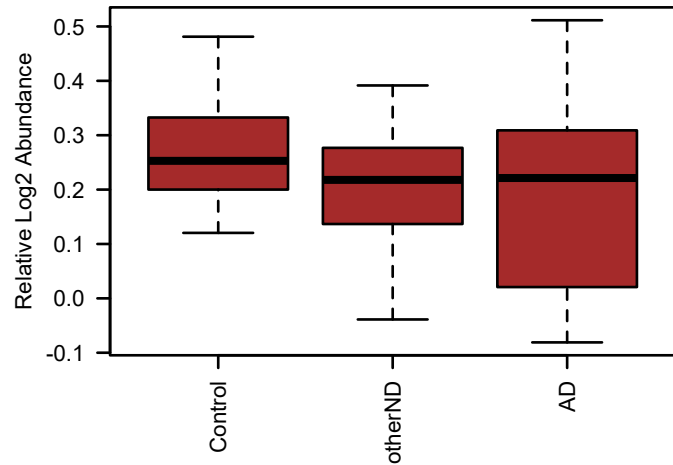
bicor=-0.29, p=0.0036
cor=-0.3, p=0.0024



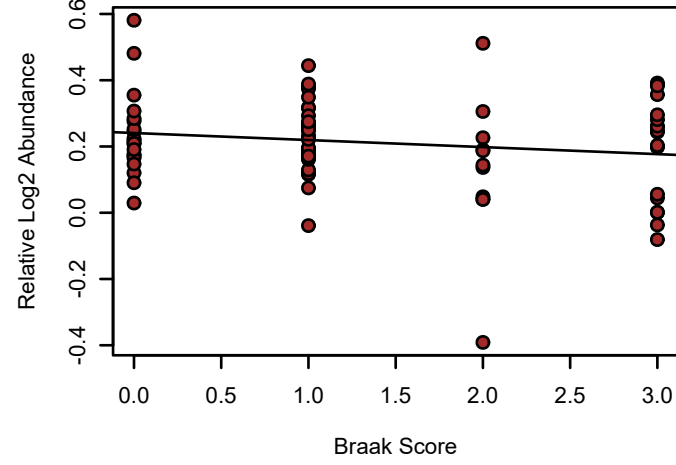
SLC25A4 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.5



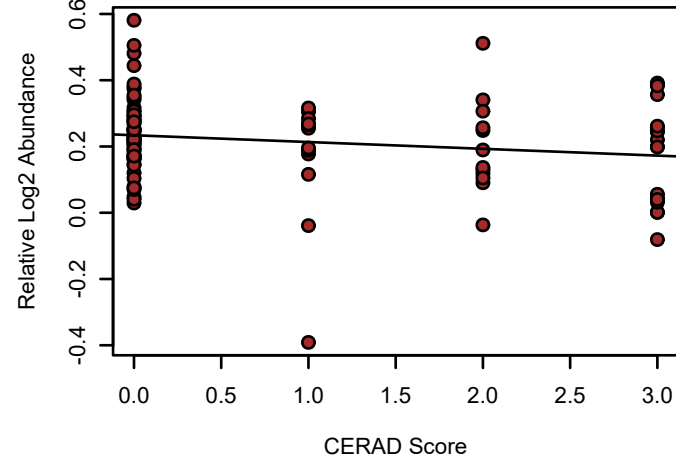
SLC25A4 UPenn Mixed PRM
K-W ANOVA p: 0.15



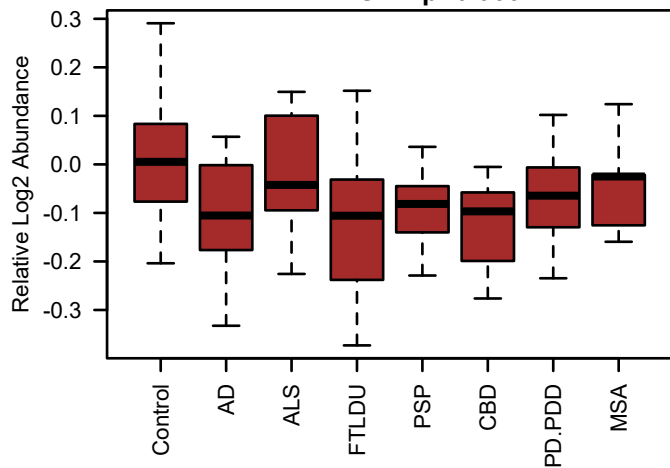
bicor=-0.092, p=0.41
cor=-0.16, p=0.15



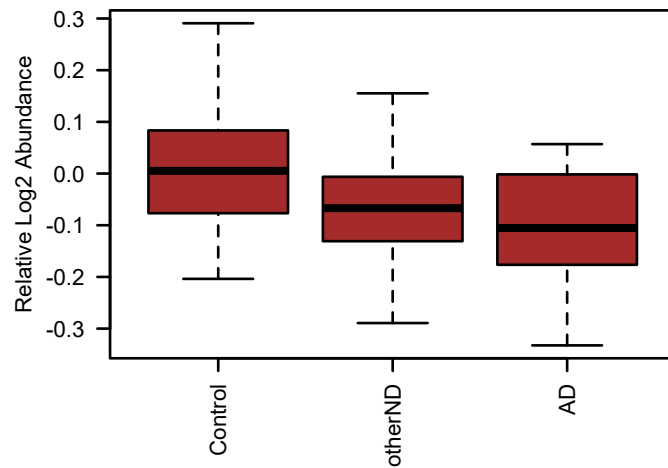
bicor=-0.17, p=0.095
cor=-0.18, p=0.073



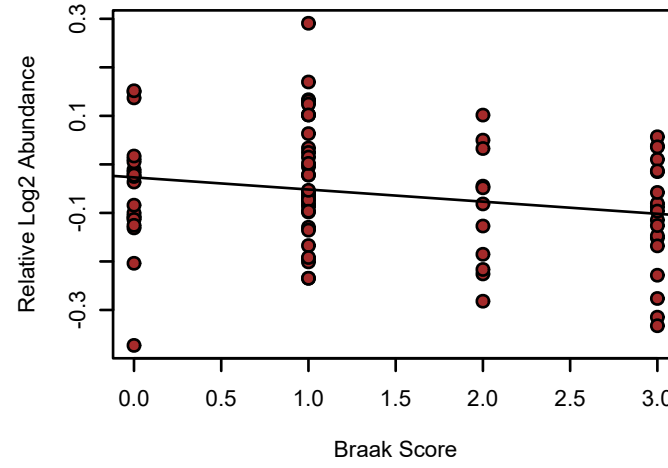
SLC25A6 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.066



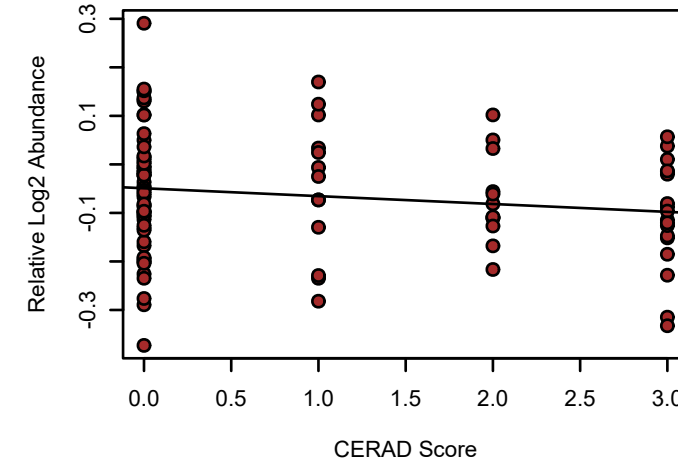
SLC25A6 UPenn Mixed PRM
K-W ANOVA p: 0.021



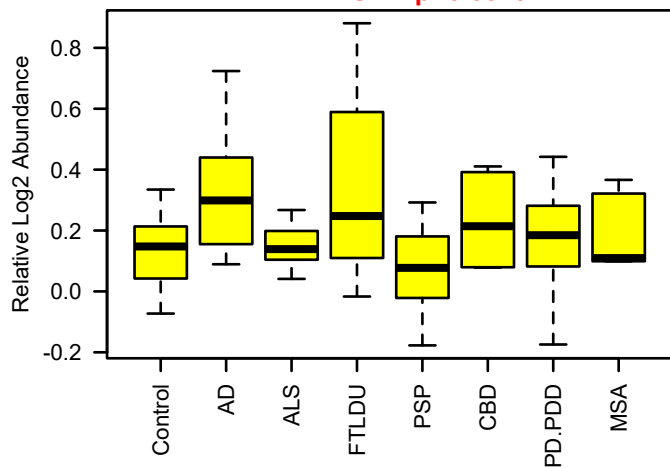
bicor=-0.19, p=0.078
cor=-0.22, p=0.044



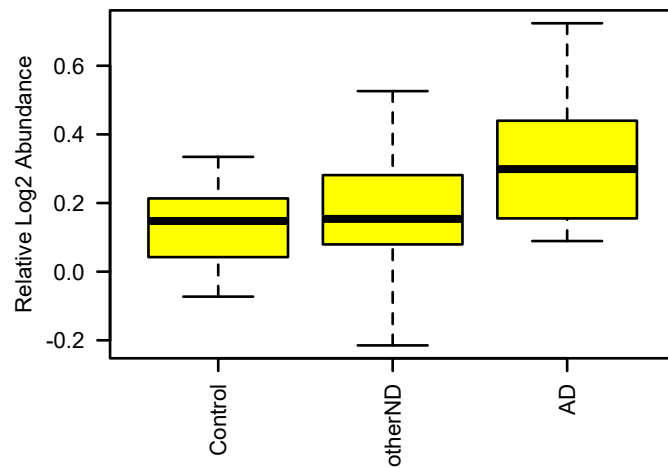
bicor=-0.15, p=0.14
cor=-0.16, p=0.11



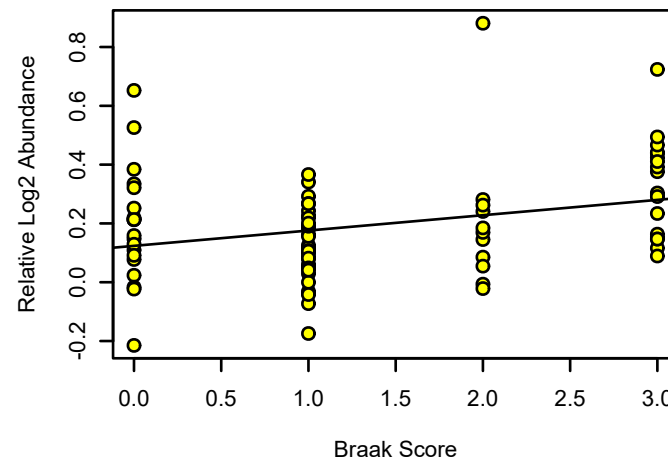
XRCC6 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.0019



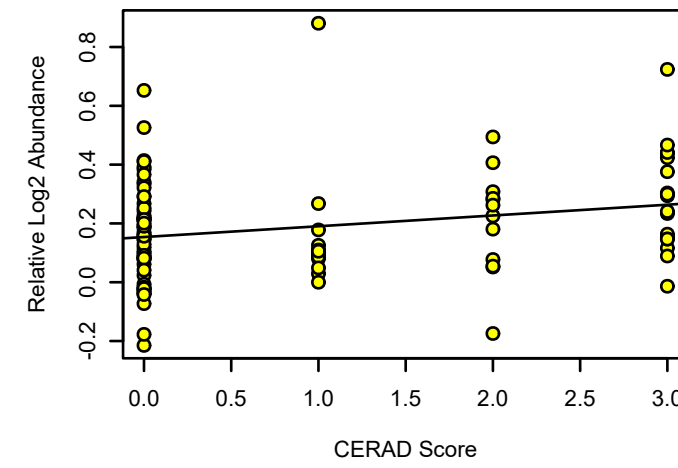
XRCC6 UPenn Mixed PRM
K-W ANOVA p: 0.004



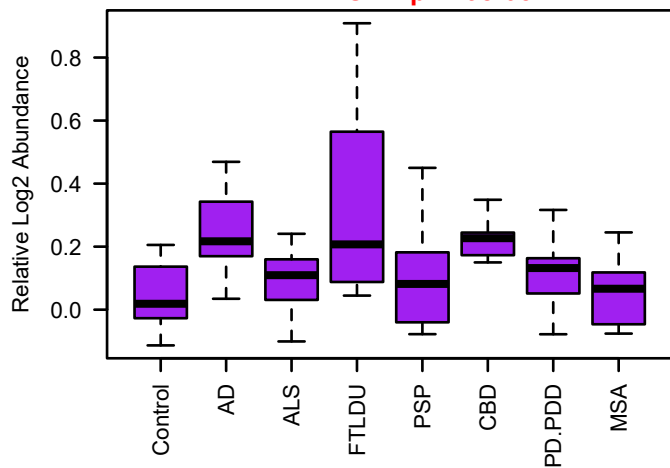
bicor=0.32, p=0.0028
cor=0.31, p=0.0041



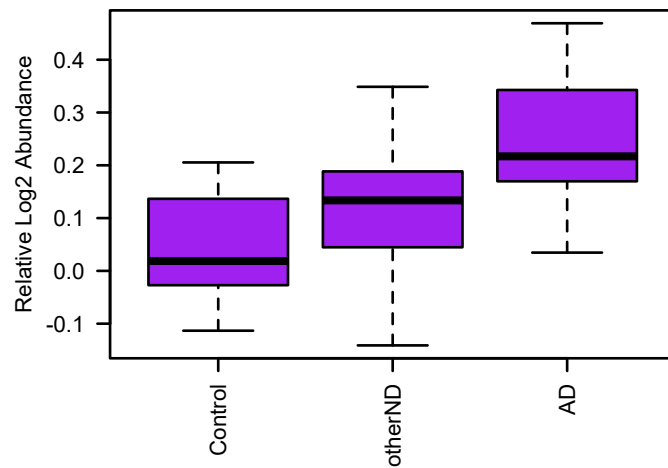
bicor=0.25, p=0.011
cor=0.24, p=0.016



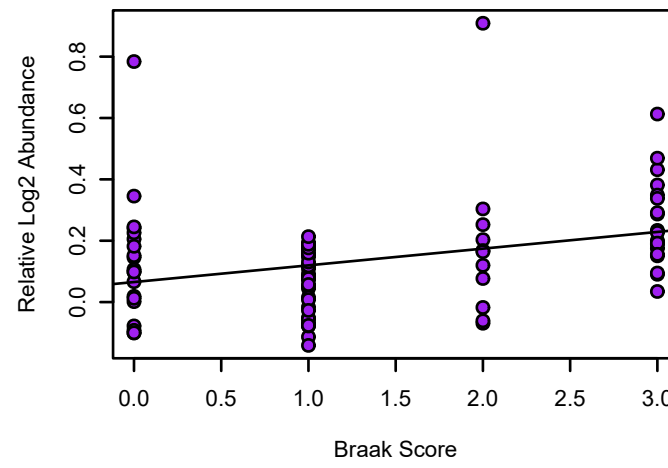
XRCC5 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 2.9e-05



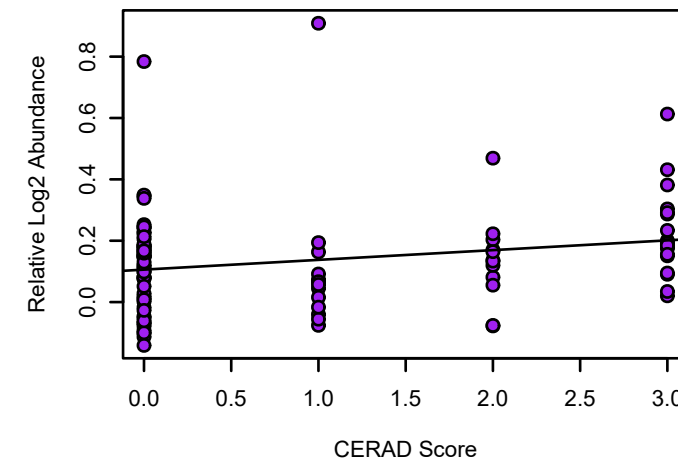
XRCC5 UPenn Mixed PRM
K-W ANOVA p: 0.00083



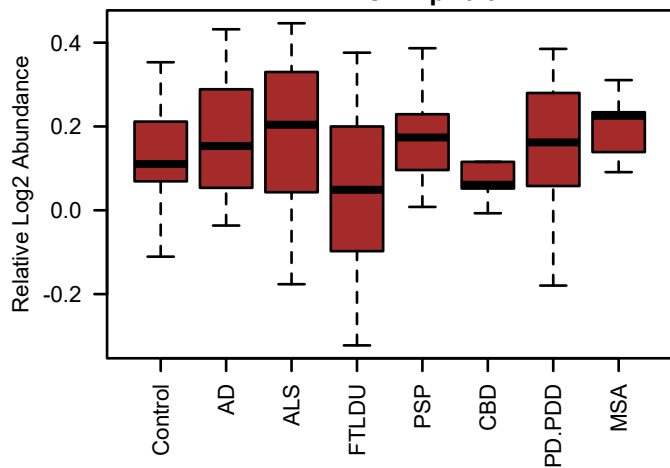
bicor=0.37, p=0.00052
cor=0.33, p=0.0022



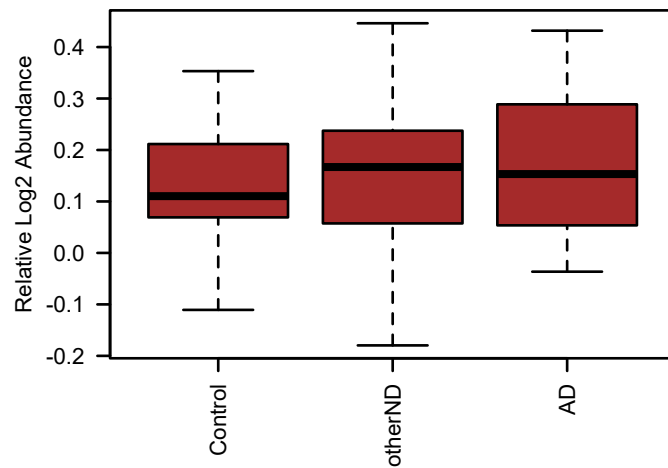
bicor=0.27, p=0.0058
cor=0.22, p=0.028



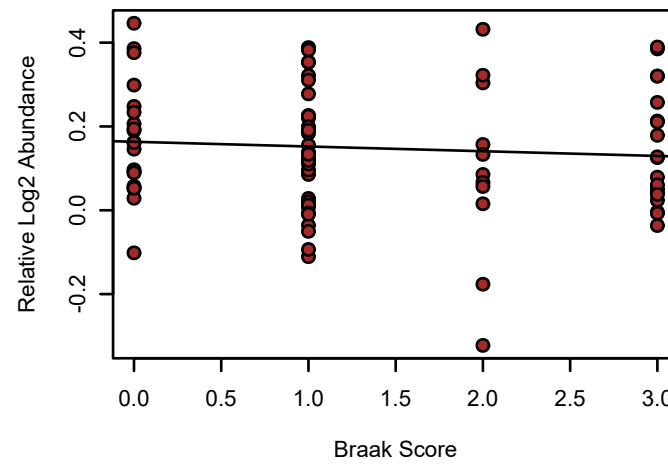
COX41 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.31



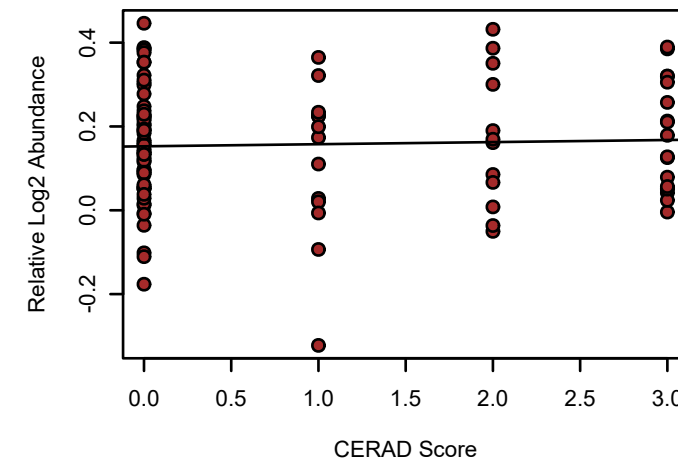
COX41 UPenn Mixed PRM
K-W ANOVA p: 0.76



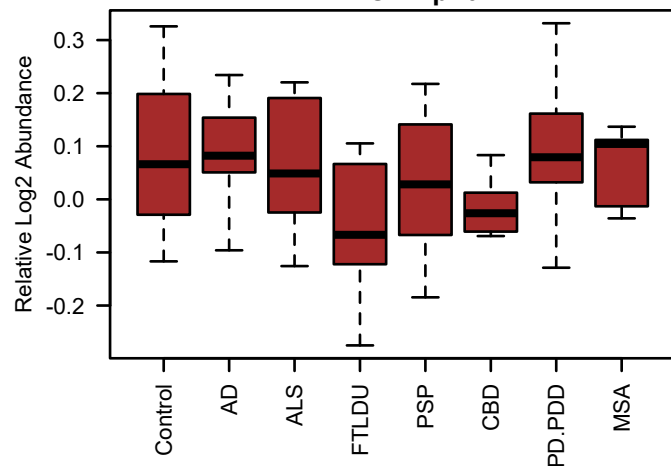
bicor=-0.051, p=0.65
cor=-0.081, p=0.46



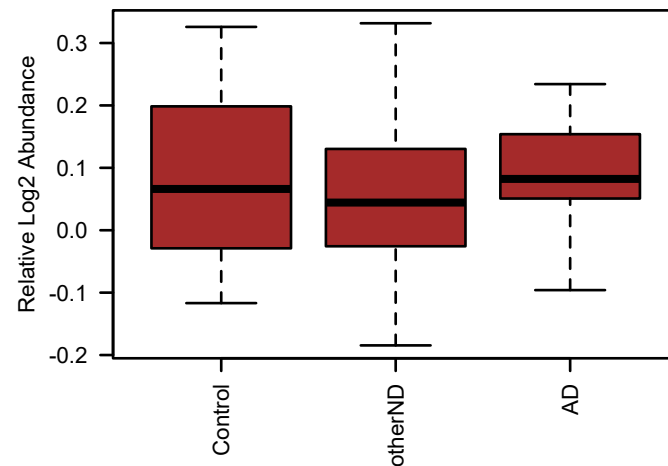
bicor=0.037, p=0.71
cor=0.041, p=0.69



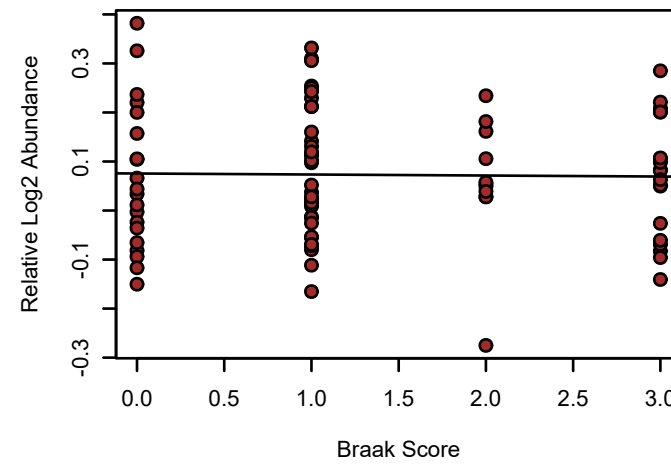
ATP1A3 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.24



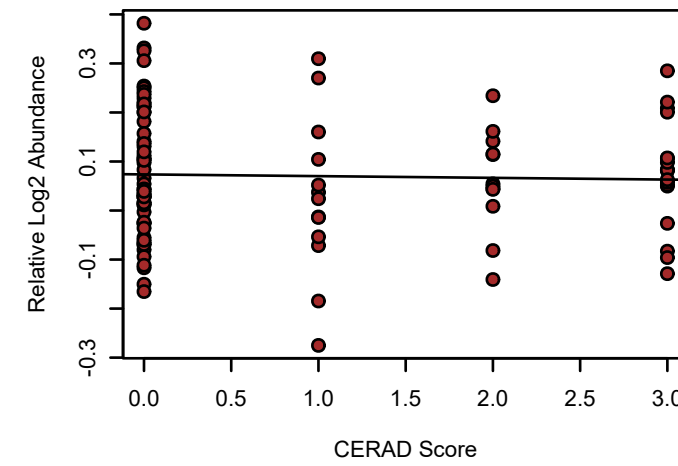
ATP1A3 UPenn Mixed PRM
K-W ANOVA p: 0.54



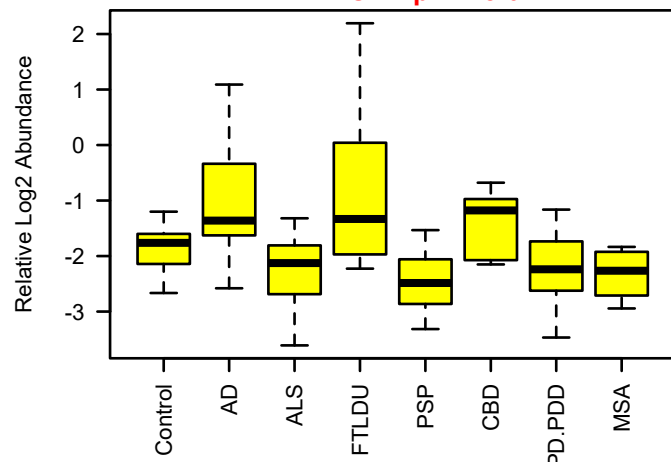
bicor=0.037, p=0.74
cor=-0.017, p=0.88



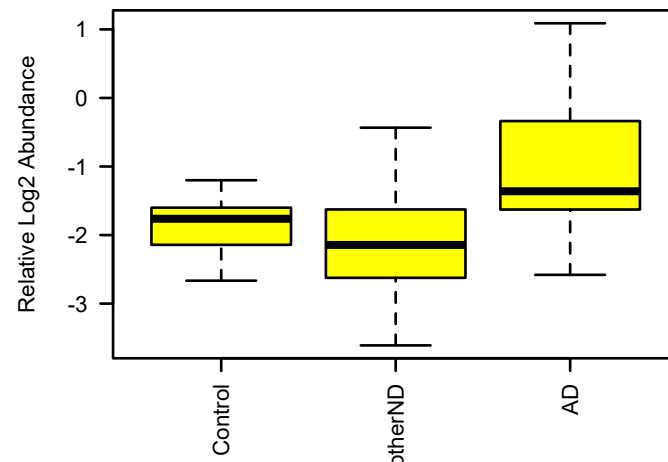
bicor=-0.017, p=0.87
cor=-0.032, p=0.75



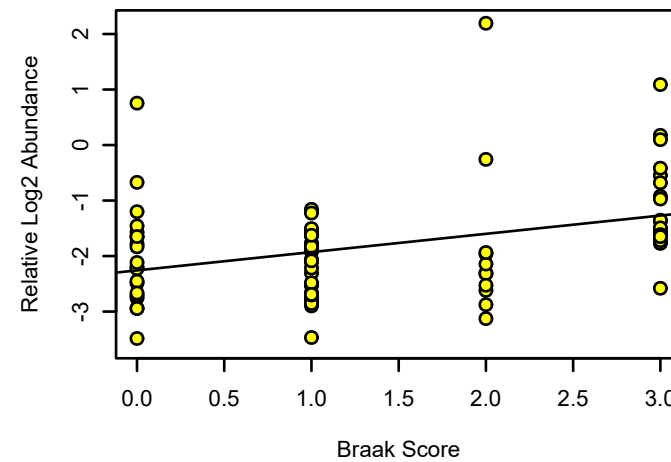
GFAP UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 2.7e-07



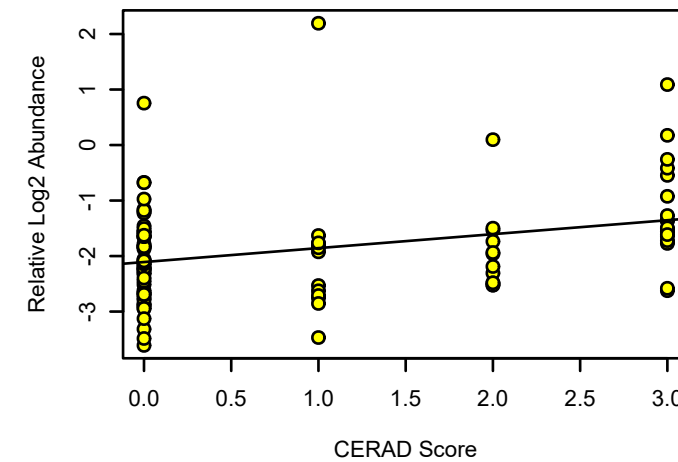
GFAP UPenn Mixed PRM
K-W ANOVA p: 0.00011



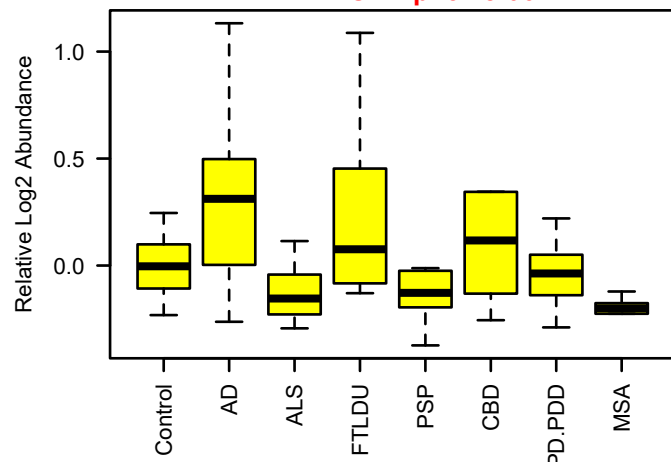
bicor=0.33, p=0.0019
cor=0.37, p=0.00053



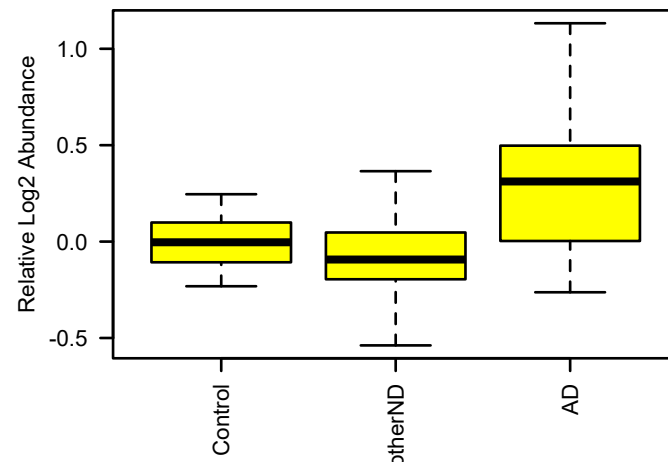
bicor=0.34, p=0.00049
cor=0.32, p=0.0012



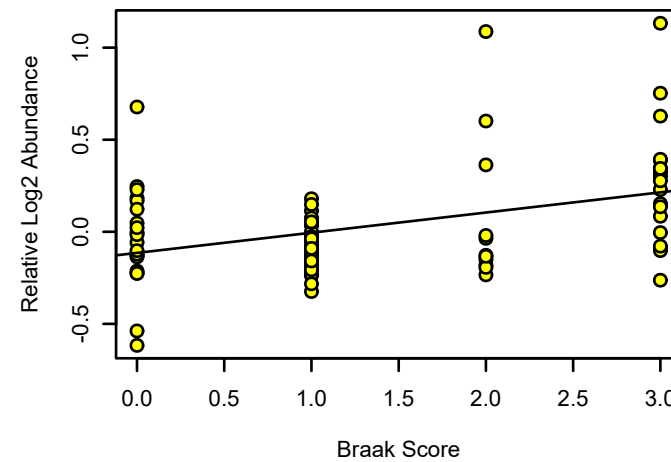
PKM UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 3.1e-06



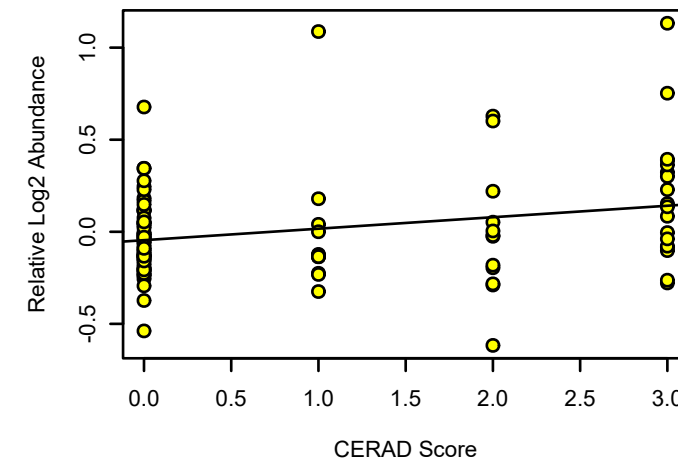
PKM UPenn Mixed PRM
K-W ANOVA p: 1.7e-05



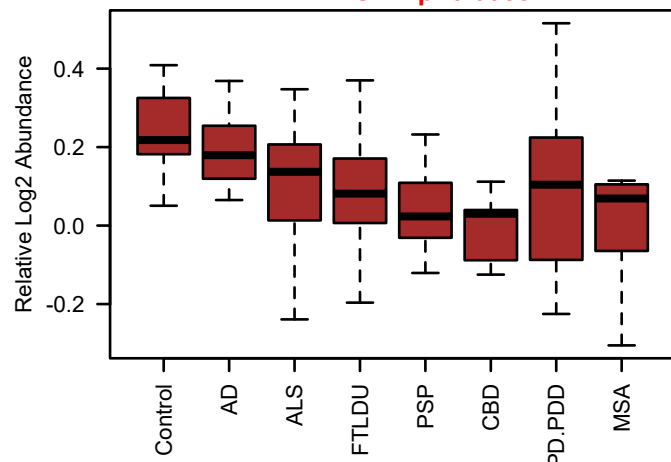
bicor=0.36, p=0.00082
cor=0.4, p=0.00016



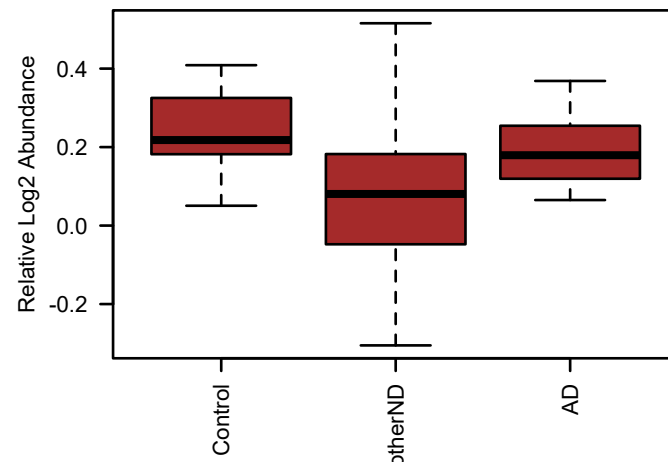
bicor=0.21, p=0.035
cor=0.26, p=0.009



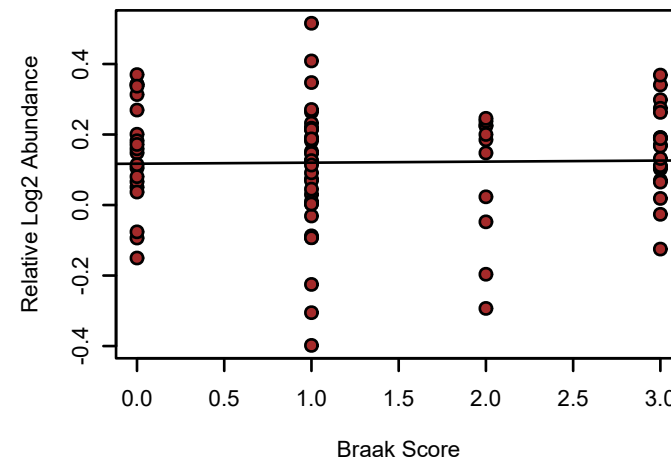
UQCRB UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0053



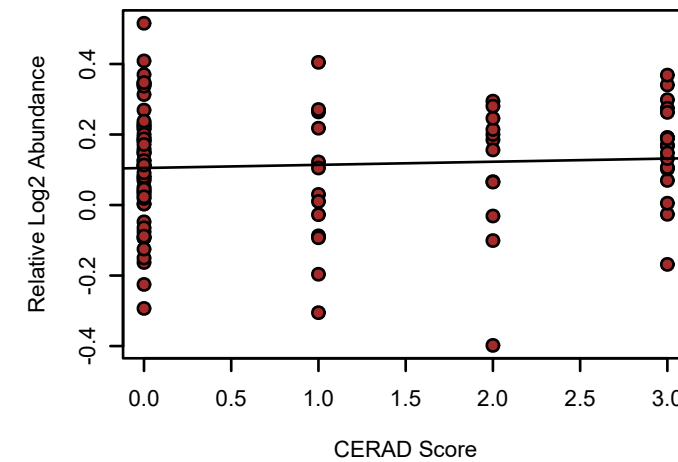
UQCRB UPenn Mixed PRM
K-W ANOVA p: 0.00054



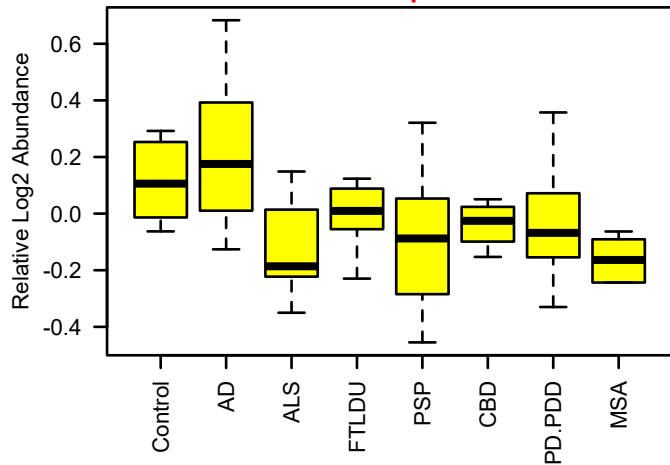
bicor=-0.013, p=0.91
cor=0.019, p=0.86



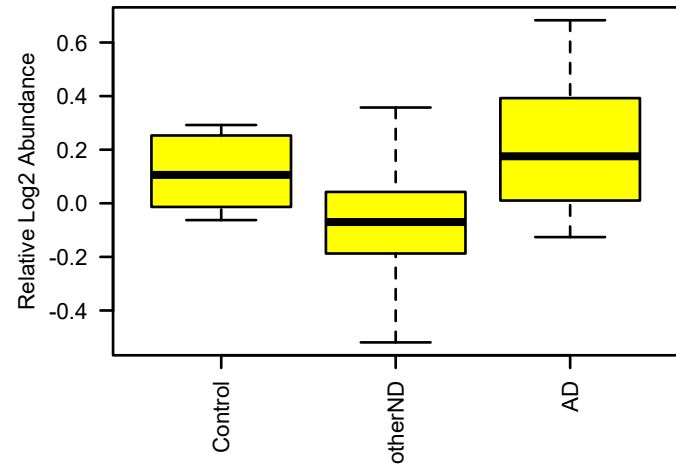
bicor=0.088, p=0.39
cor=0.062, p=0.54



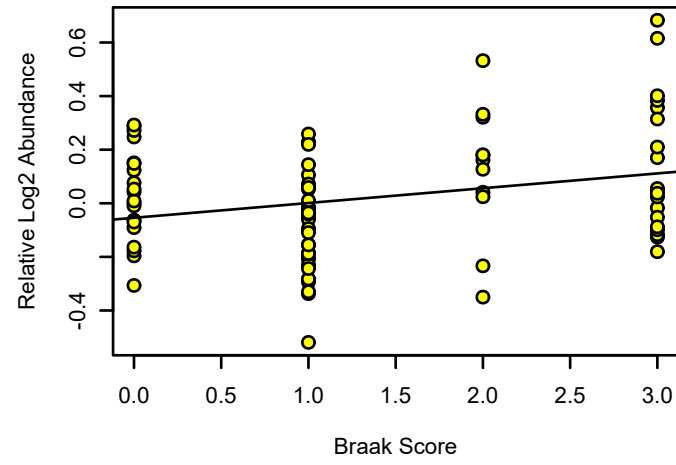
AKR1B1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 5.5e-06



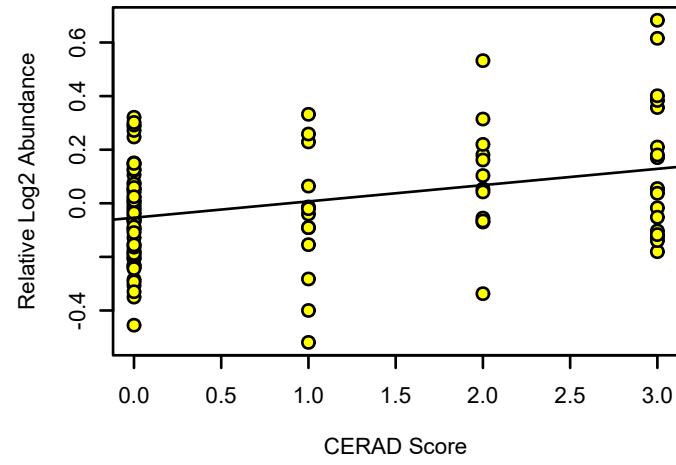
AKR1B1 UPenn Mixed PRM
K-W ANOVA p: 2.6e-07



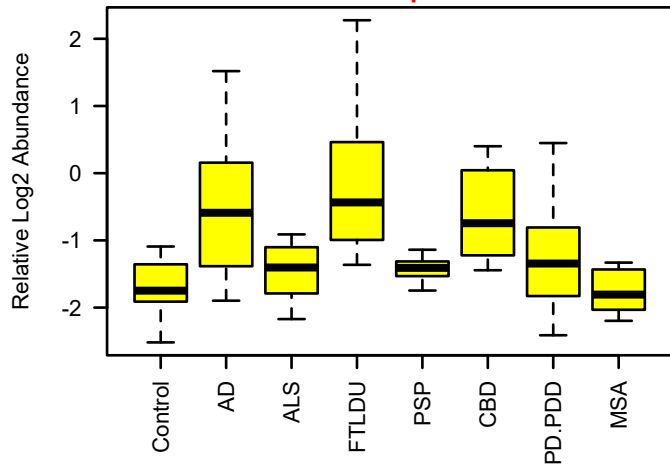
bicor=0.24, p=0.031
cor=0.27, p=0.013



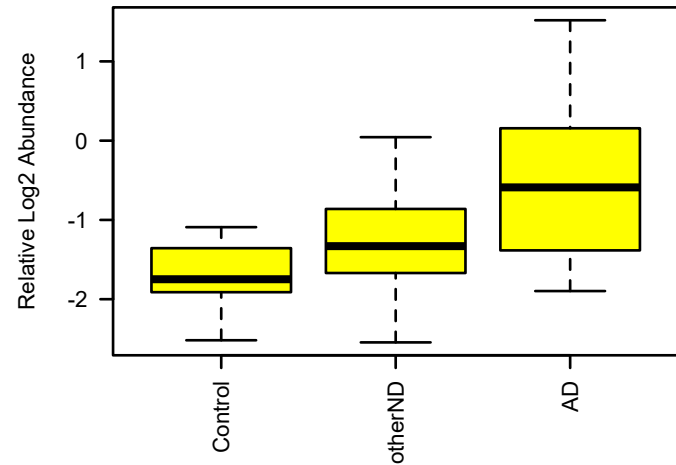
bicor=0.29, p=0.003
cor=0.33, p=8e-04



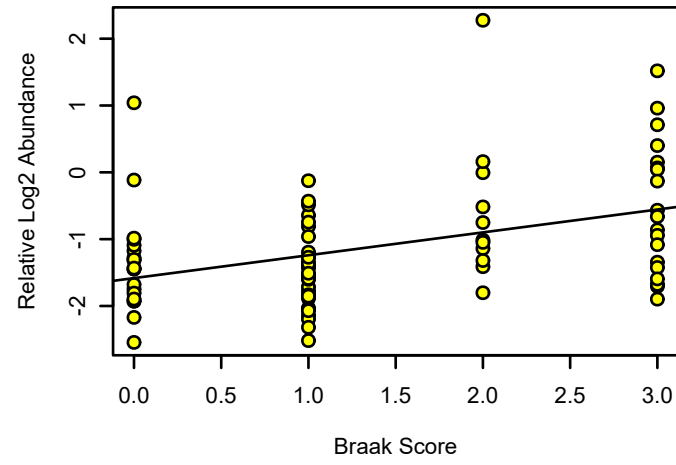
PGAM2 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.2e-06



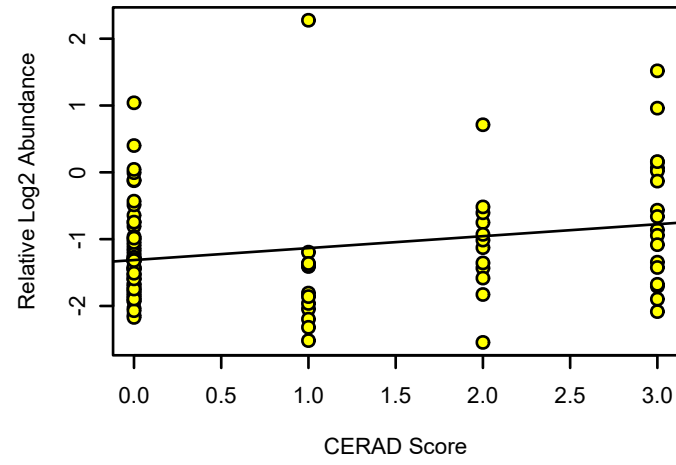
PGAM2 UPenn Mixed PRM
K-W ANOVA p: 0.00018



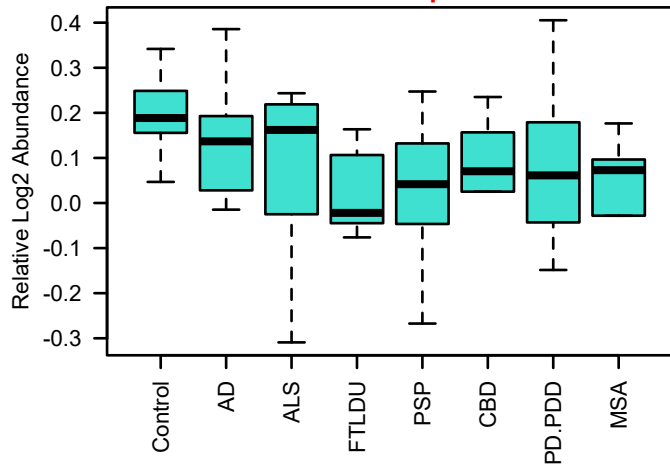
bicor=0.43, p=3.9e-05
cor=0.41, p=0.00011



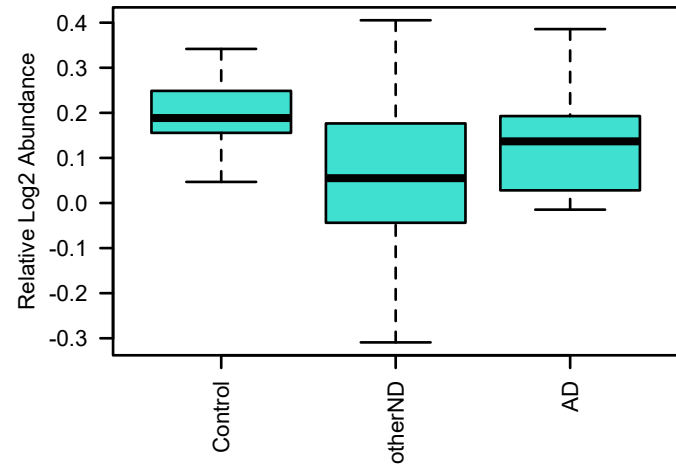
bicor=0.23, p=0.02
cor=0.25, p=0.012



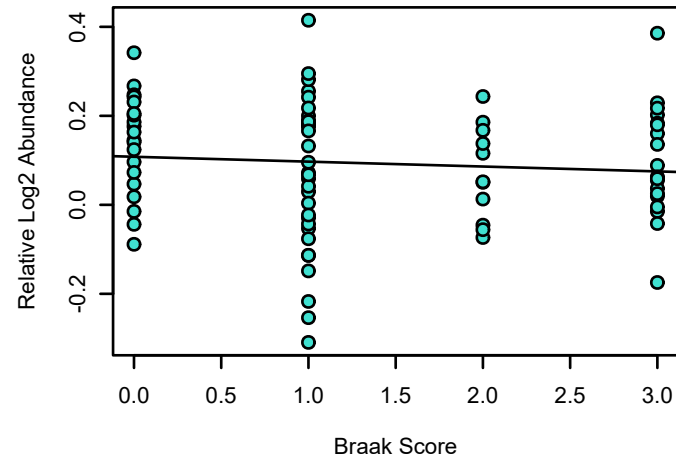
ATP2A2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.01



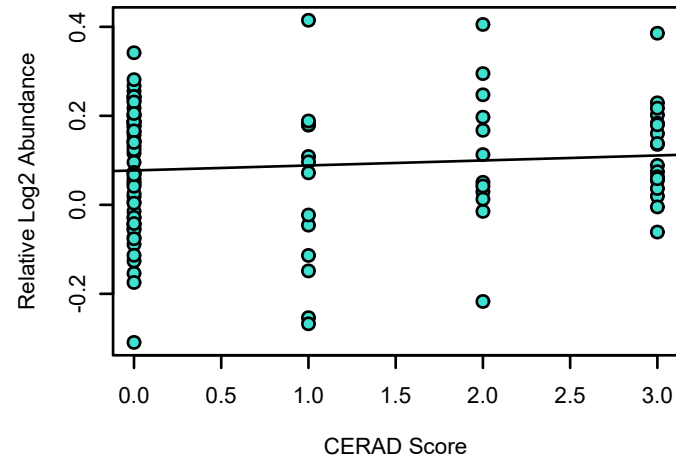
ATP2A2 UPenn Mixed PRM
K-W ANOVA p: 0.00043



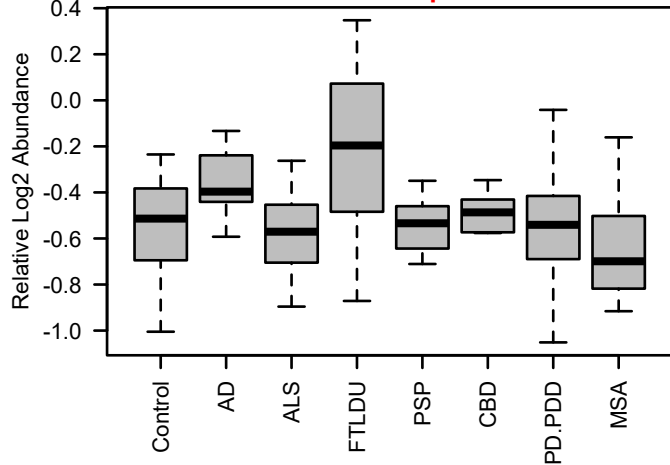
bicor=-0.13, p=0.26
cor=-0.085, p=0.44



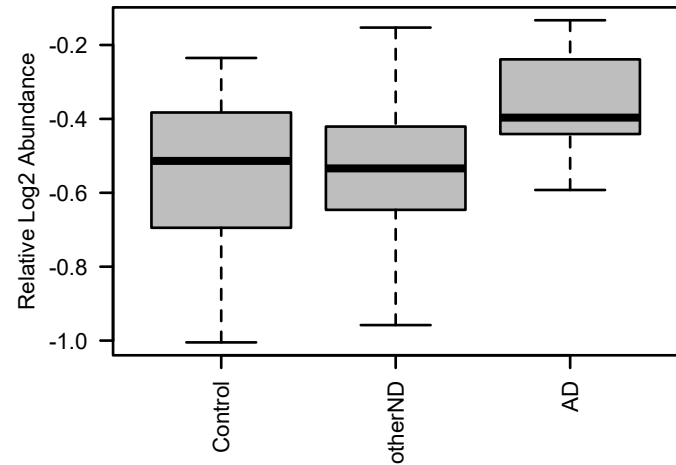
bicor=0.082, p=0.42
cor=0.093, p=0.36



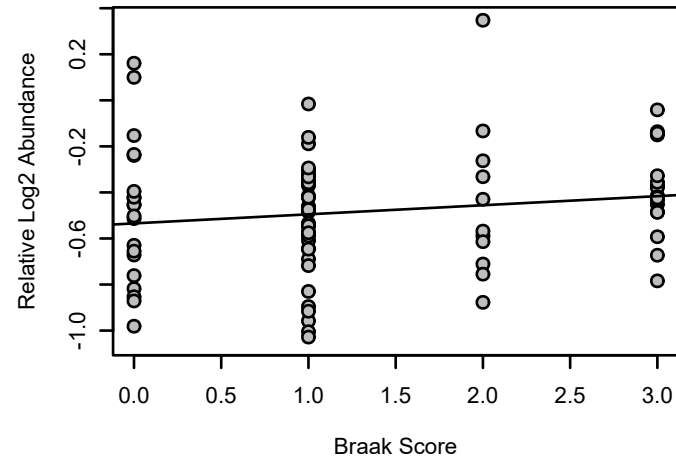
CPE UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.01



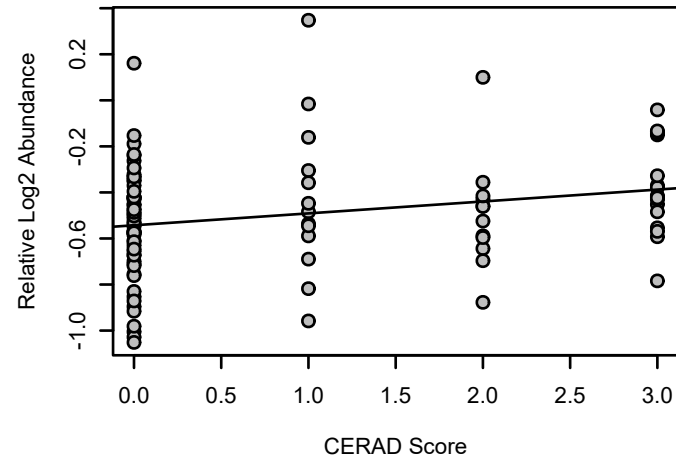
CPE UPenn Mixed PRM
K-W ANOVA p: 0.15



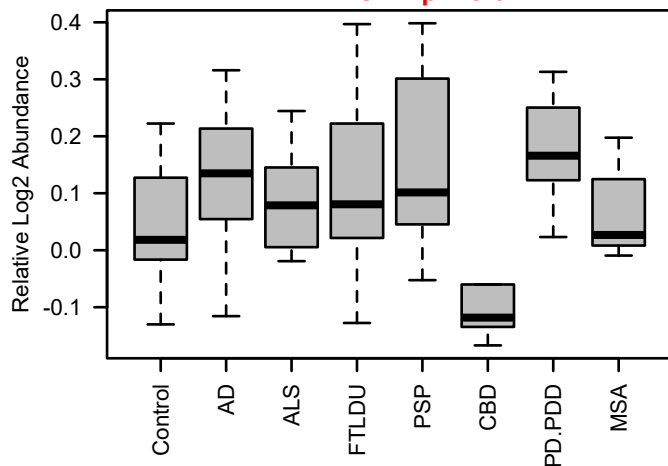
bicor=0.13, p=0.25
cor=0.16, p=0.15



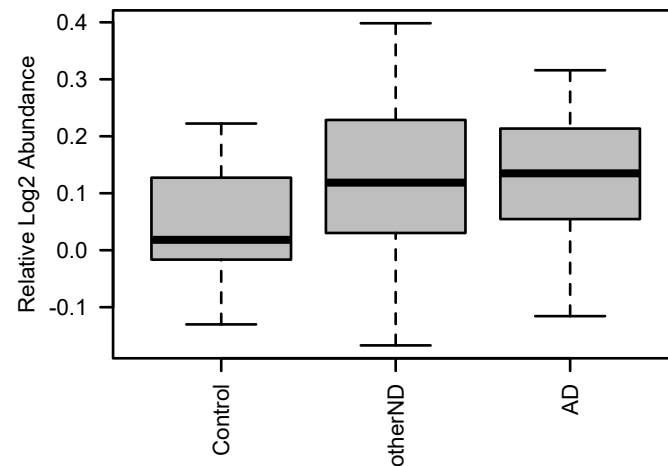
bicor=0.26, p=0.0097
cor=0.24, p=0.016



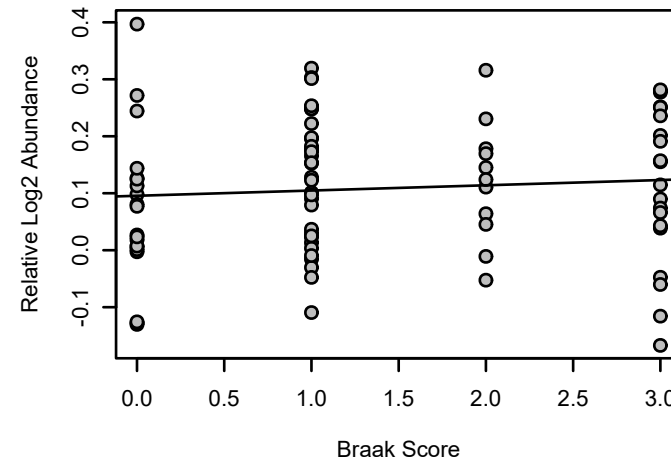
GOT1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 2e-04



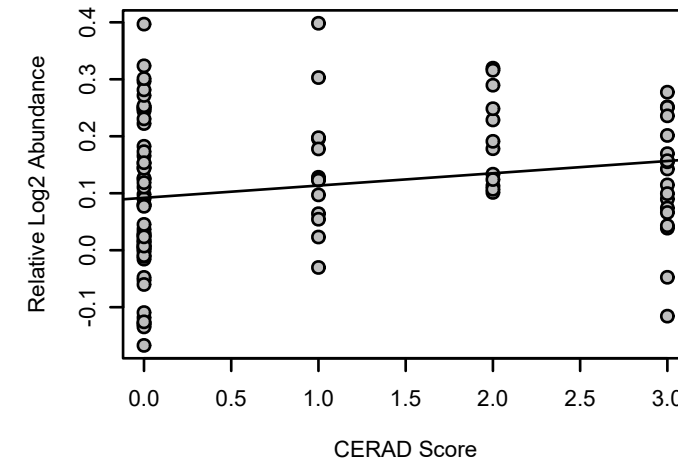
GOT1 UPenn Mixed PRM
K-W ANOVA p: 0.06



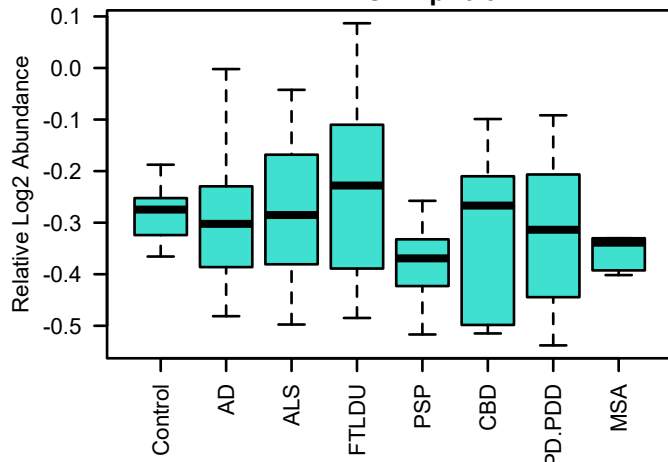
bicor=0.088, p=0.43
cor=0.081, p=0.46



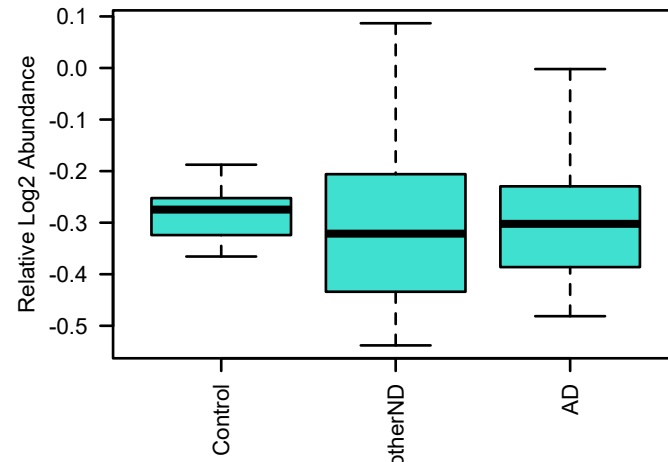
bicor=0.21, p=0.037
cor=0.2, p=0.046



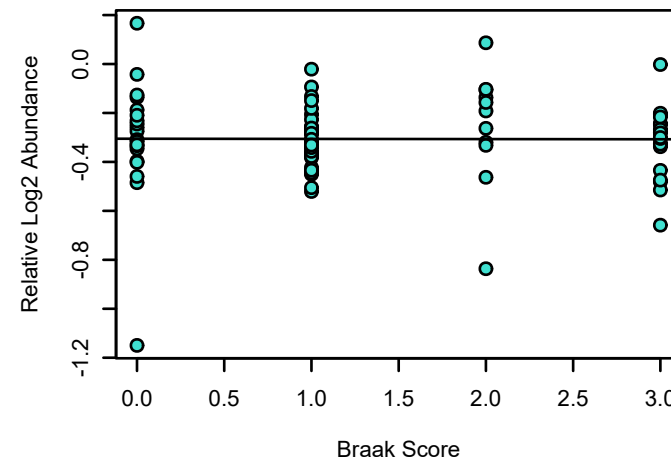
SYN1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.91



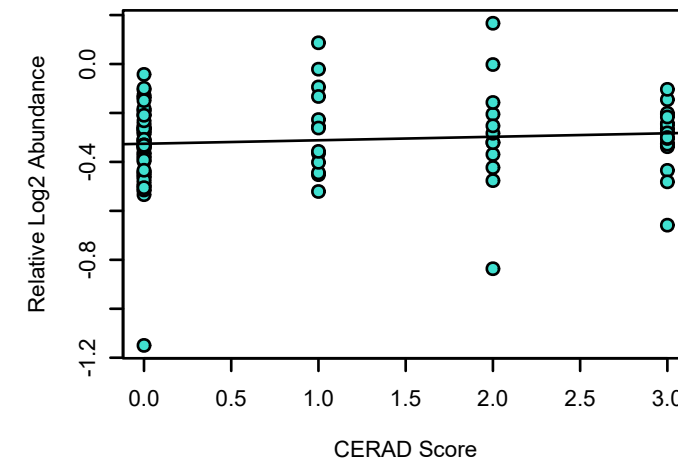
SYN1 UPenn Mixed PRM
K-W ANOVA p: 0.81



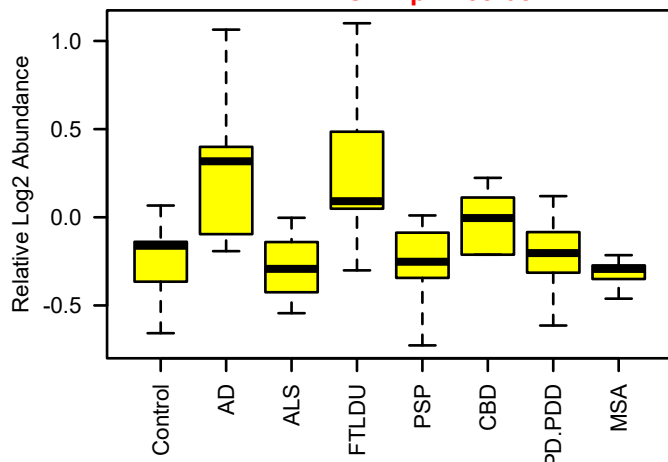
bicor=-0.019, p=0.87
cor=-0.0043, p=0.97



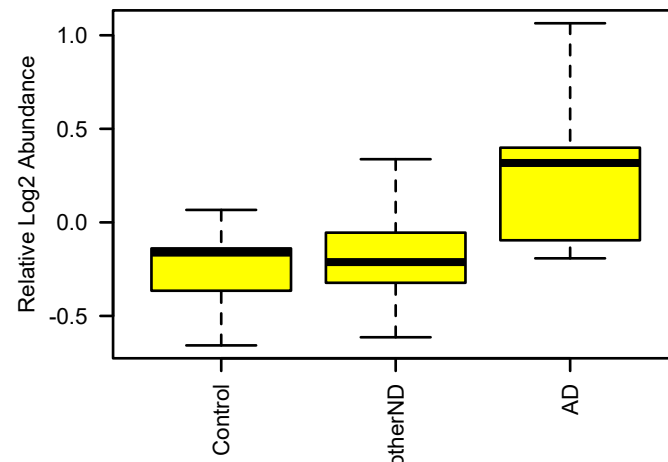
bicor=0.099, p=0.33
cor=0.099, p=0.33



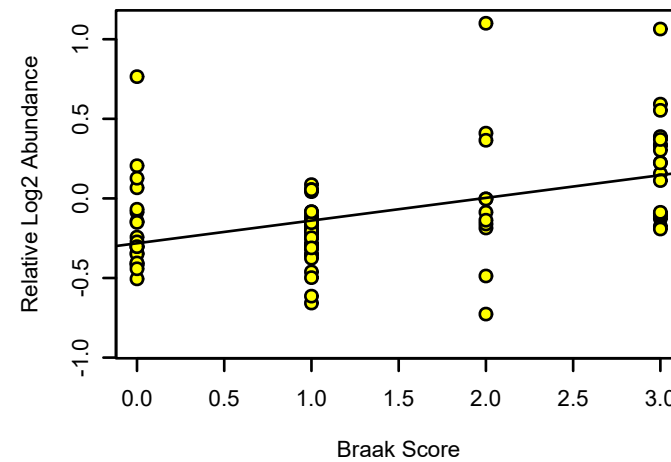
CAPN2 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.5e-08



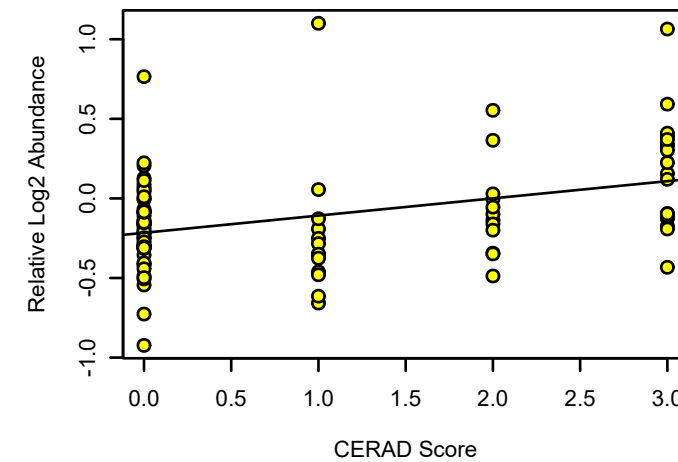
CAPN2 UPenn Mixed PRM
K-W ANOVA p: 9.1e-07



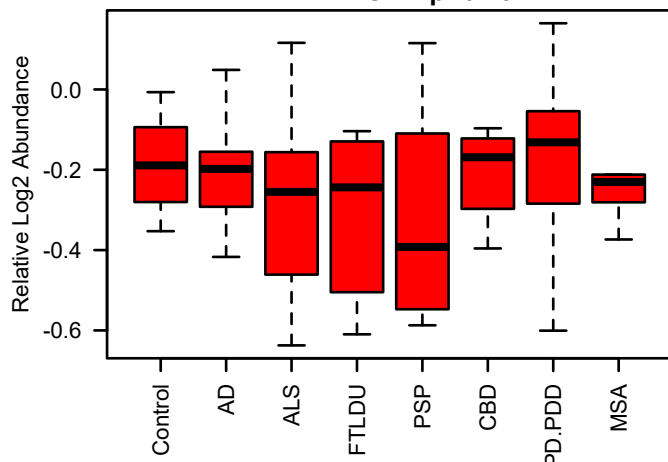
bicor=0.49, p=2.9e-06
cor=0.46, p=1.1e-05



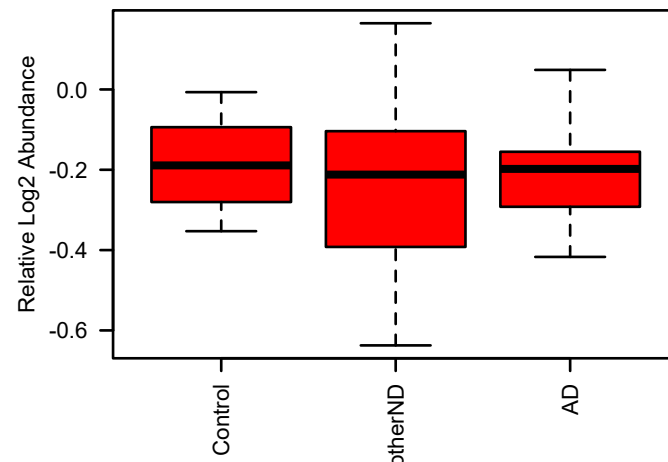
bicor=0.39, p=7.6e-05
cor=0.39, p=6e-05



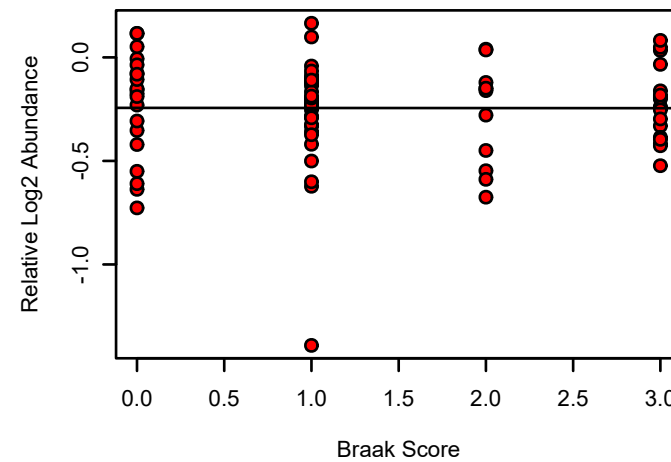
GAP43 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.23



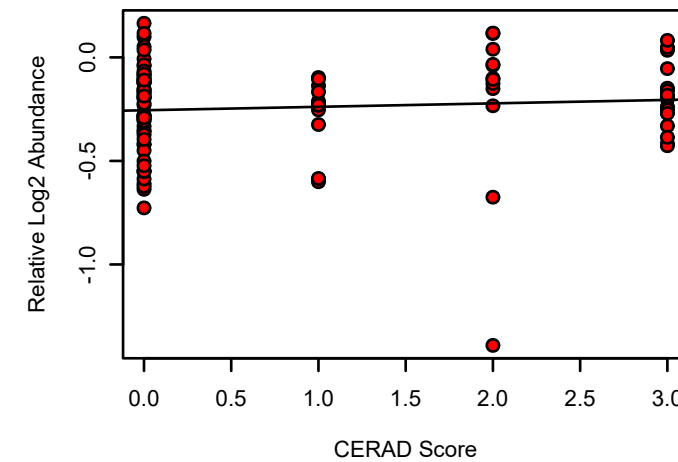
GAP43 UPenn Mixed PRM
K-W ANOVA p: 0.77



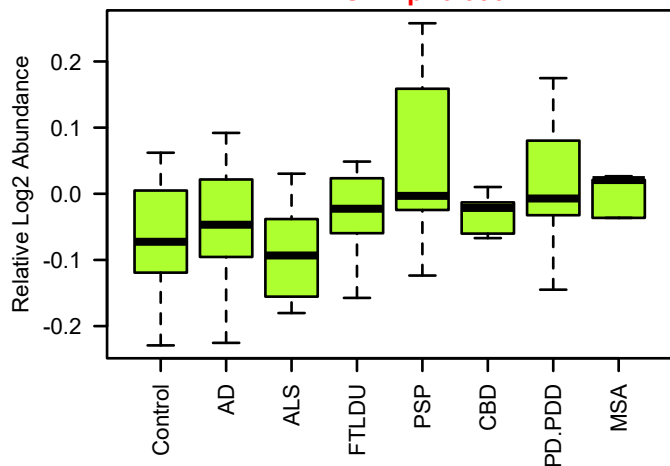
bicor=-0.093, p=0.4
cor=-0.0021, p=0.98



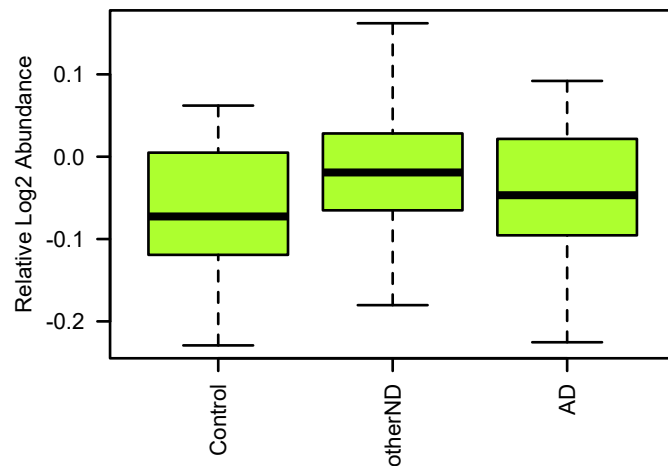
bicor=0.15, p=0.15
cor=0.086, p=0.39



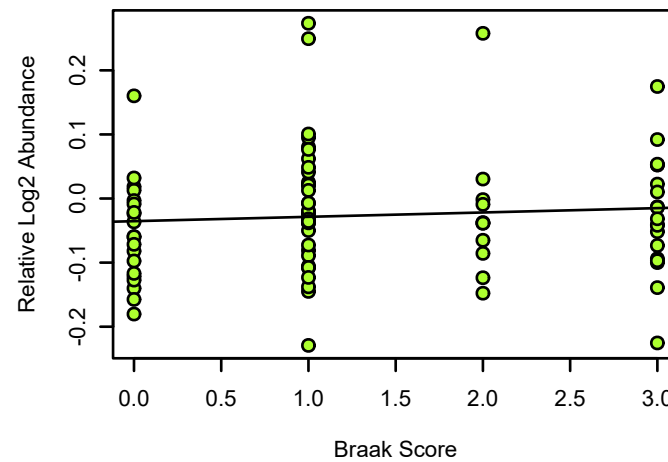
TCP1 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.00071



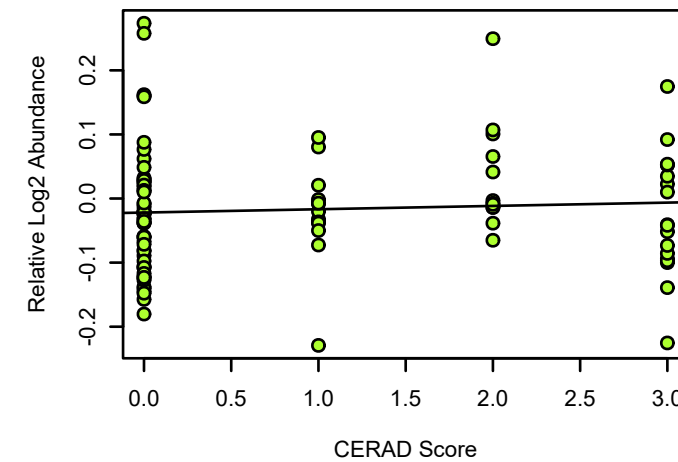
TCP1 UPenn Mixed PRM
K-W ANOVA p: 0.047



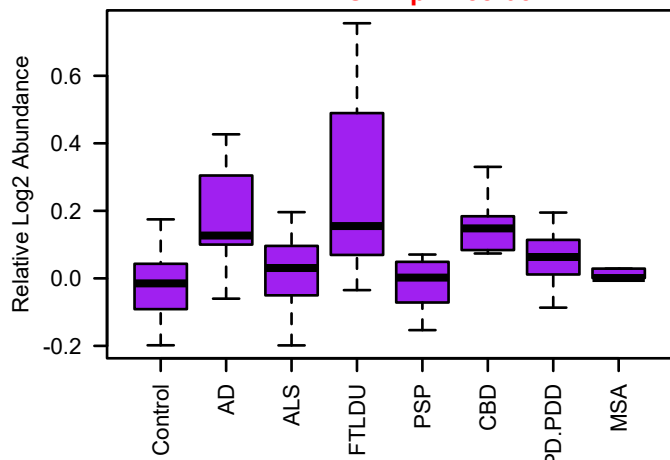
bicor=0.1, p=0.36
cor=0.077, p=0.49



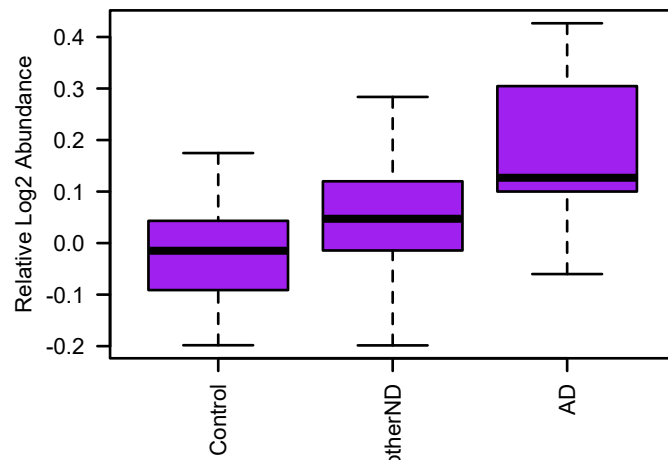
bicor=0.11, p=0.3
cor=0.066, p=0.51



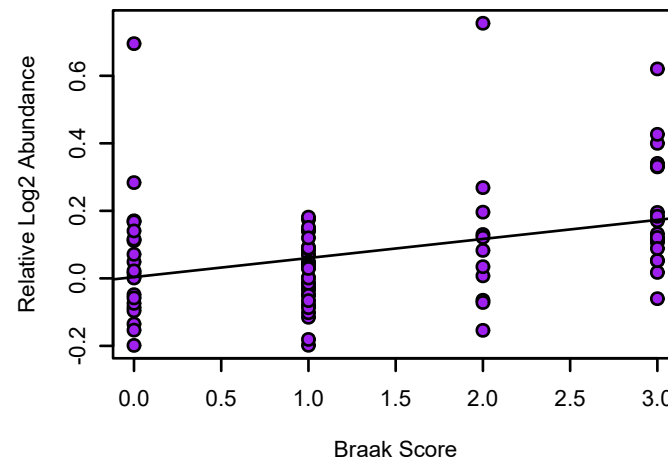
NCL UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 1.8e-05



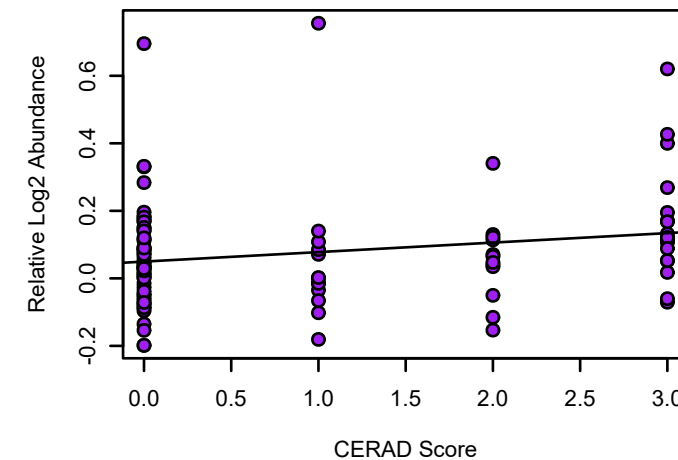
NCL UPenn Mixed PRM
K-W ANOVA p: 0.00087



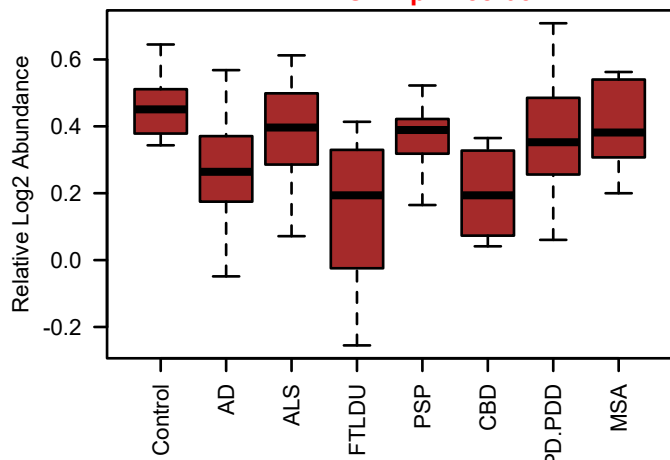
bicor=0.4, p=0.00015
cor=0.35, p=0.0011



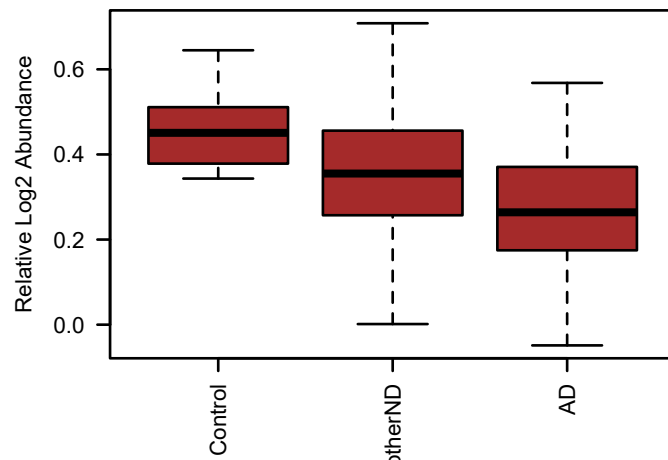
bicor=0.22, p=0.027
cor=0.2, p=0.046



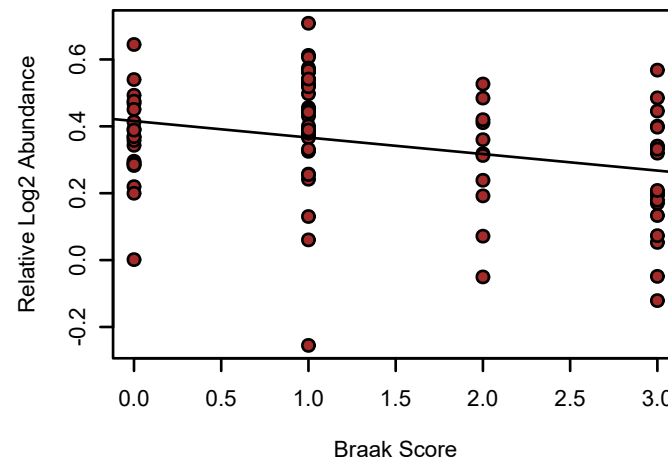
NDUFV2 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 7.8e-05



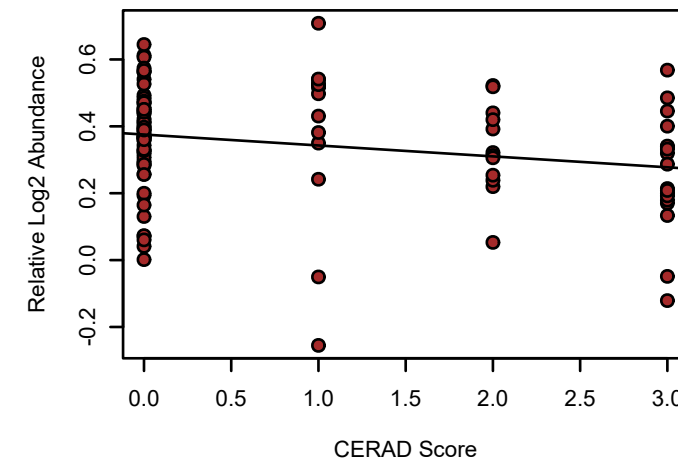
NDUFV2 UPenn Mixed PRM
K-W ANOVA p: 0.0025



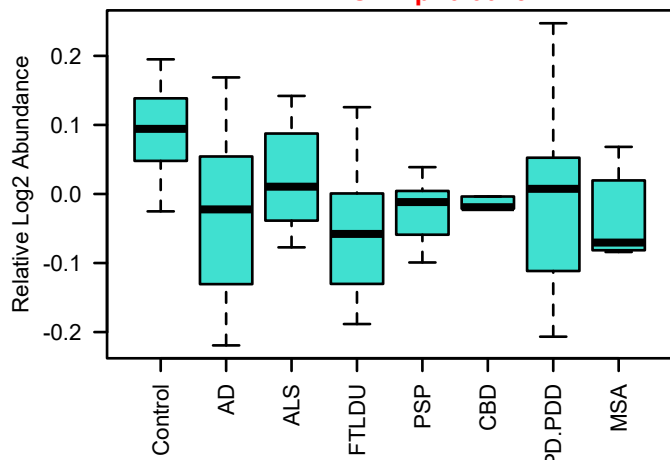
bicor=-0.31, p=0.0036
cor=-0.29, p=0.0075



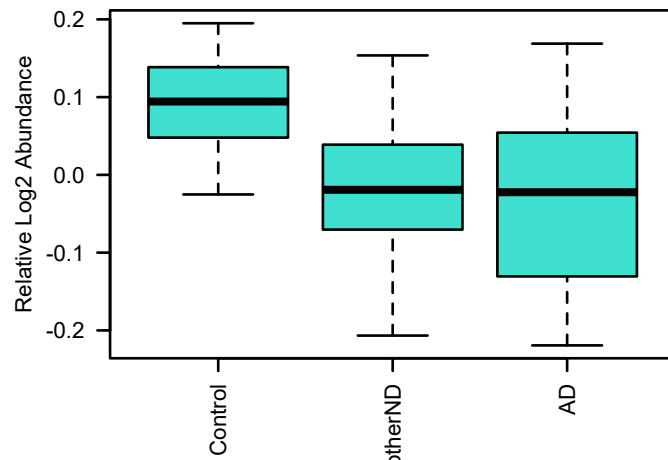
bicor=-0.23, p=0.02
cor=-0.22, p=0.028



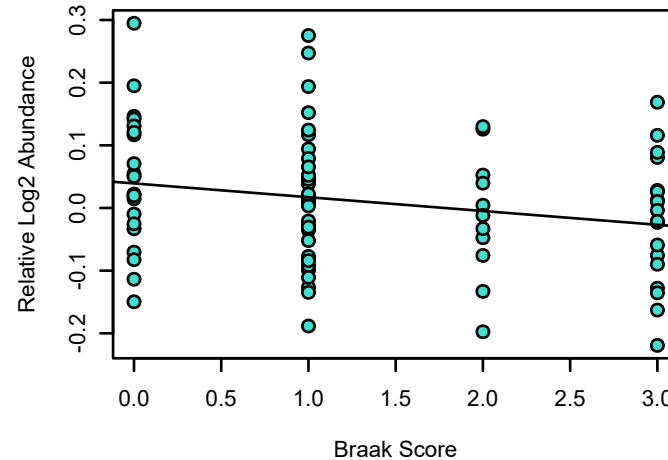
ATP2B1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0075



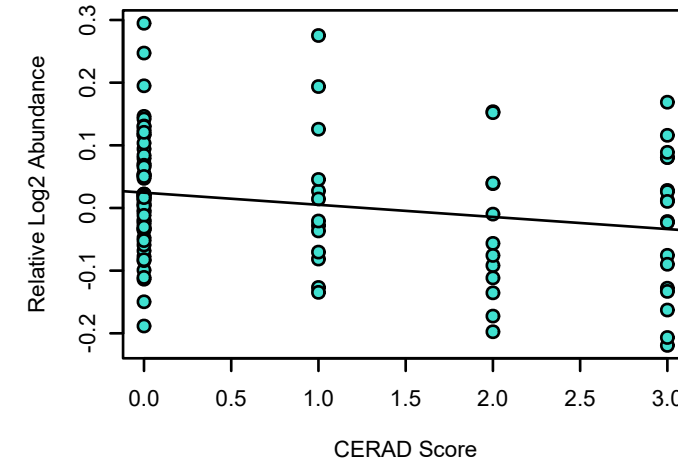
ATP2B1 UPenn Mixed PRM
K-W ANOVA p: 0.00066



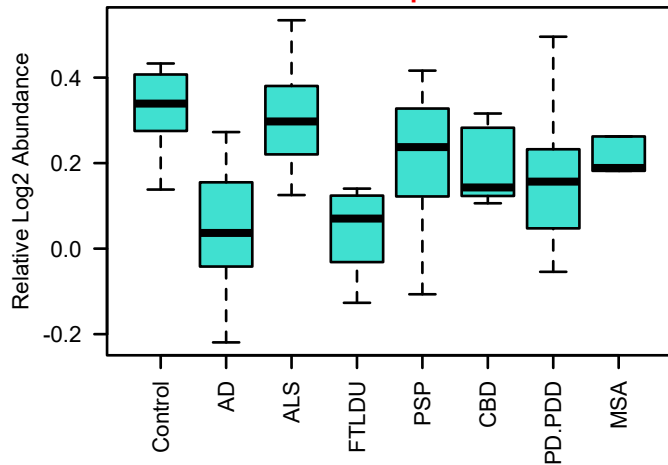
bicor=-0.21, p=0.051
cor=-0.22, p=0.044



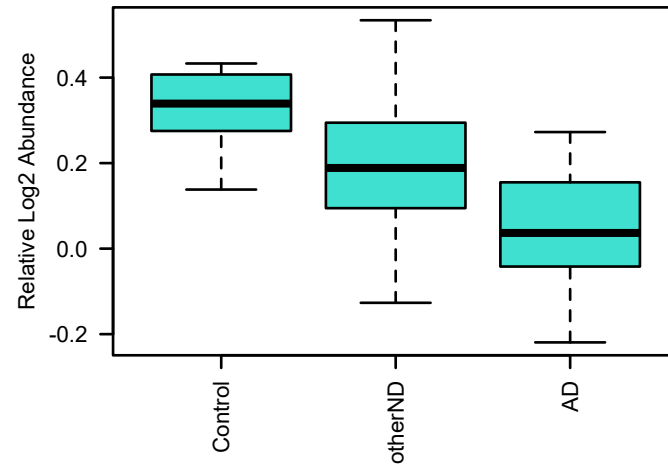
bicor=-0.21, p=0.038
cor=-0.22, p=0.028



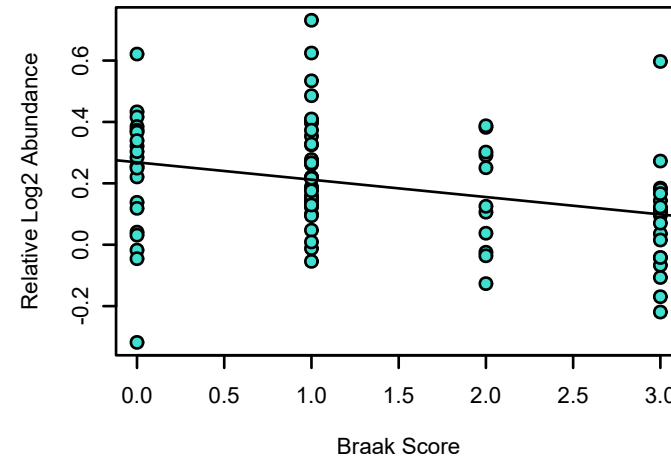
RAB3A UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 7.5e-05



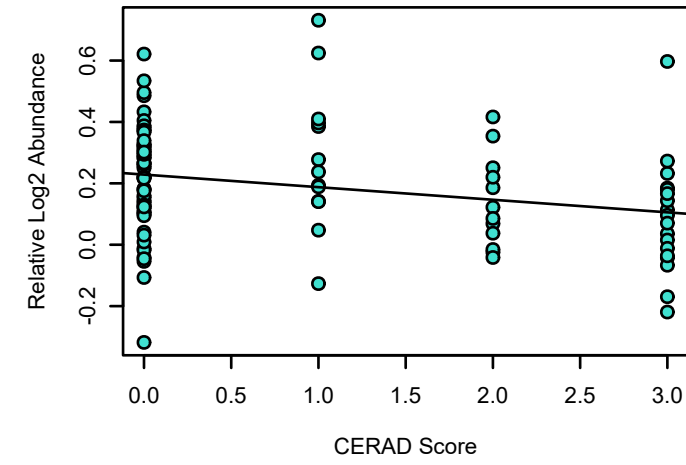
RAB3A UPenn Mixed PRM
K-W ANOVA p: 4.4e-05



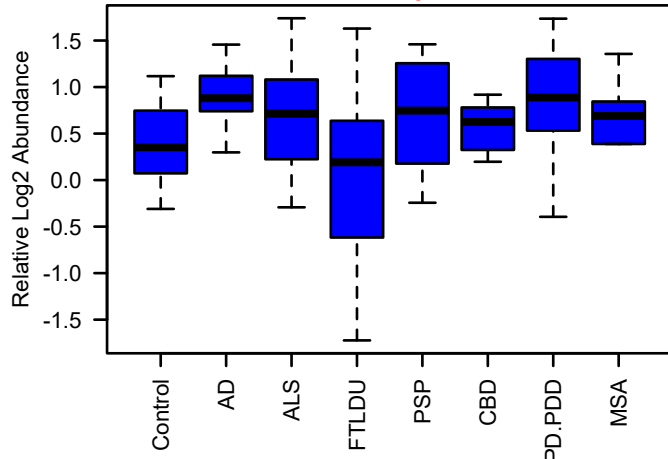
bicor=-0.3, p=0.0049
cor=-0.31, p=0.0041



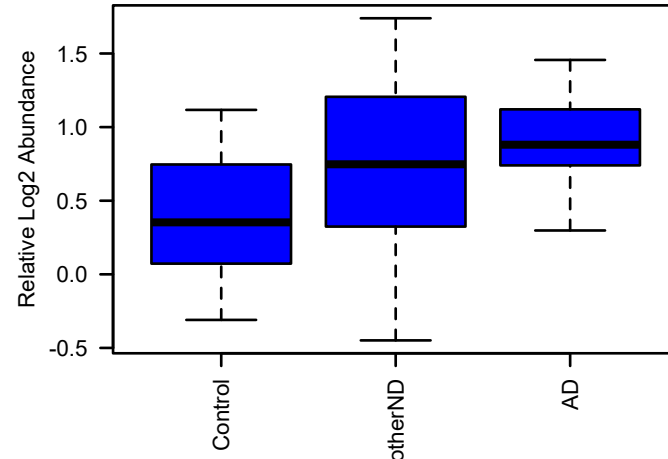
bicor=-0.29, p=0.0033
cor=-0.26, p=0.009



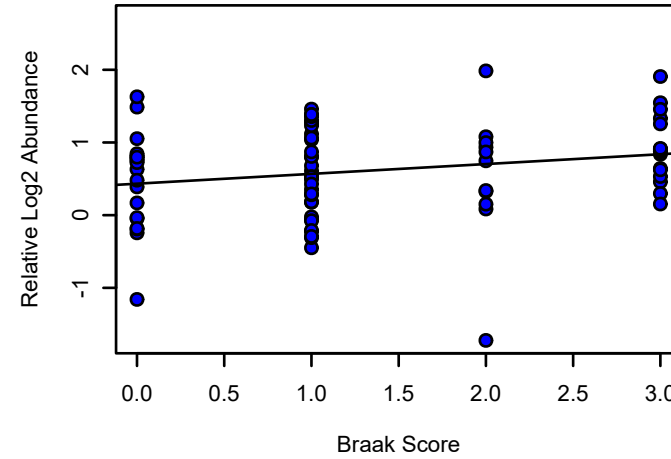
MAG UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.0067



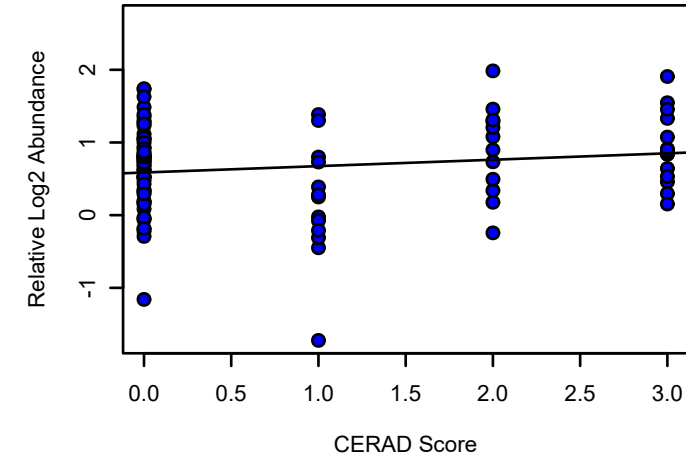
MAG UPenn Mixed PRM
K-W ANOVA p: 0.042



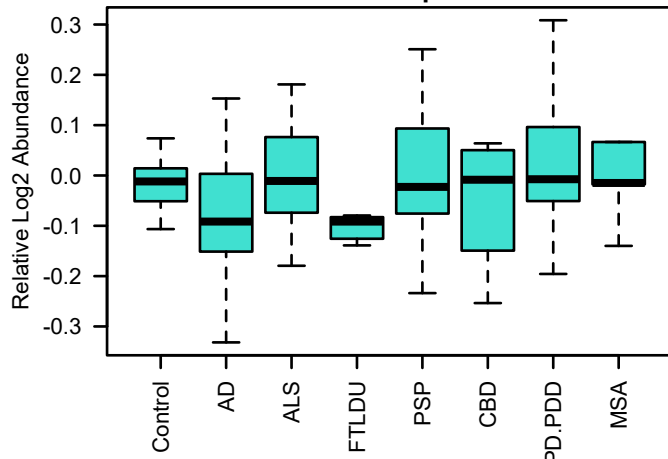
bicor=0.21, p=0.05
cor=0.23, p=0.035



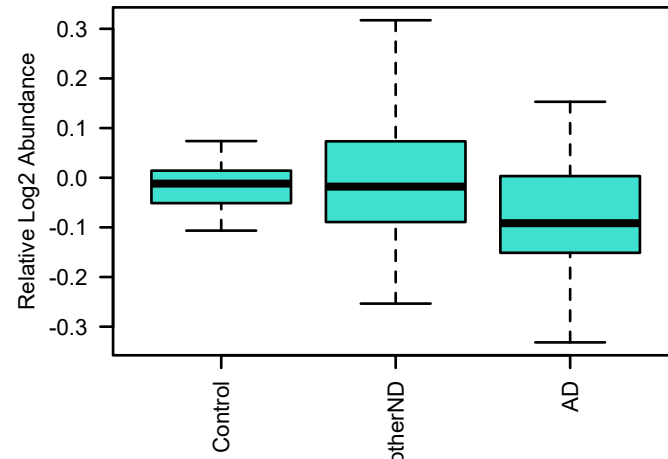
bicor=0.18, p=0.075
cor=0.17, p=0.091



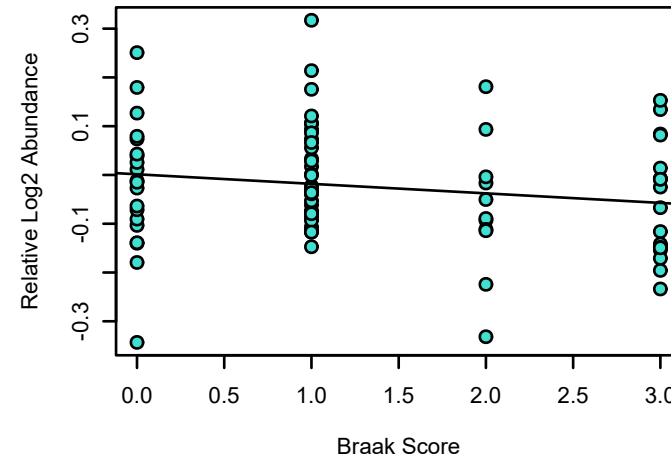
ATP6V1B2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.052



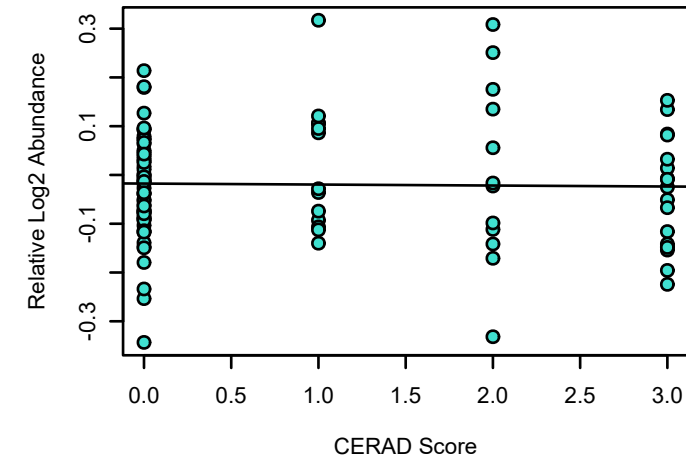
ATP6V1B2 UPenn Mixed PRM
K-W ANOVA p: 0.11



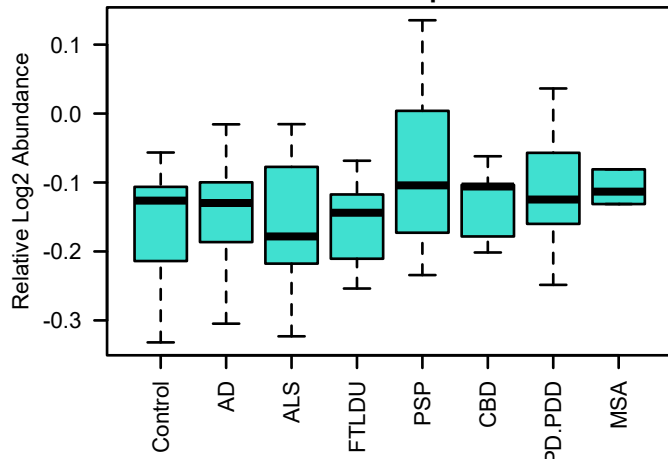
bicor=-0.17, p=0.12
cor=-0.17, p=0.12



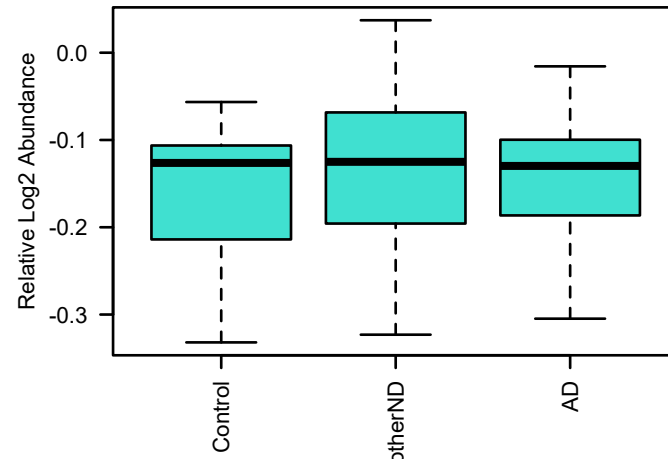
bicor=-0.035, p=0.73
cor=-0.02, p=0.84



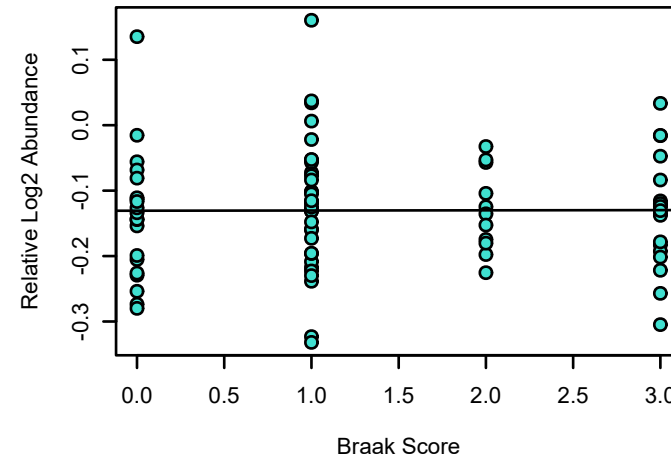
ATP6V1C1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.19



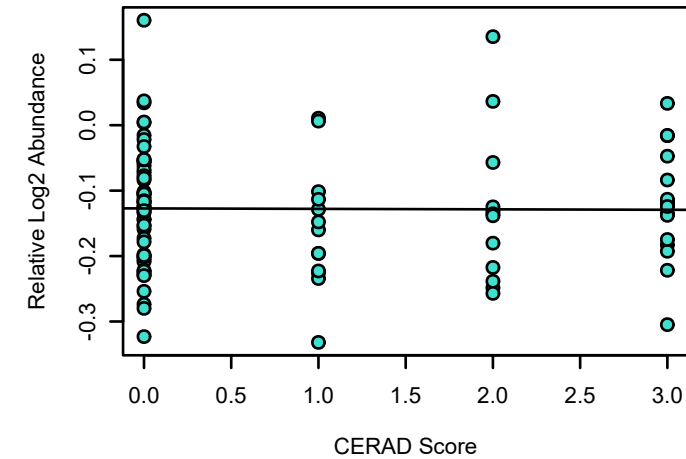
ATP6V1C1 UPenn Mixed PRM
K-W ANOVA p: 0.32

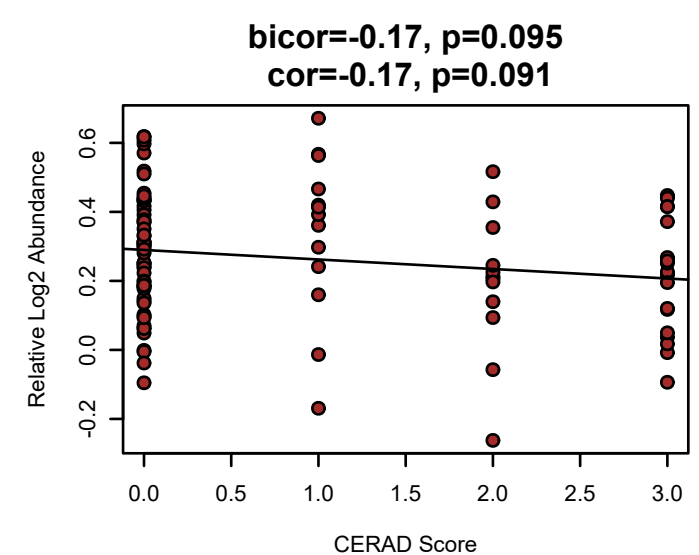
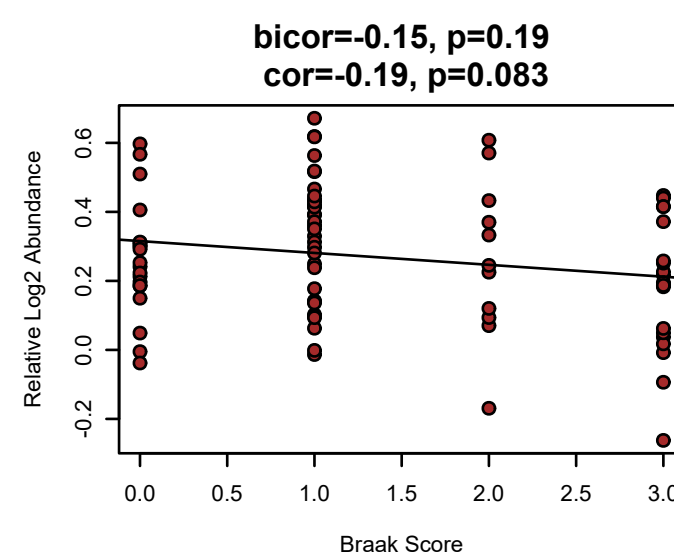
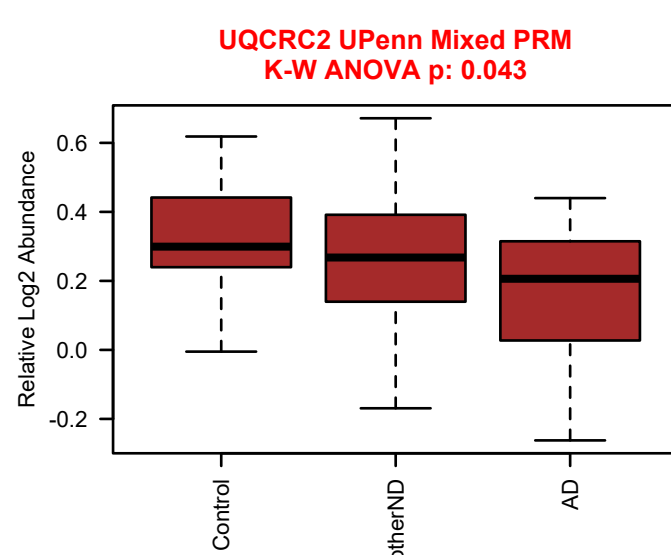
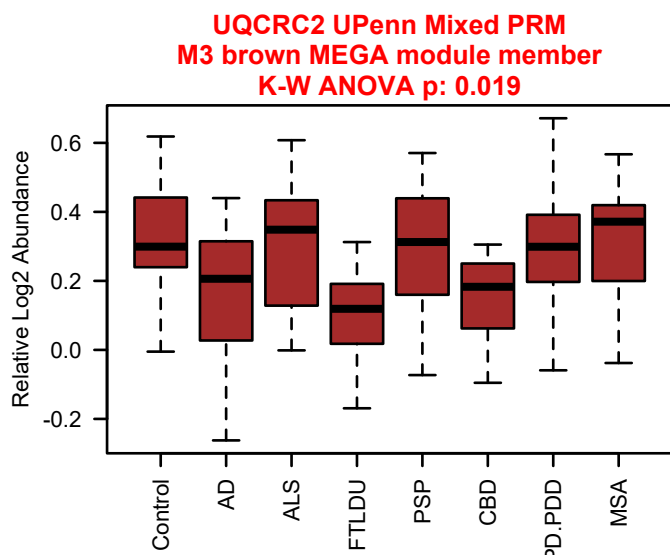
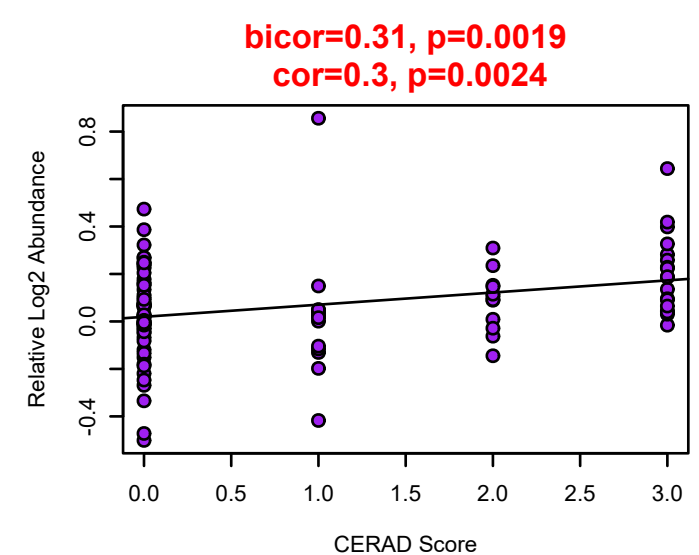
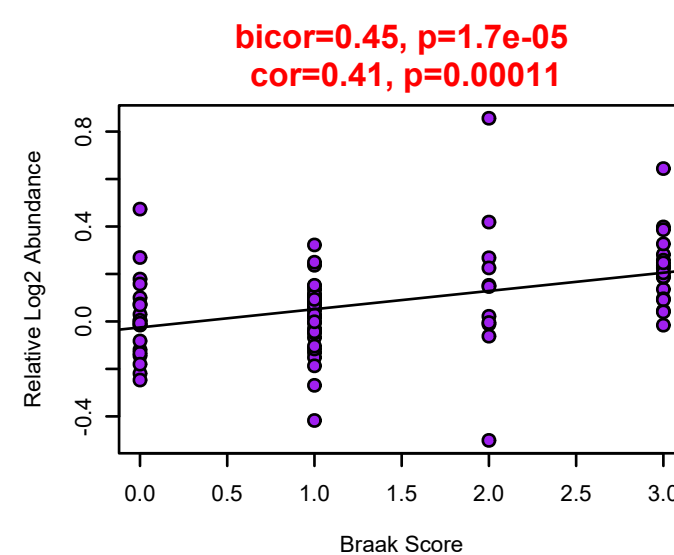
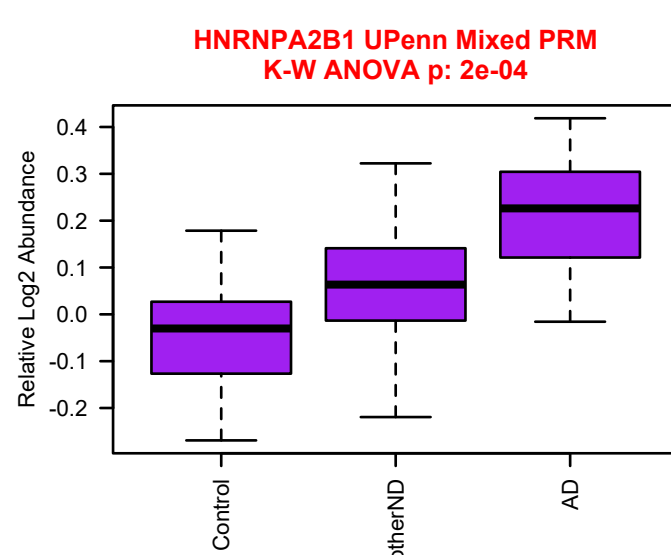
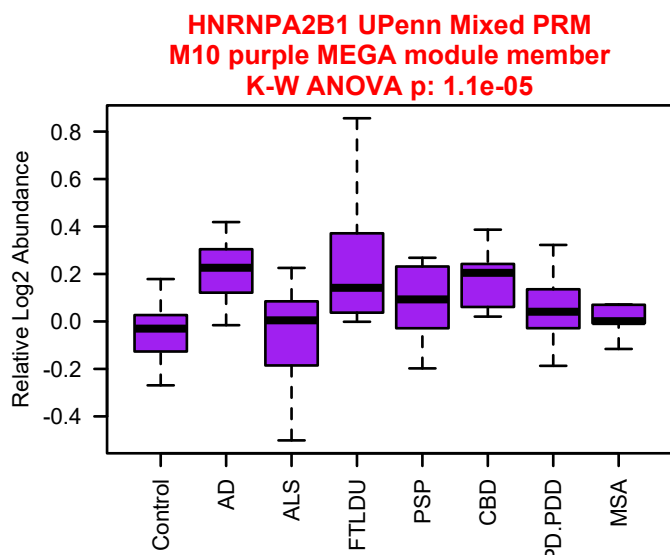
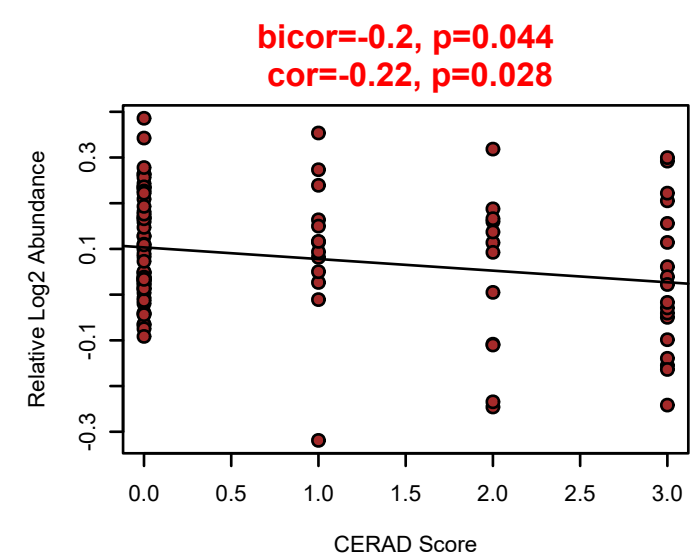
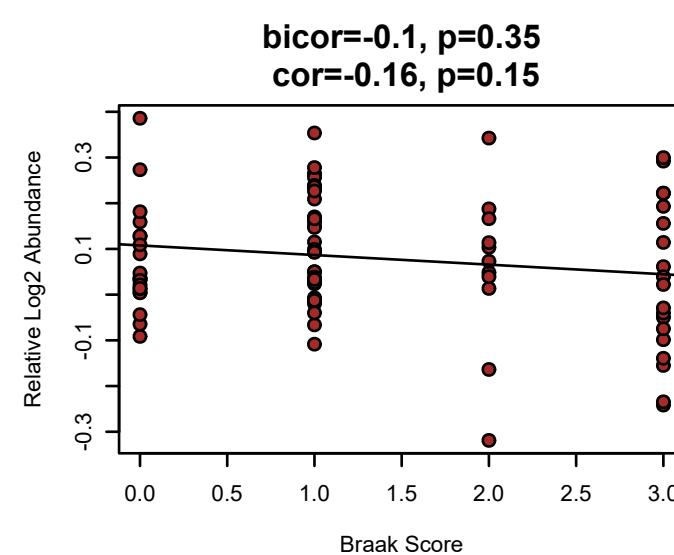
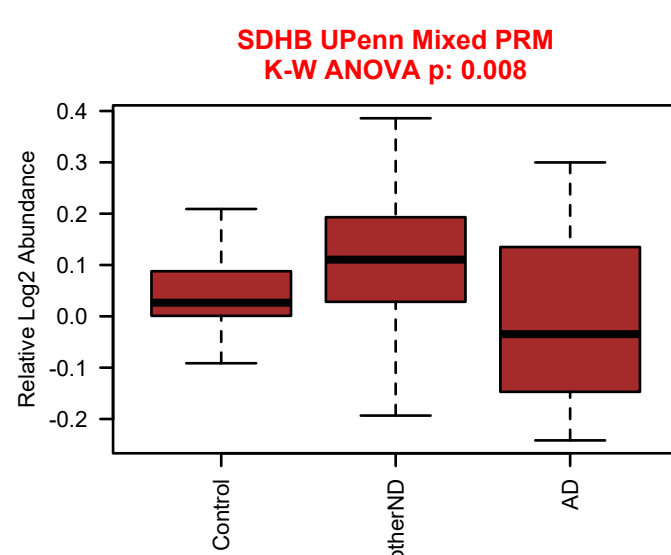
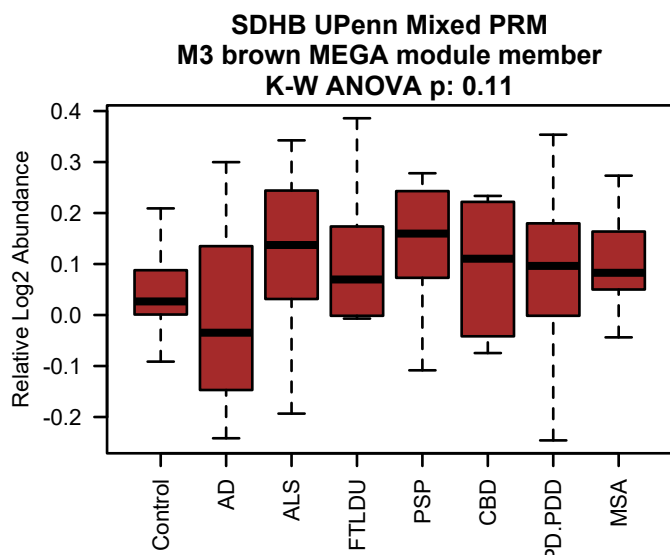
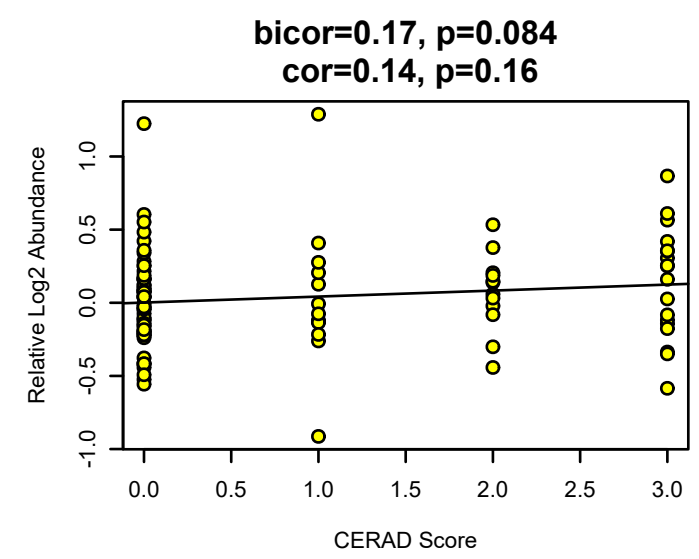
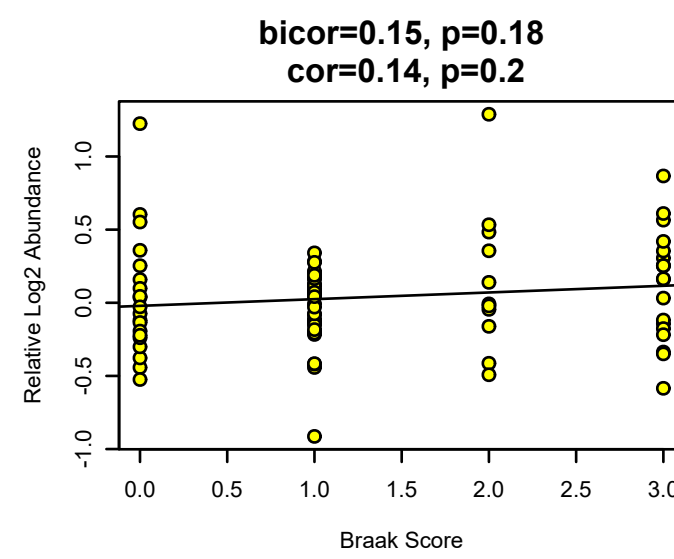
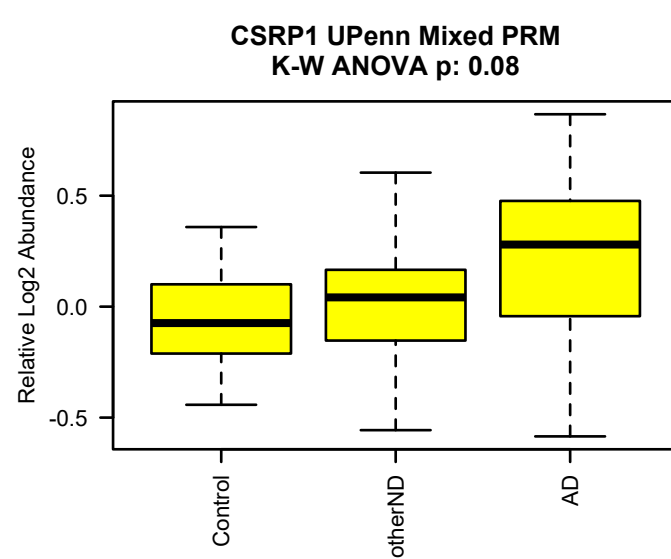
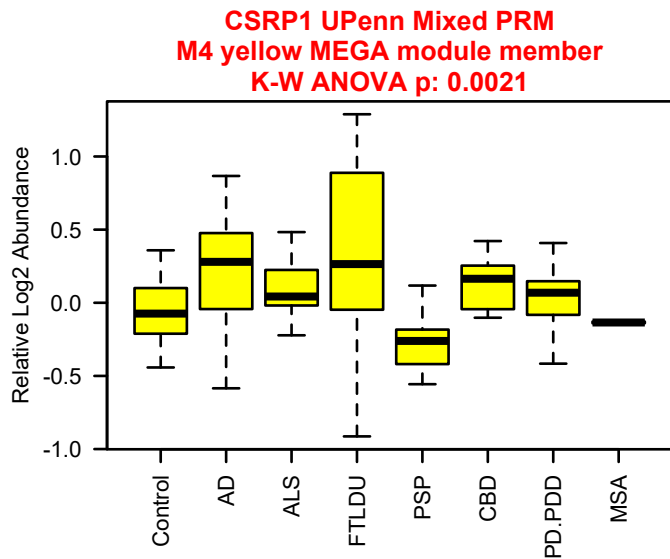


bicor=0.014, p=0.9
cor=0.0036, p=0.97

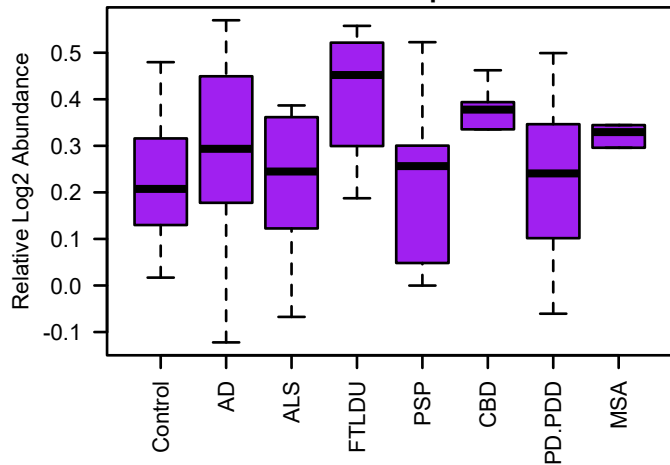


bicor=-0.011, p=0.91
cor=-0.0091, p=0.93

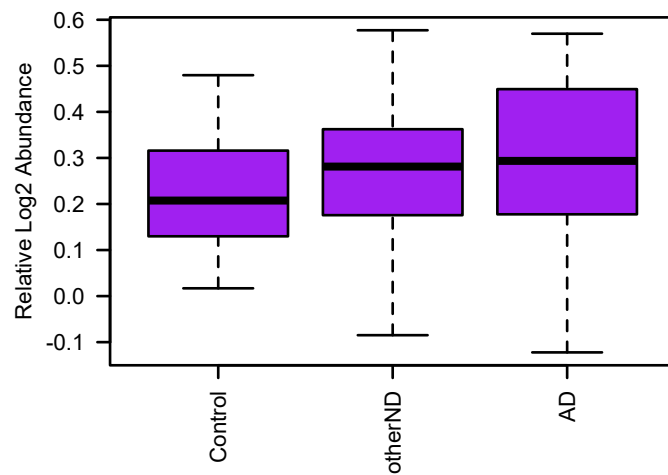




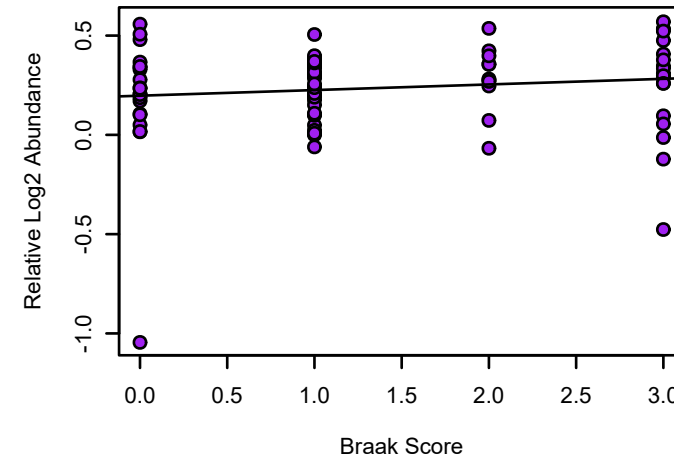
SFPQ UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.21



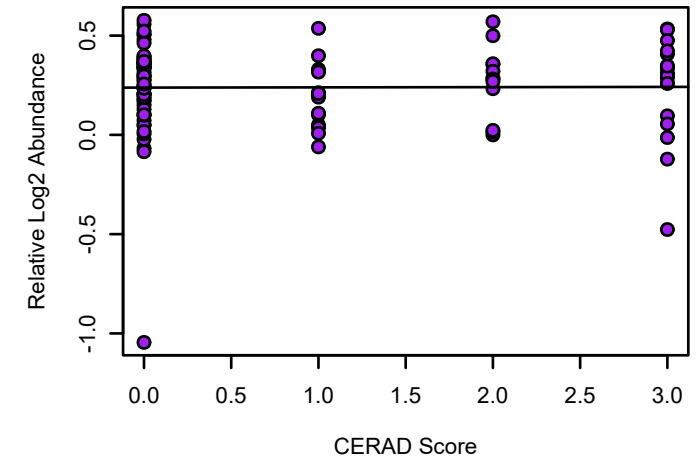
SFPQ UPenn Mixed PRM
K-W ANOVA p: 0.9



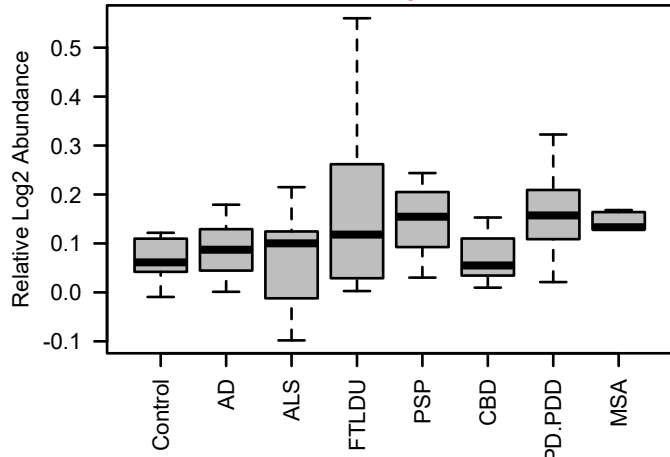
bicor=0.14, p=0.22
cor=0.13, p=0.24



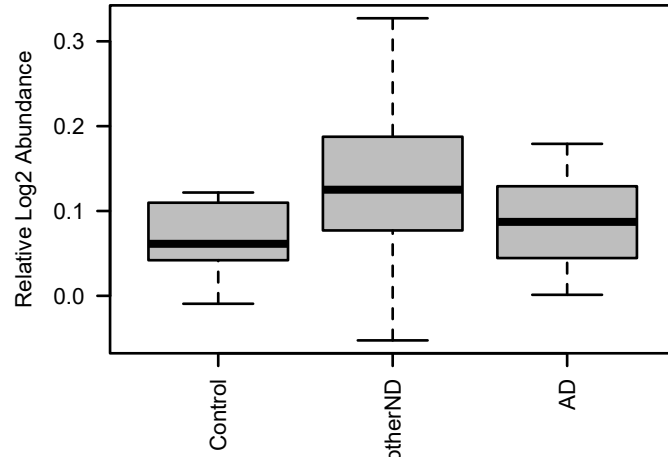
bicor=0.033, p=0.75
cor=0.006, p=0.95



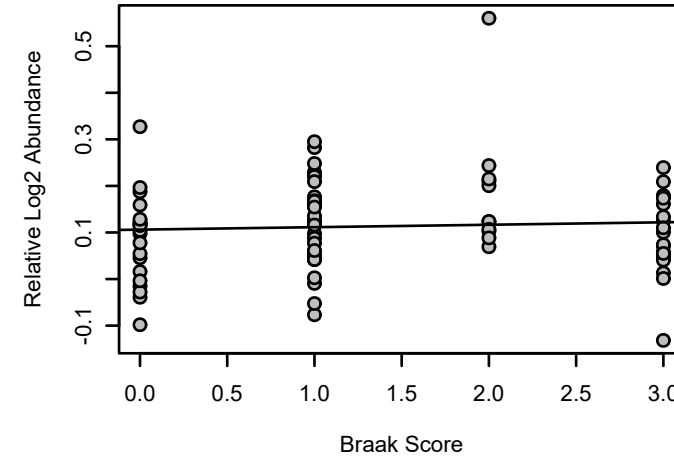
CFL1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.00069



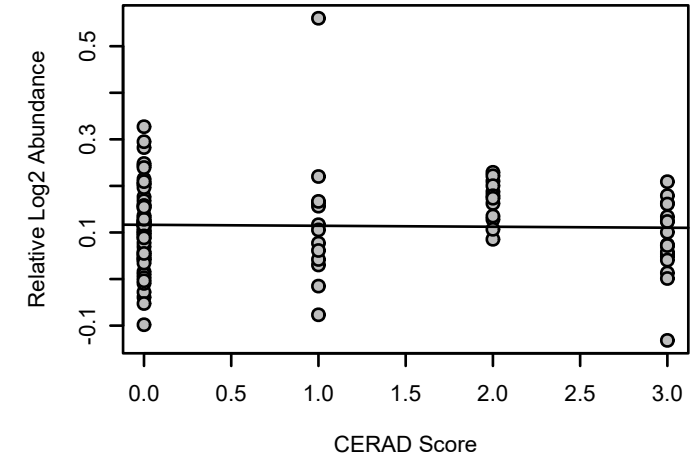
CFL1 UPenn Mixed PRM
K-W ANOVA p: 0.0062



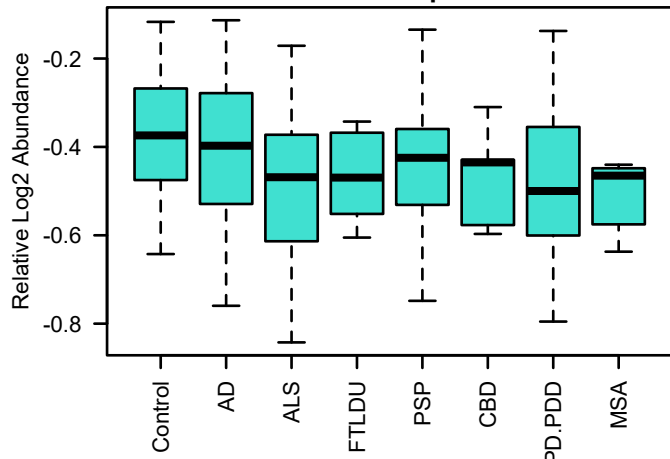
bicor=0.026, p=0.81
cor=0.056, p=0.61



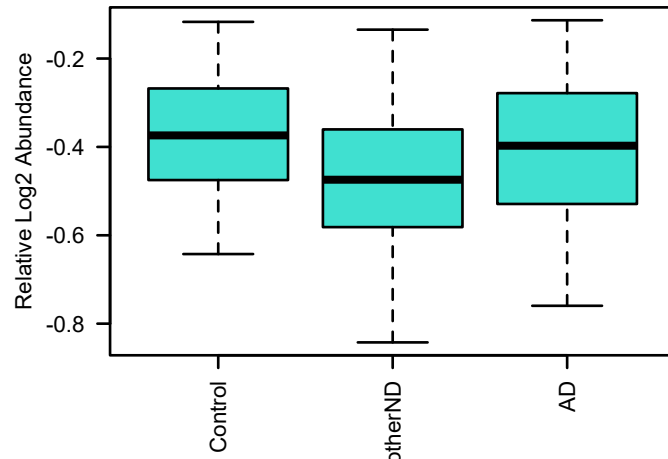
bicor=-0.014, p=0.89
cor=-0.026, p=0.8



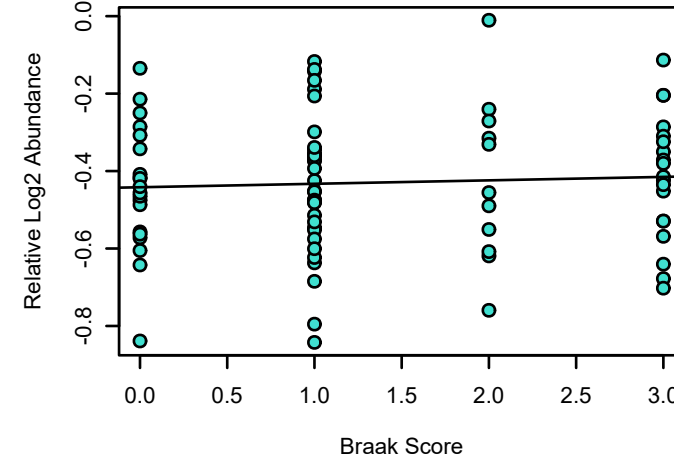
ATP2B4 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.44



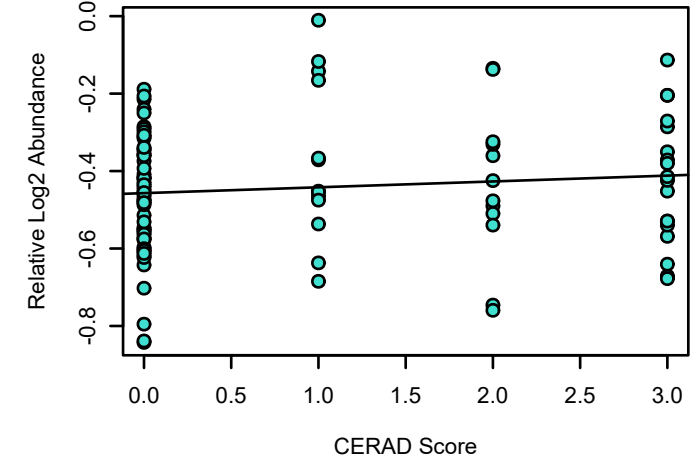
ATP2B4 UPenn Mixed PRM
K-W ANOVA p: 0.067



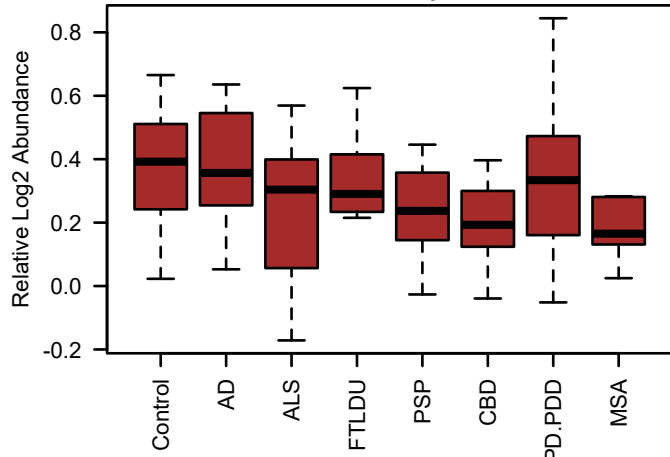
bicor=0.049, p=0.66
cor=0.055, p=0.62



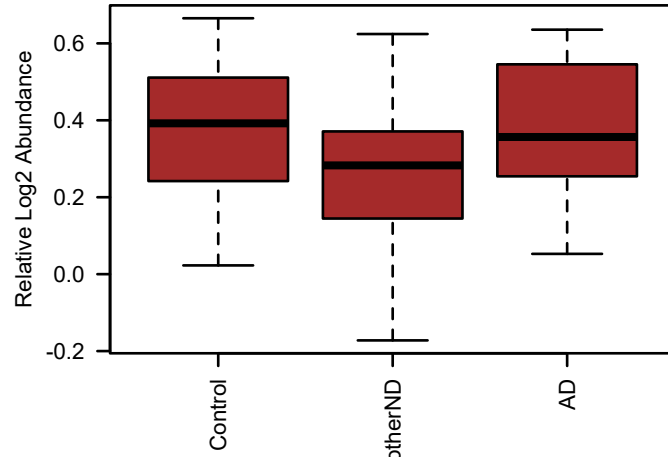
bicor=0.097, p=0.34
cor=0.11, p=0.28



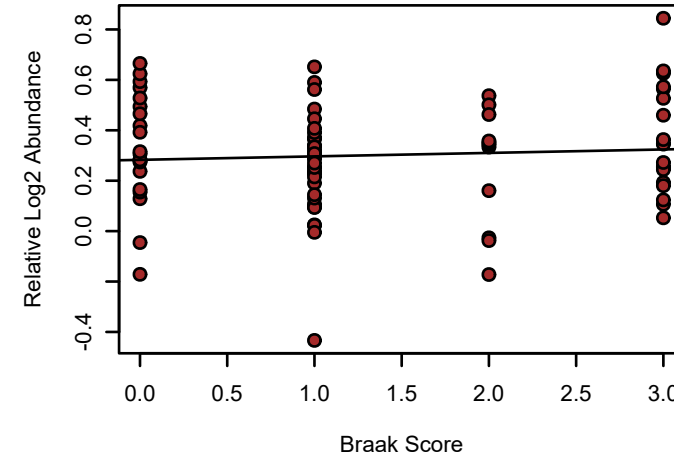
ATP5F1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.11



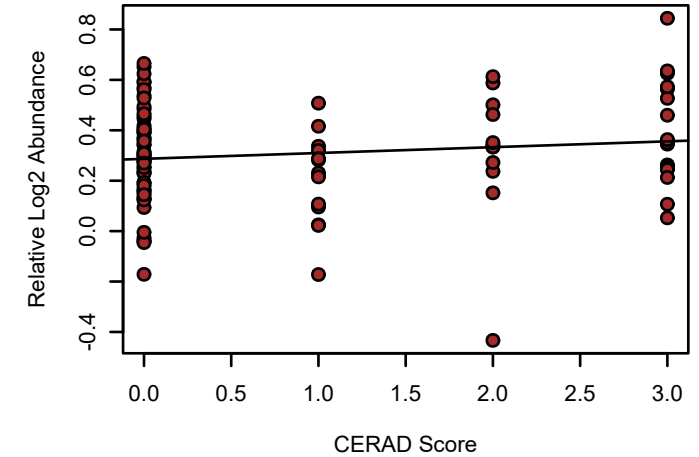
ATP5F1 UPenn Mixed PRM
K-W ANOVA p: 0.041



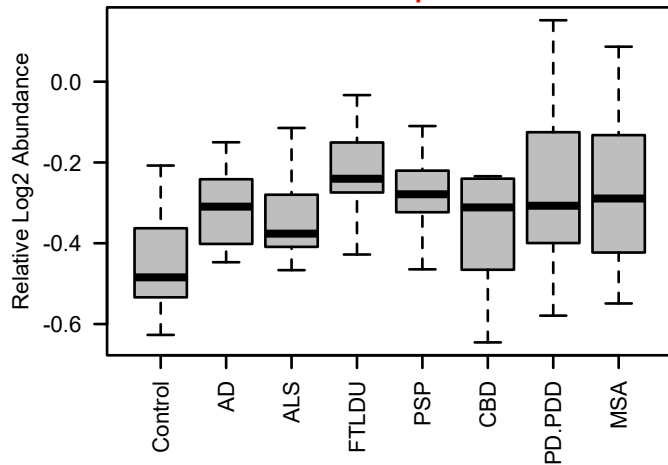
bicor=0.047, p=0.67
cor=0.069, p=0.53



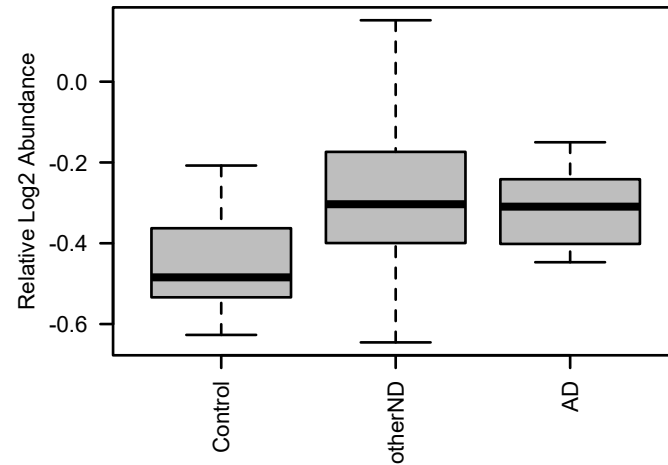
bicor=0.15, p=0.15
cor=0.13, p=0.2



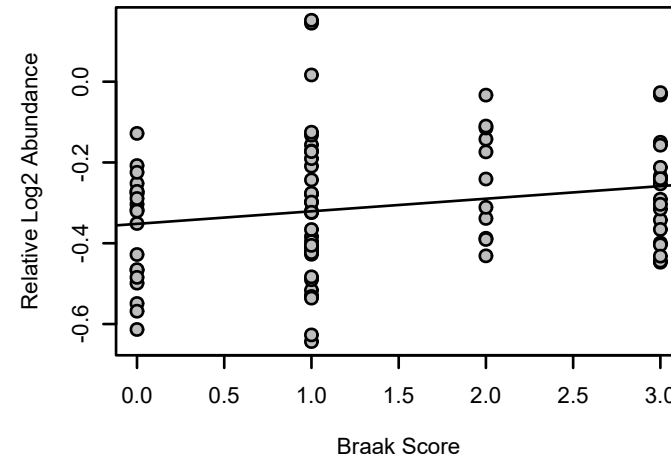
DNAJB2 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.0094



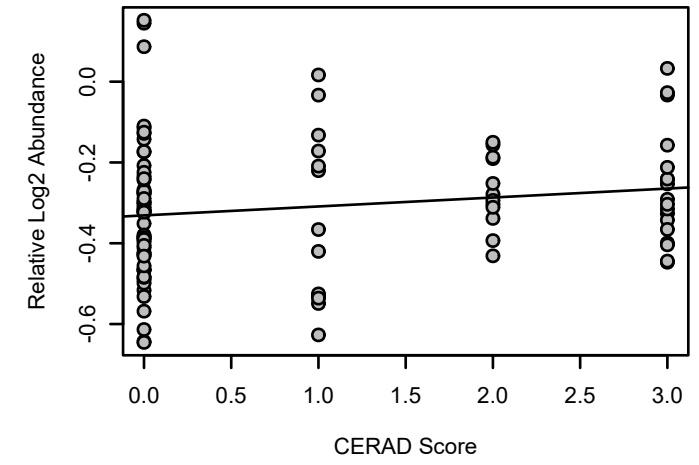
DNAJB2 UPenn Mixed PRM
K-W ANOVA p: 0.0022



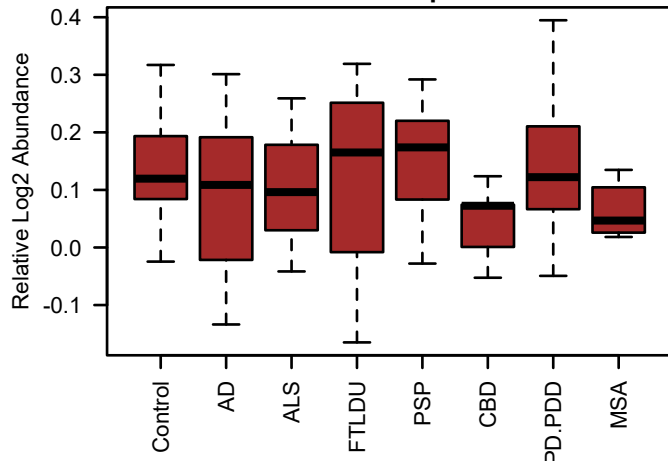
bicor=0.21, p=0.051
cor=0.21, p=0.055



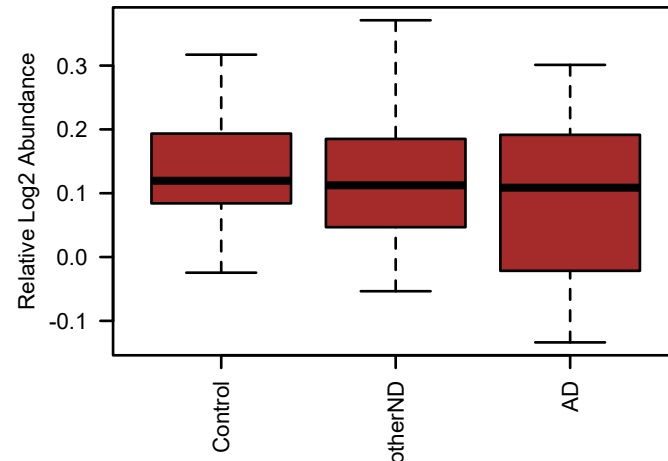
bicor=0.18, p=0.072
cor=0.16, p=0.11



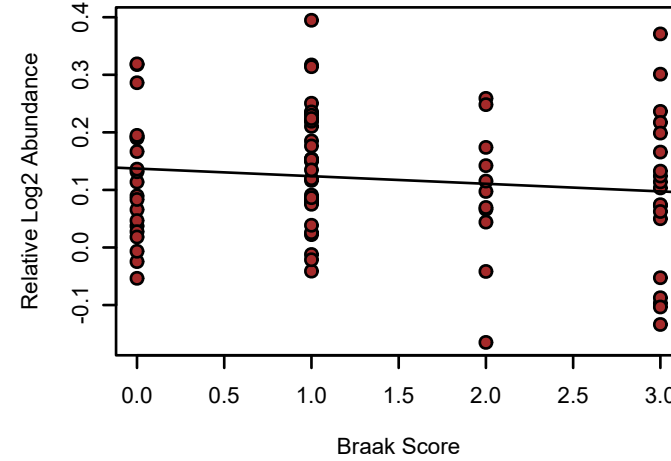
ATP5A1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.52



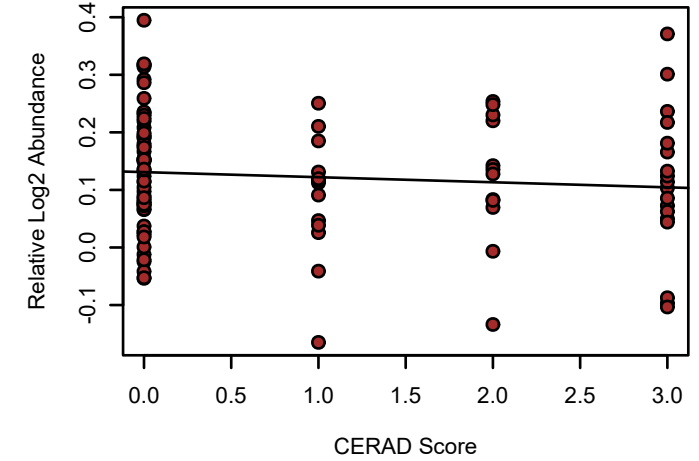
ATP5A1 UPenn Mixed PRM
K-W ANOVA p: 0.52



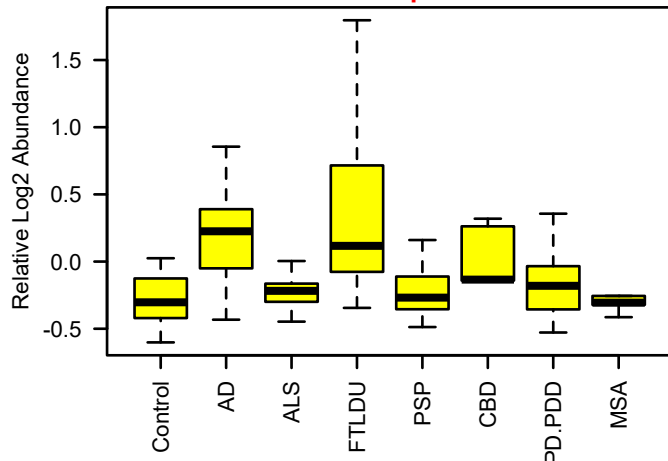
bicor=-0.092, p=0.4
cor=-0.12, p=0.28



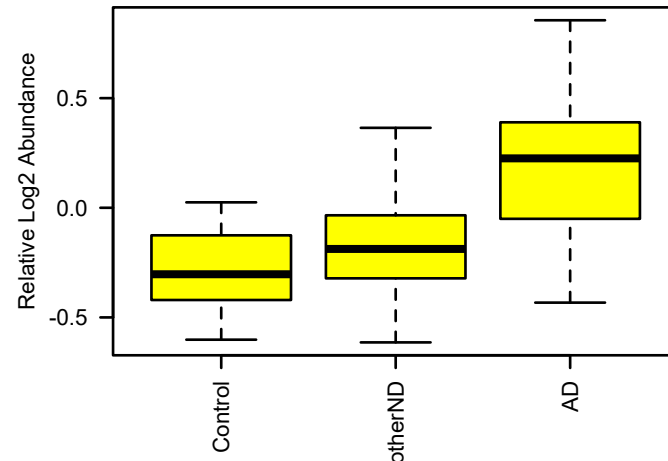
bicor=-0.083, p=0.41
cor=-0.094, p=0.35



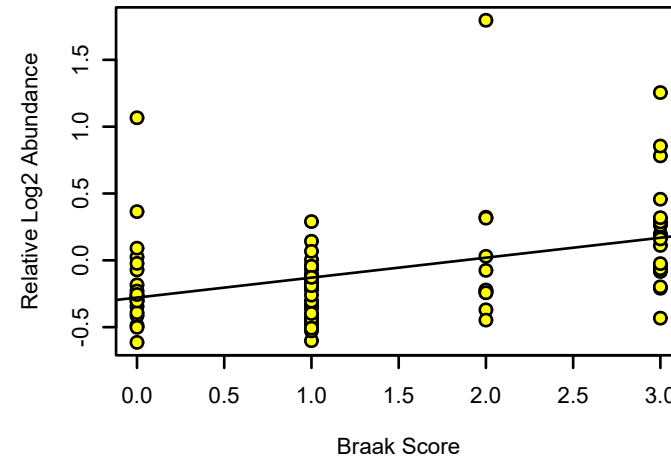
MSN UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.7e-06



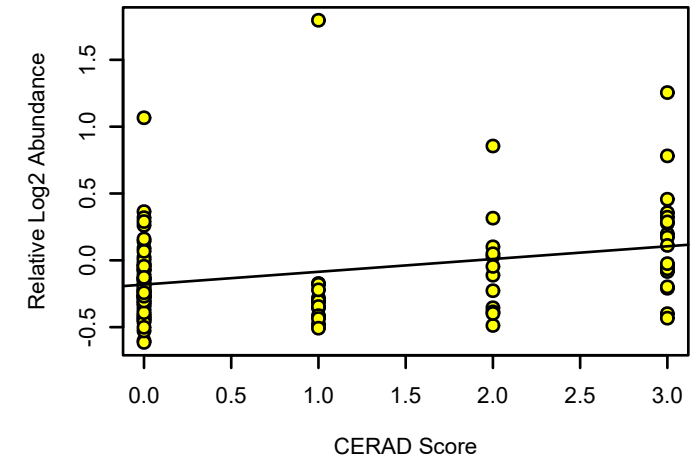
MSN UPenn Mixed PRM
K-W ANOVA p: 0.00014



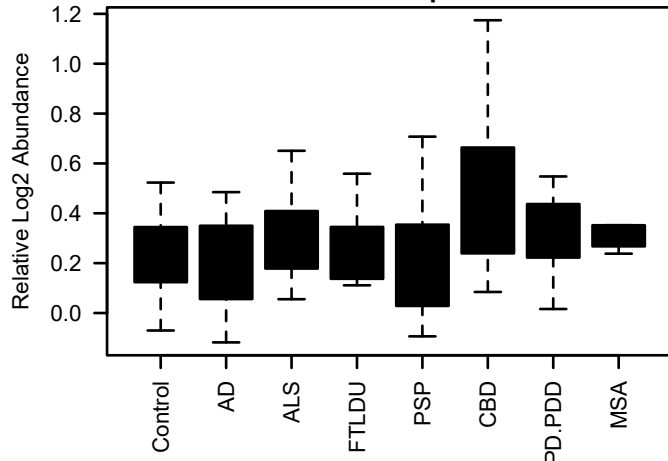
bicor=0.46, p=1e-05
cor=0.4, p=0.00016



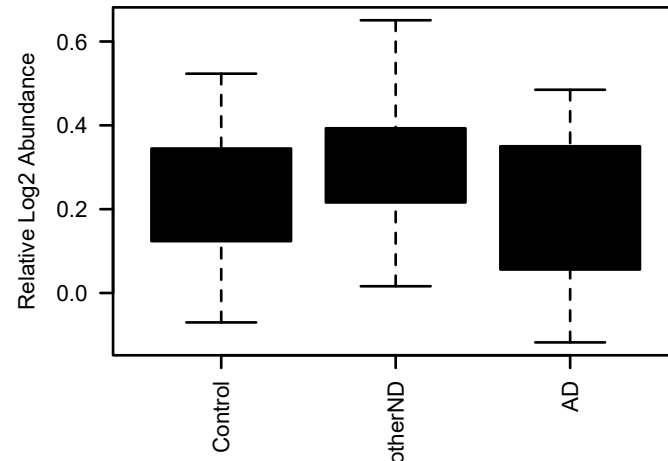
bicor=0.31, p=0.0019
cor=0.3, p=0.0024



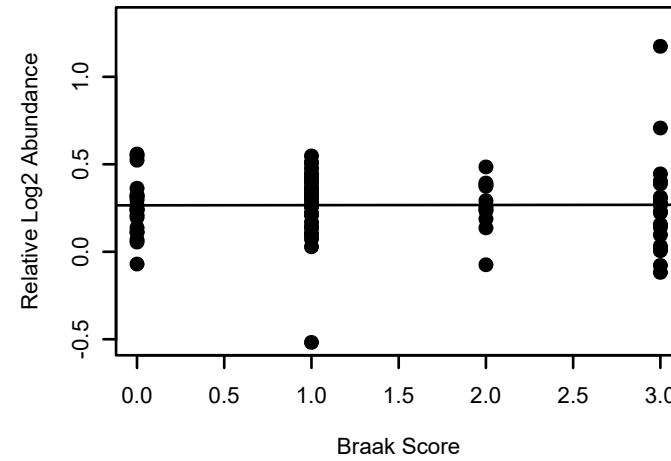
RPL13 UPenn Mixed PRM
M7 black MEGA module member
K-W ANOVA p: 0.18



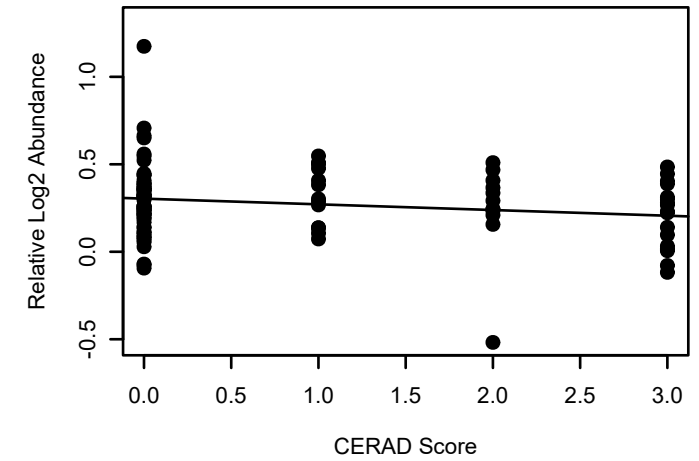
RPL13 UPenn Mixed PRM
K-W ANOVA p: 0.17



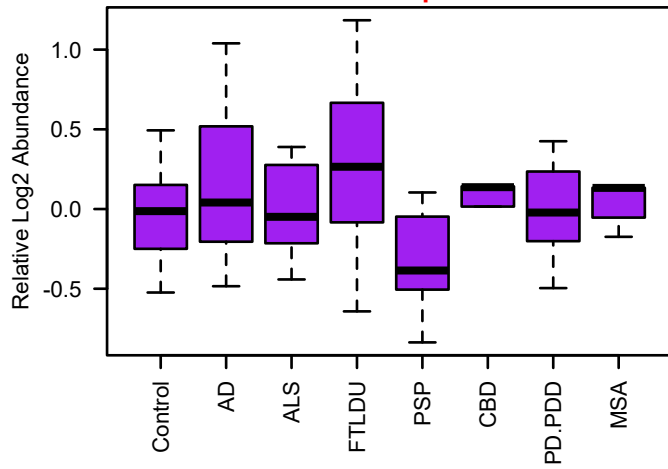
bicor=-0.09, p=0.42
cor=0.0049, p=0.96



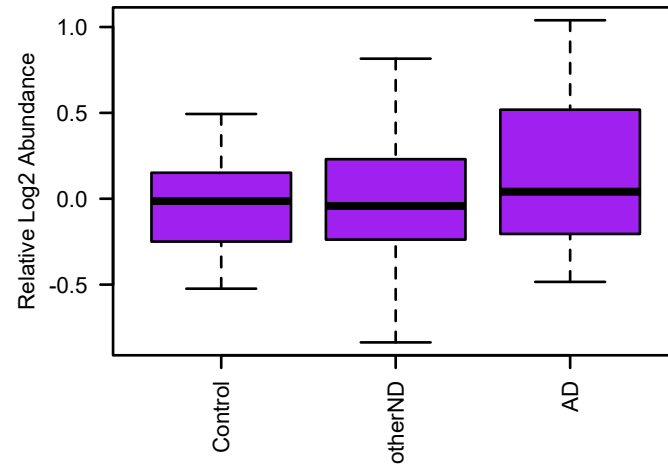
bicor=-0.14, p=0.16
cor=-0.19, p=0.058



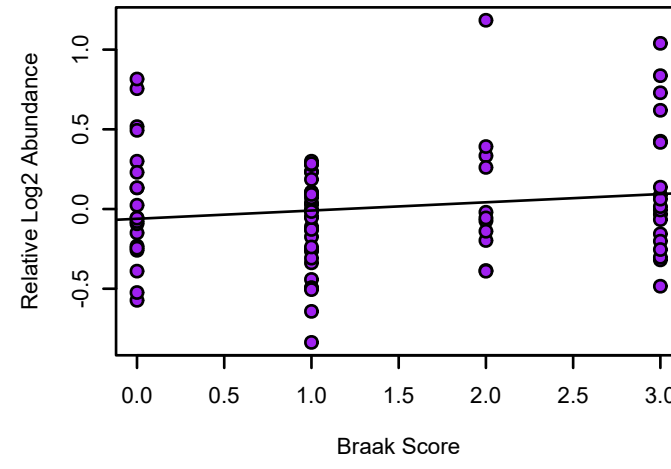
MAP4 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.019



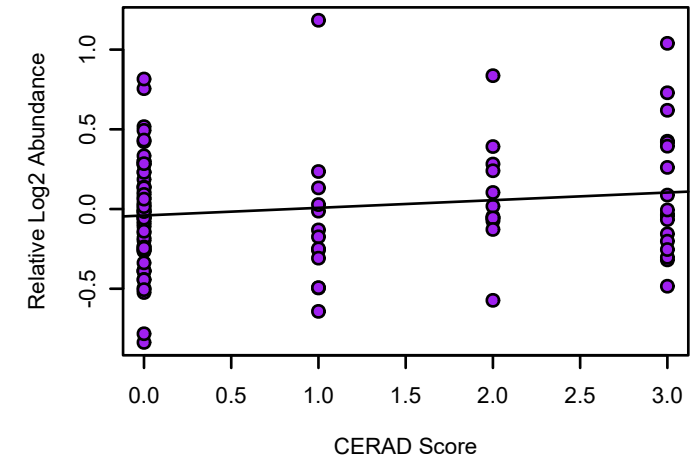
MAP4 UPenn Mixed PRM
K-W ANOVA p: 0.2



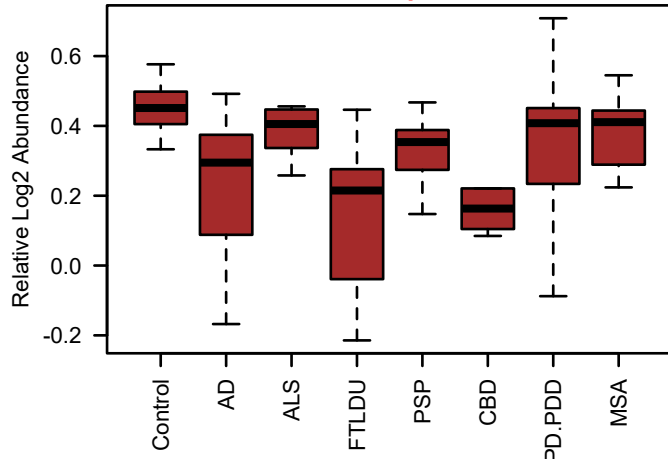
bicor=0.13, p=0.24
cor=0.15, p=0.17



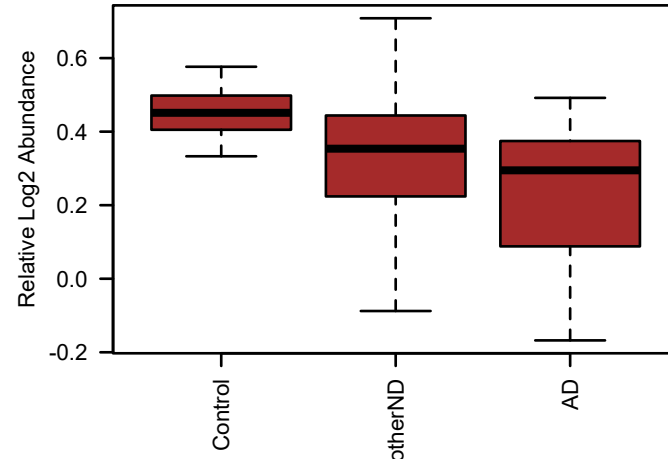
bicor=0.13, p=0.2
cor=0.15, p=0.14



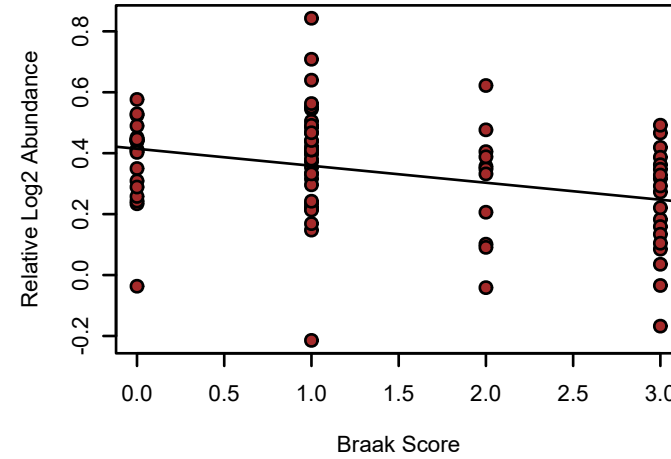
NDUFS1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.00028



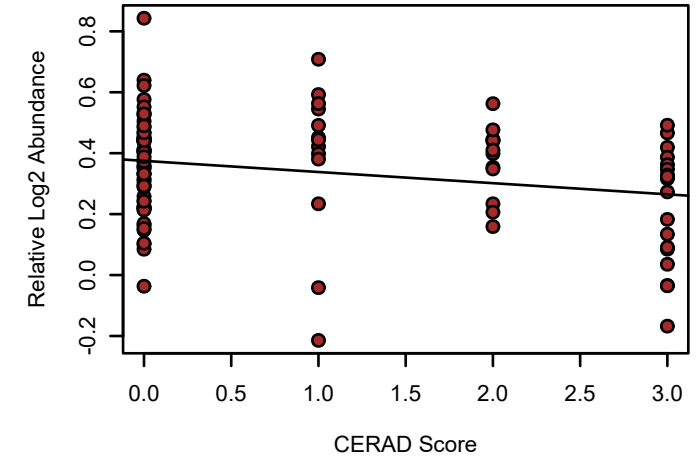
NDUFS1 UPenn Mixed PRM
K-W ANOVA p: 0.0034



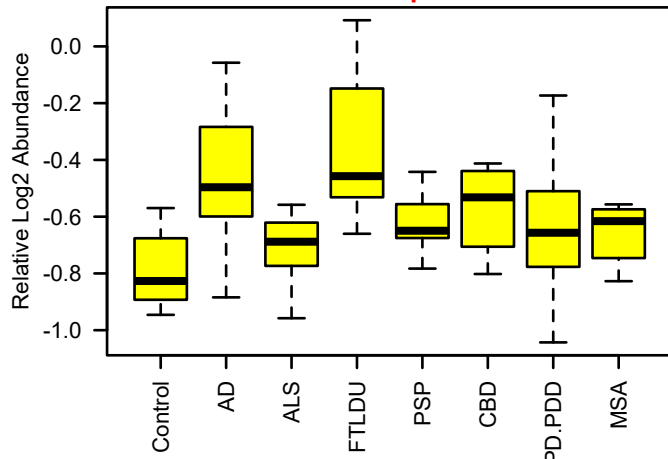
bicor=-0.37, p=0.00058
cor=-0.33, p=0.0022



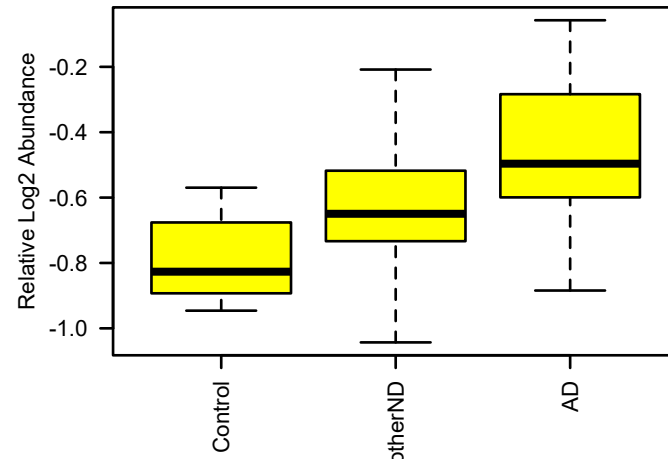
bicor=-0.2, p=0.041
cor=-0.24, p=0.016



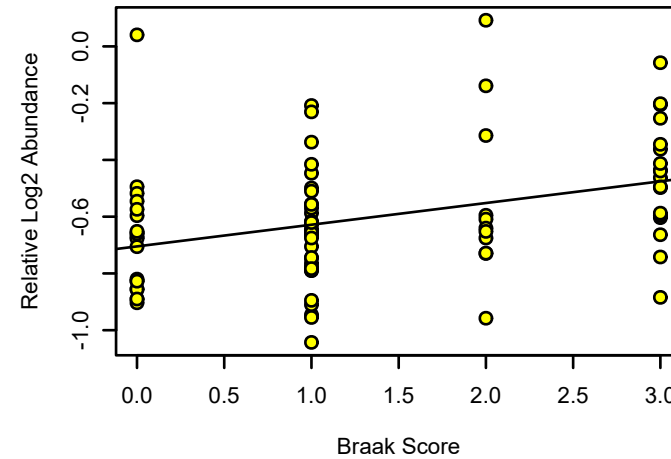
MAPK1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 1.3e-05



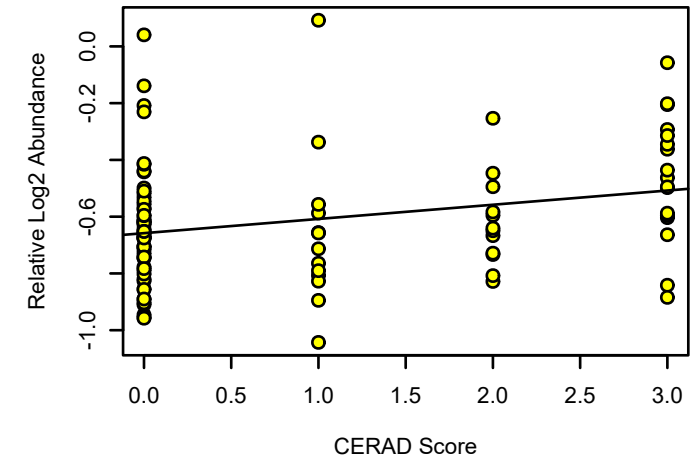
MAPK1 UPenn Mixed PRM
K-W ANOVA p: 9.7e-05



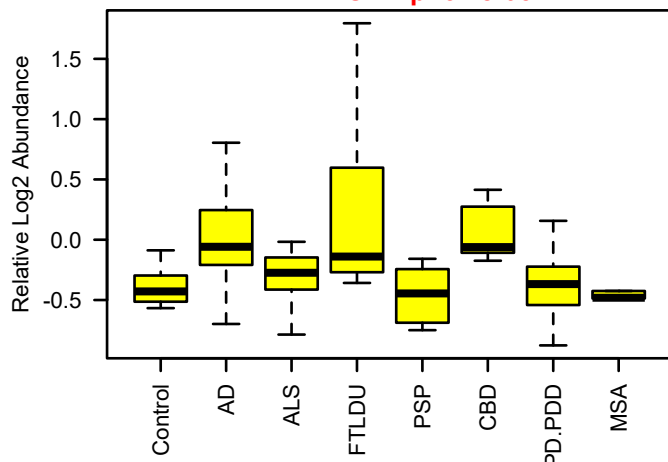
bicor=0.41, p=0.00012
cor=0.36, p=0.00077



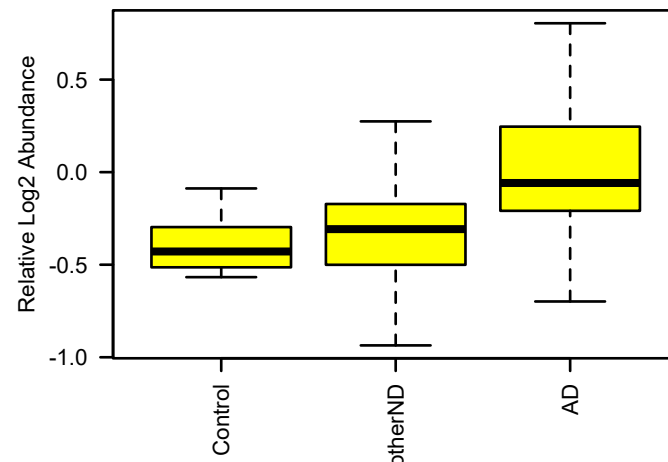
bicor=0.3, p=0.0022
cor=0.27, p=0.0066



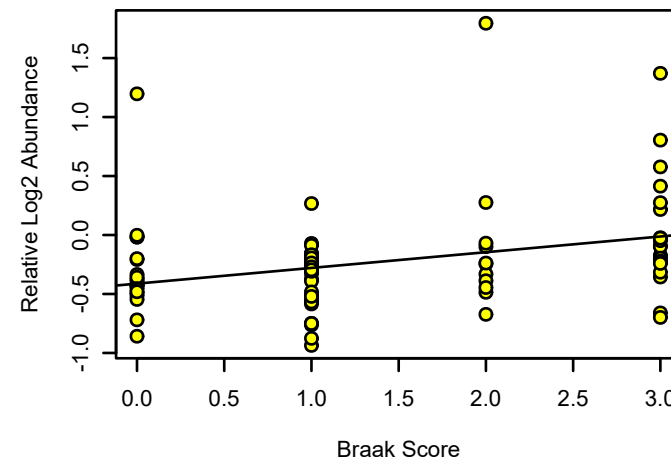
PRDX6 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 3.4e-05



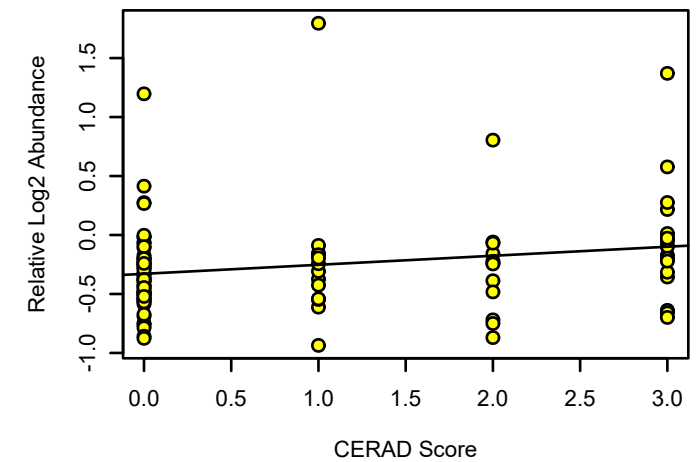
PRDX6 UPenn Mixed PRM
K-W ANOVA p: 0.0044



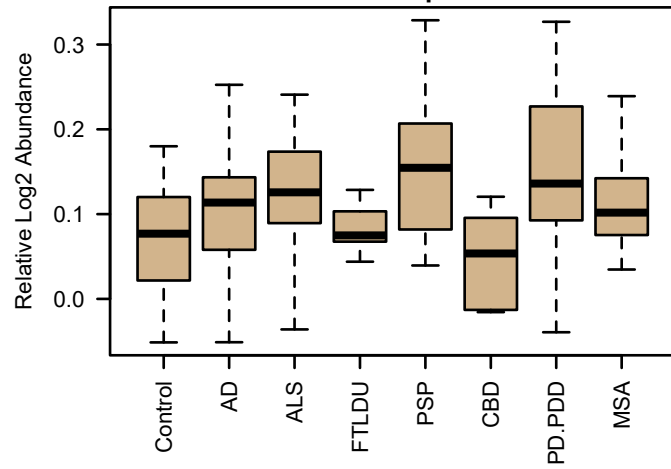
bicor=0.33, p=0.0024
cor=0.32, p=0.003



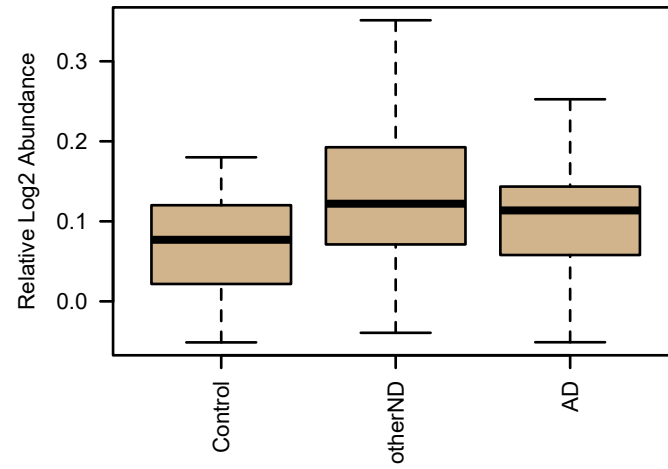
bicor=0.23, p=0.021
cor=0.21, p=0.036



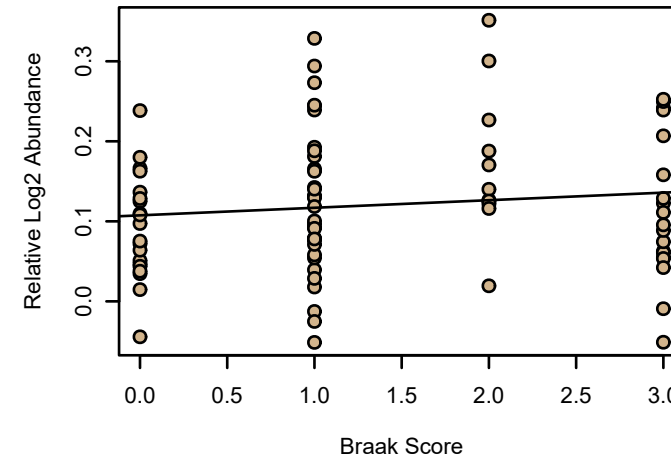
PPP2R1A UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 0.064



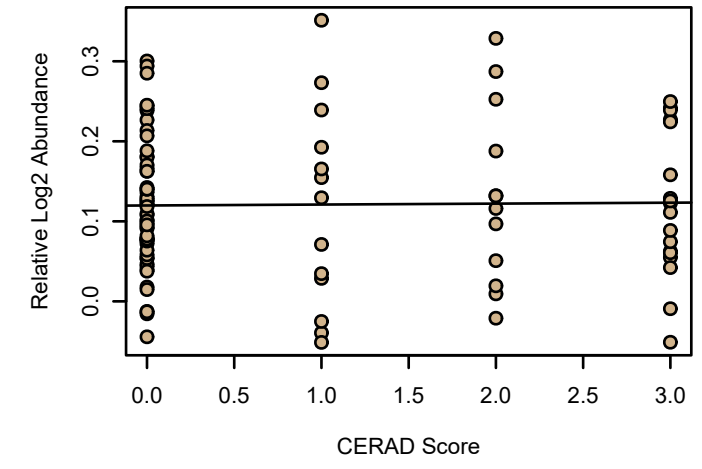
PPP2R1A UPenn Mixed PRM
K-W ANOVA p: 0.033



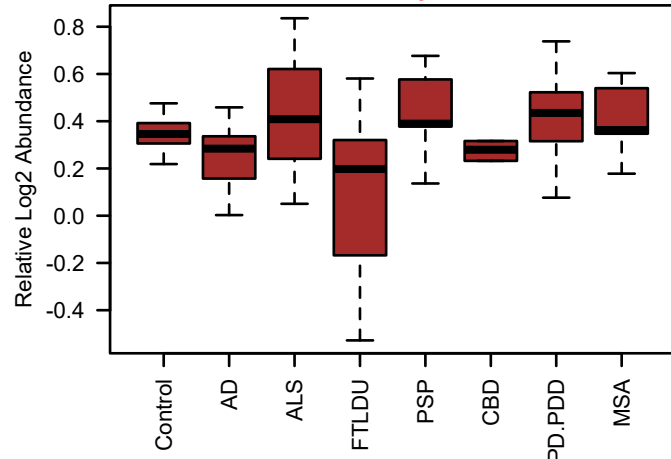
bicor=0.13, p=0.23
cor=0.12, p=0.28



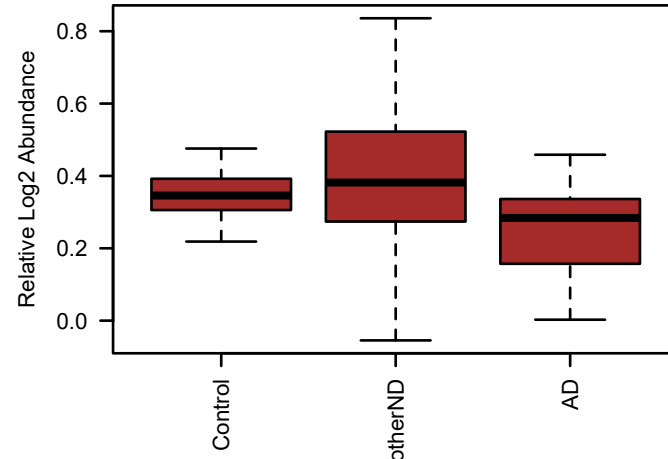
bicor=0.015, p=0.88
cor=0.015, p=0.88



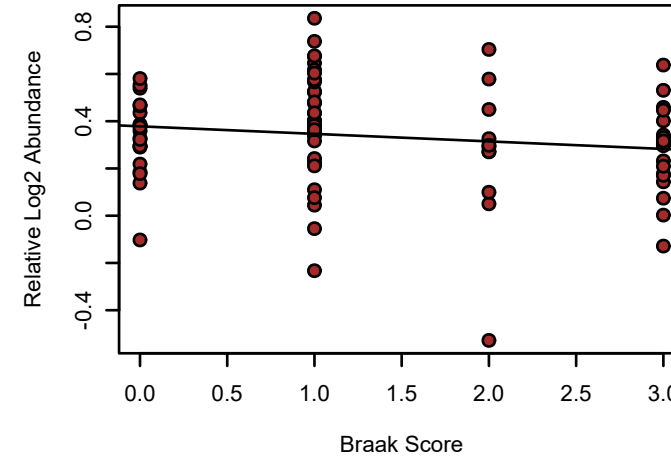
SDHA UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0015



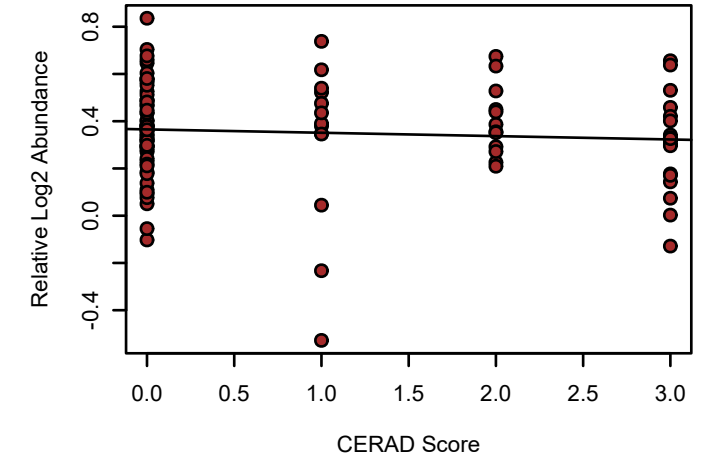
SDHA UPenn Mixed PRM
K-W ANOVA p: 0.11



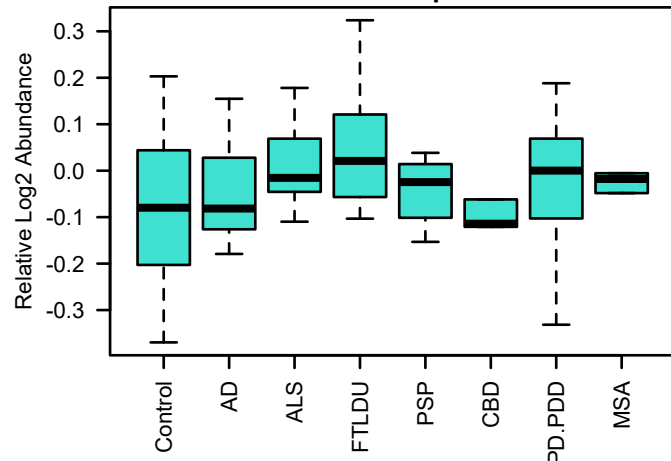
bicor=-0.14, p=0.19
cor=-0.15, p=0.17



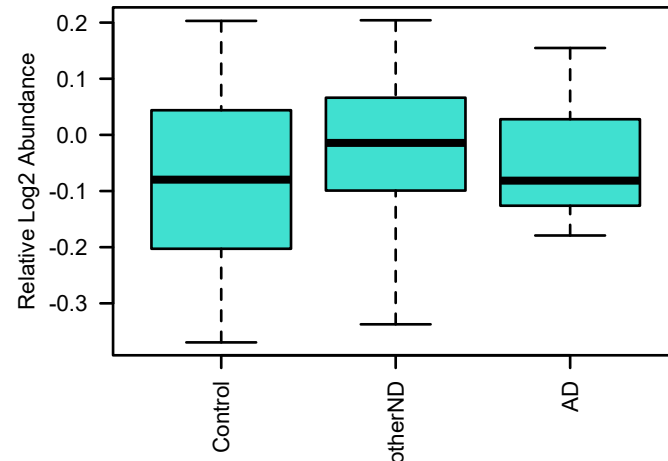
bicor=-0.078, p=0.44
cor=-0.078, p=0.44



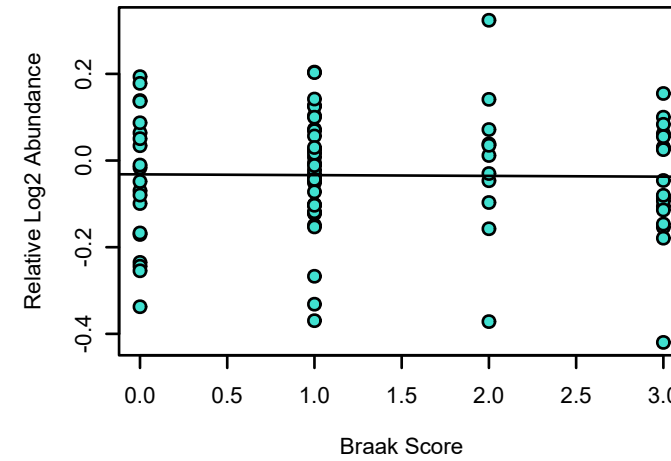
PRKAR2B UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.33



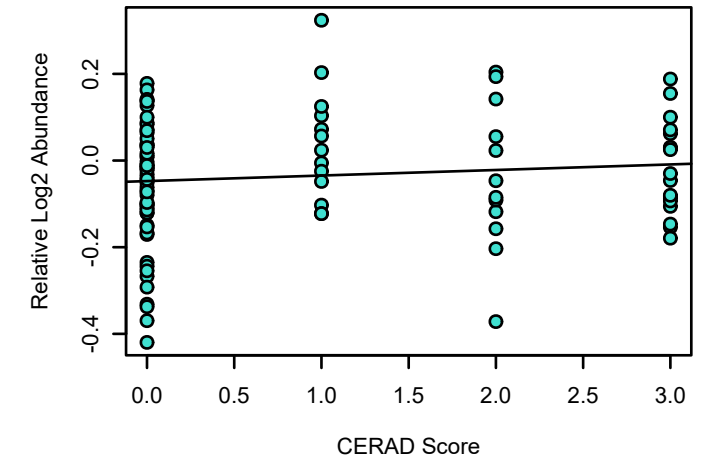
PRKAR2B UPenn Mixed PRM
K-W ANOVA p: 0.13



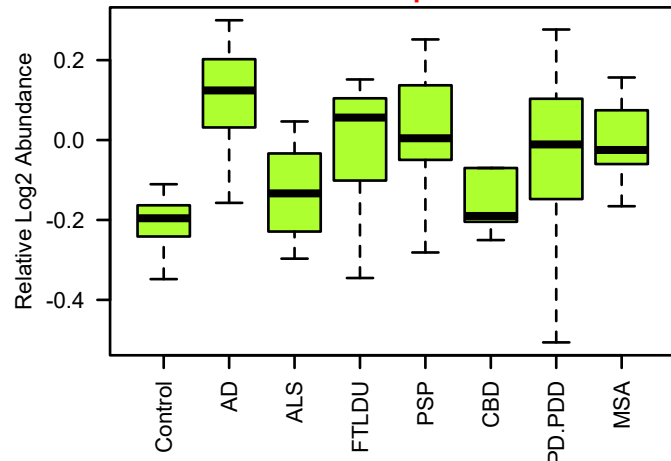
bicor=-0.0048, p=0.97
cor=-0.013, p=0.91



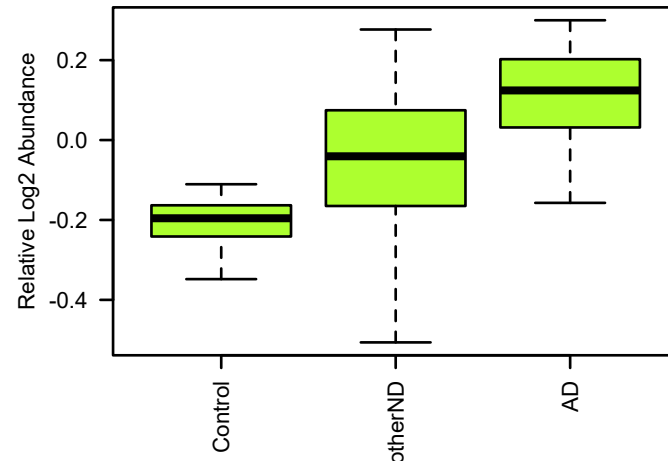
bicor=0.093, p=0.36
cor=0.11, p=0.28



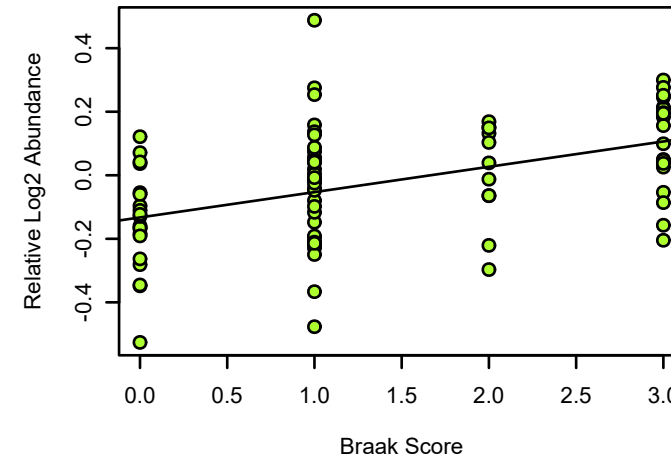
DNAJA1 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 3.2e-05



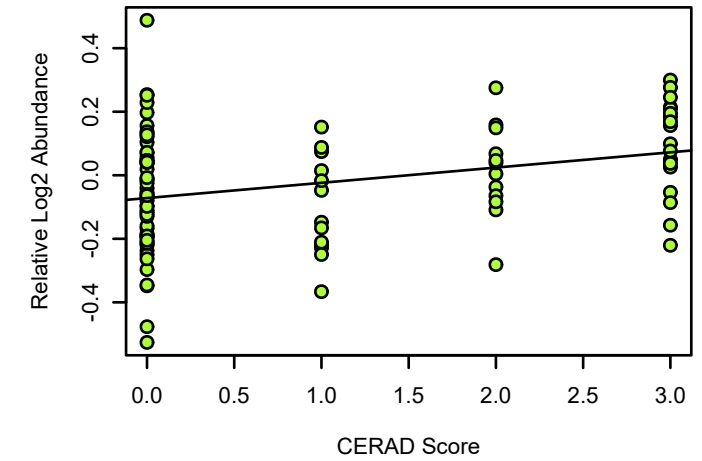
DNAJA1 UPenn Mixed PRM
K-W ANOVA p: 1.6e-05

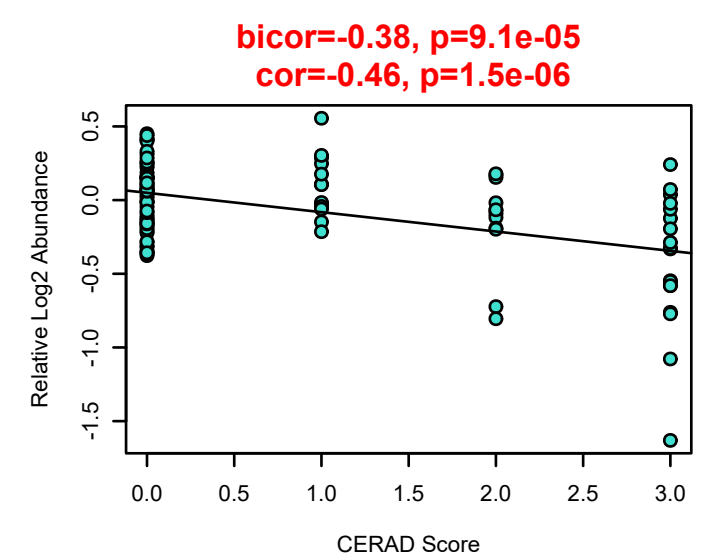
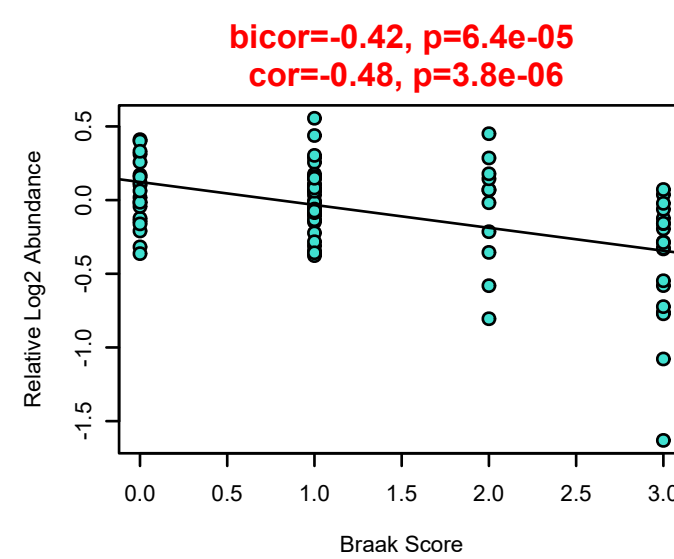
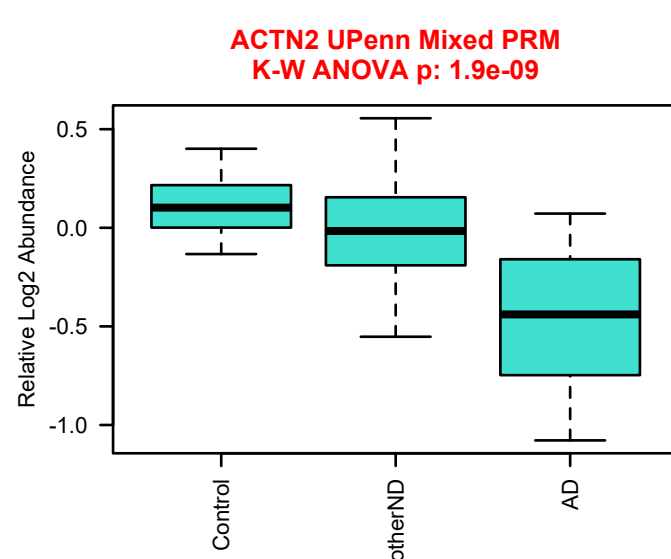
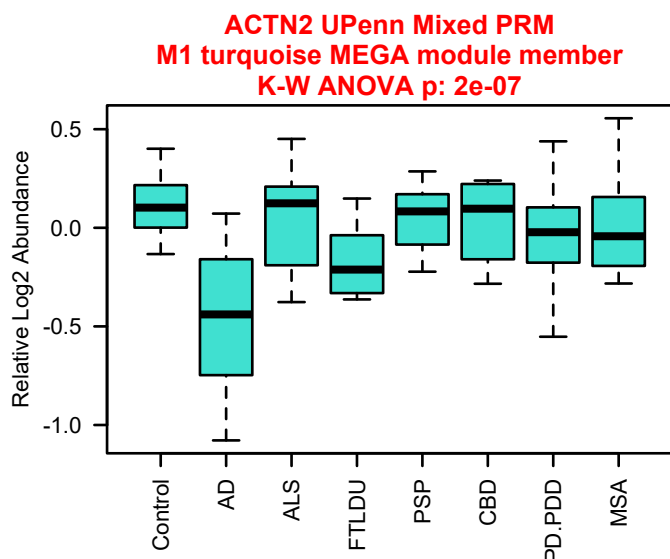
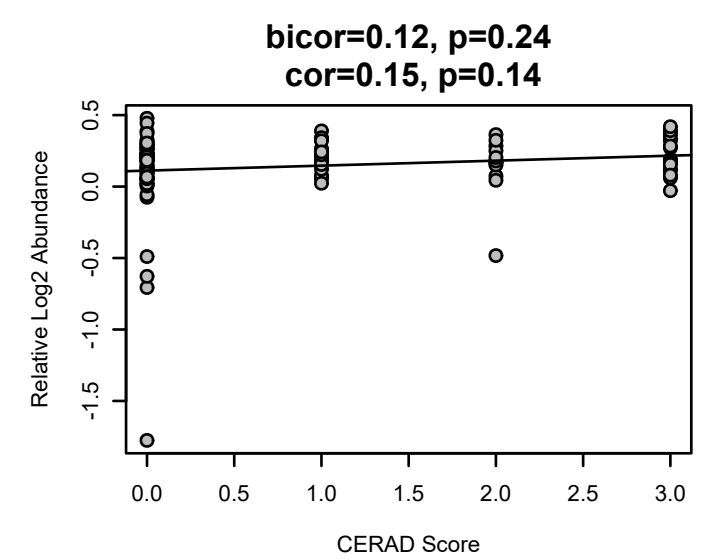
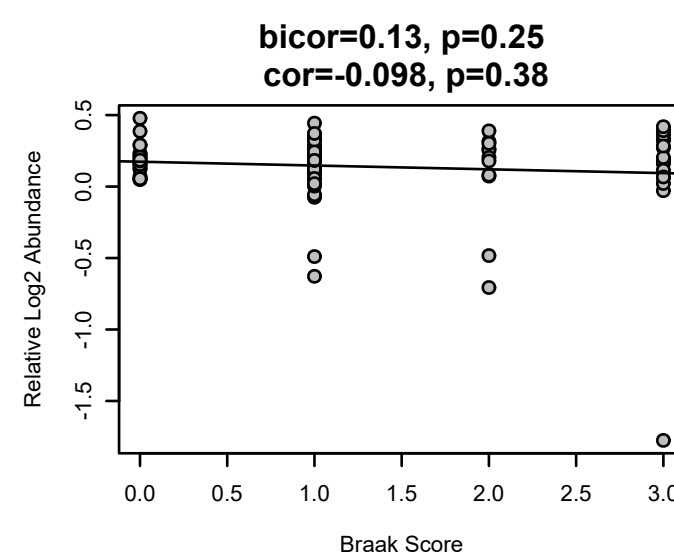
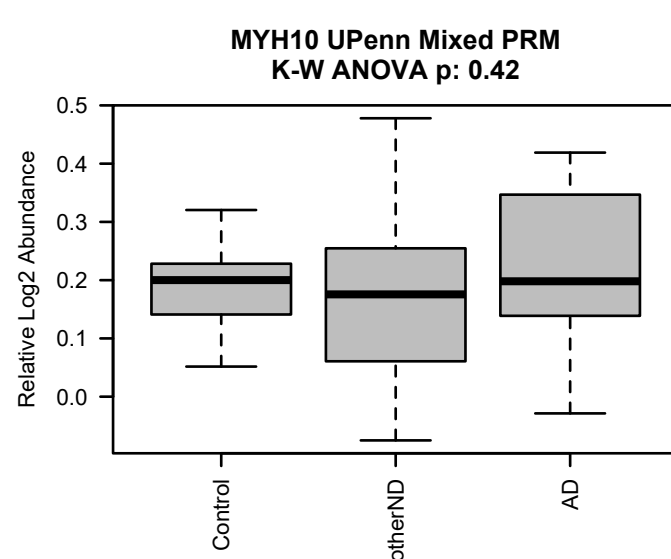
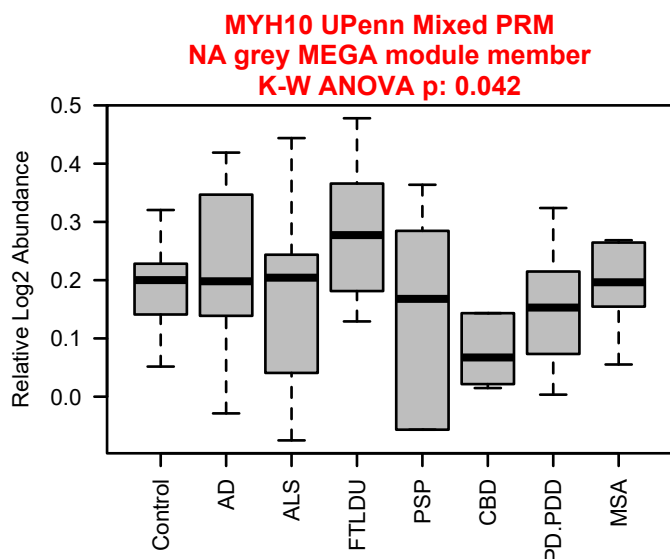
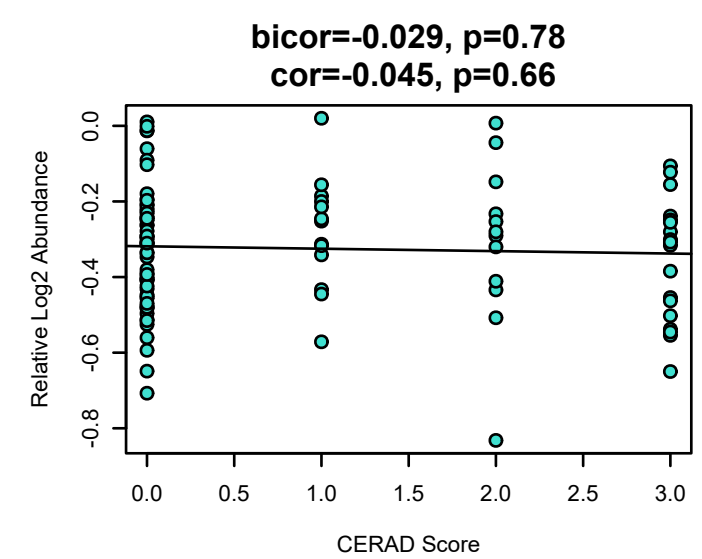
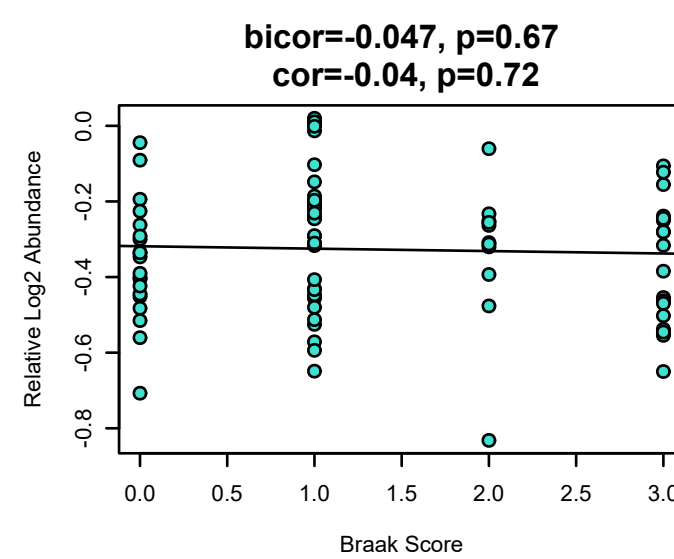
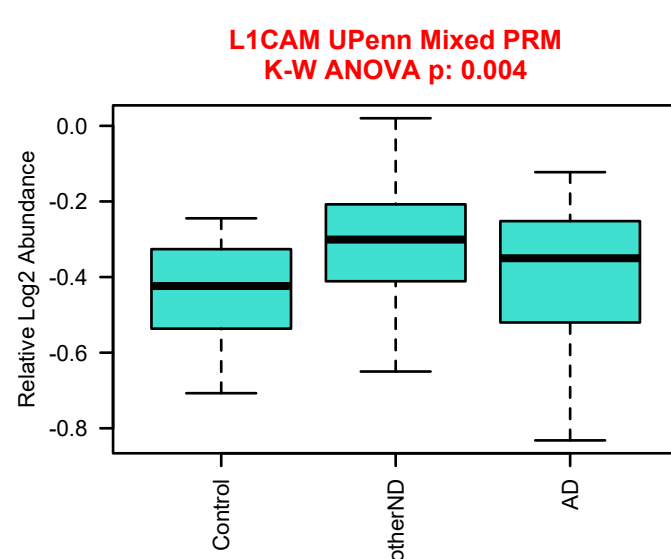
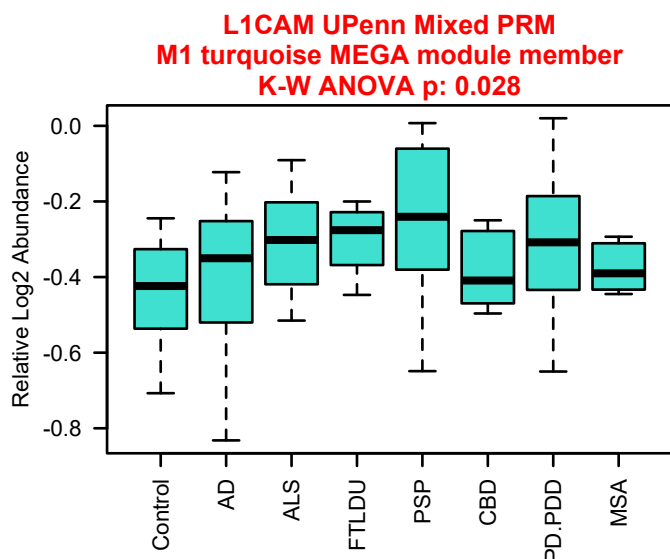
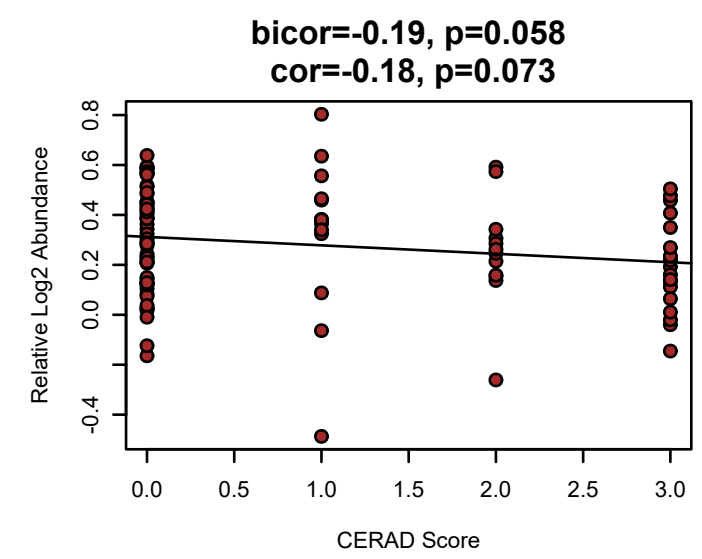
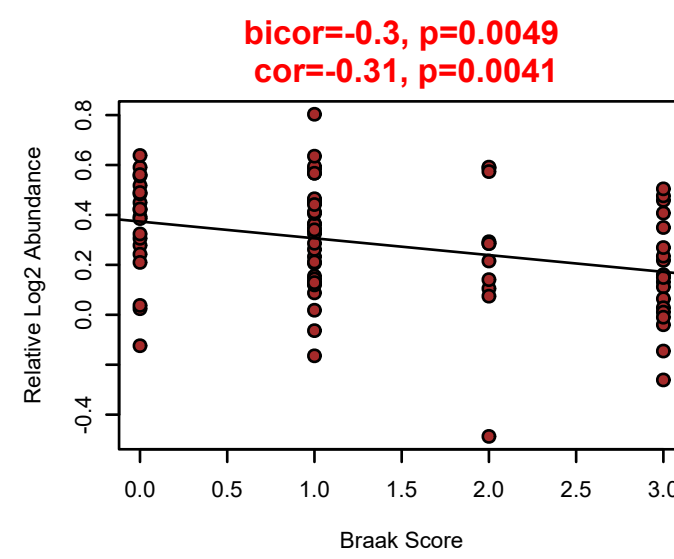
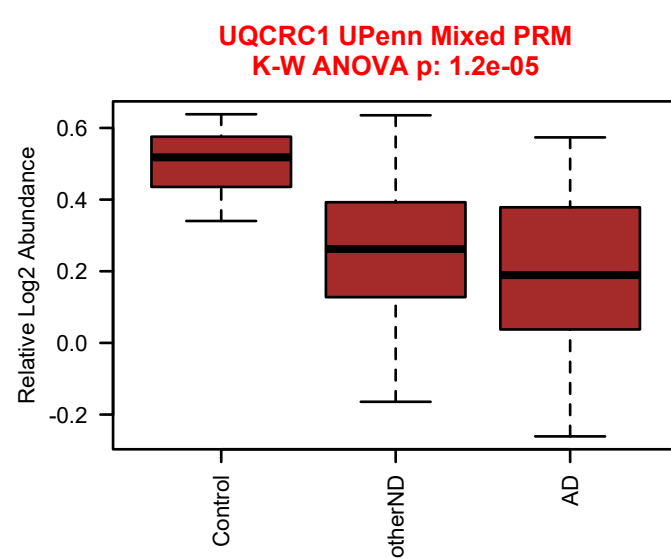
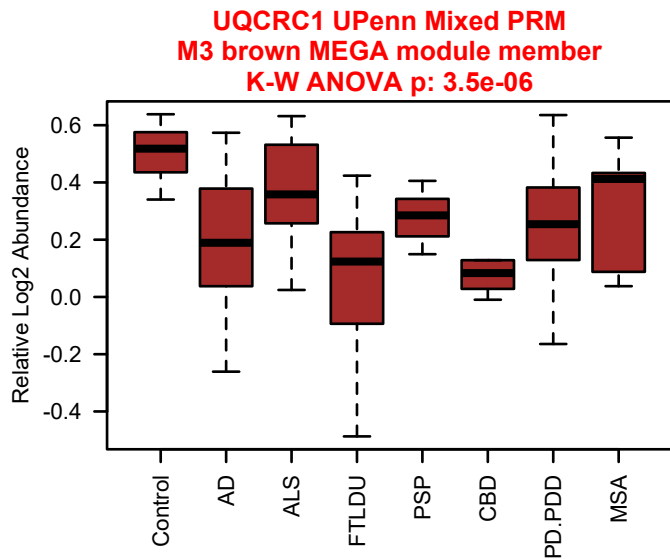


bicor=0.43, p=4.1e-05
cor=0.46, p=1.1e-05

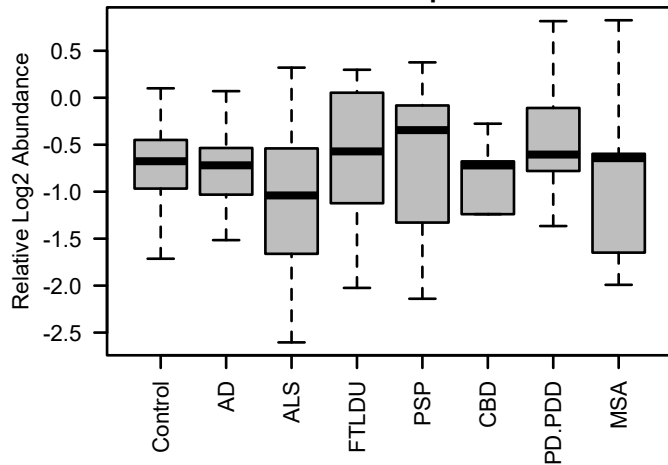


bicor=0.33, p=0.00096
cor=0.31, p=0.0017

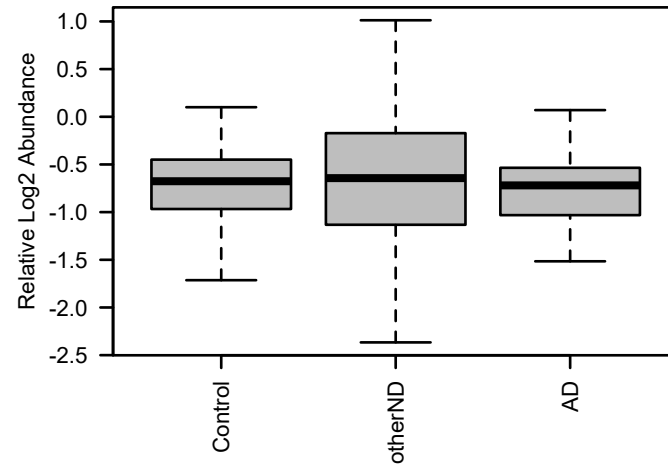




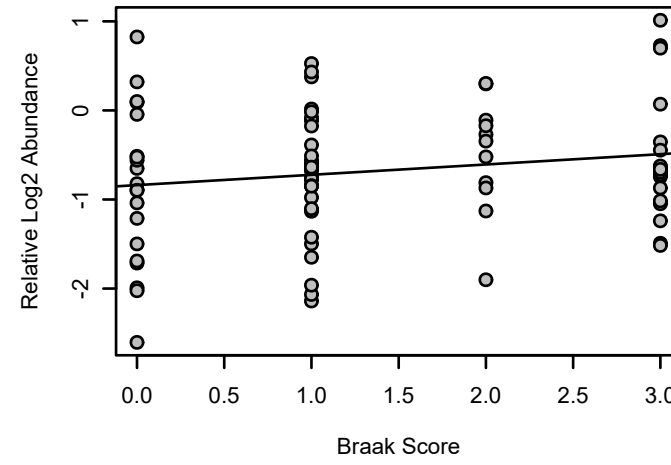
KRT2 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.32



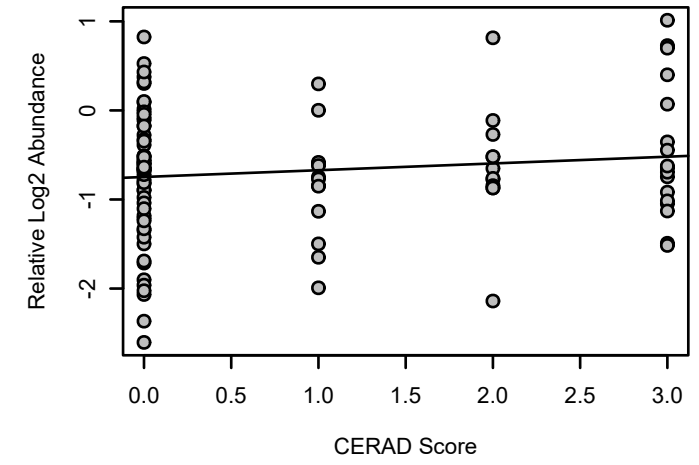
KRT2 UPenn Mixed PRM
K-W ANOVA p: 0.99



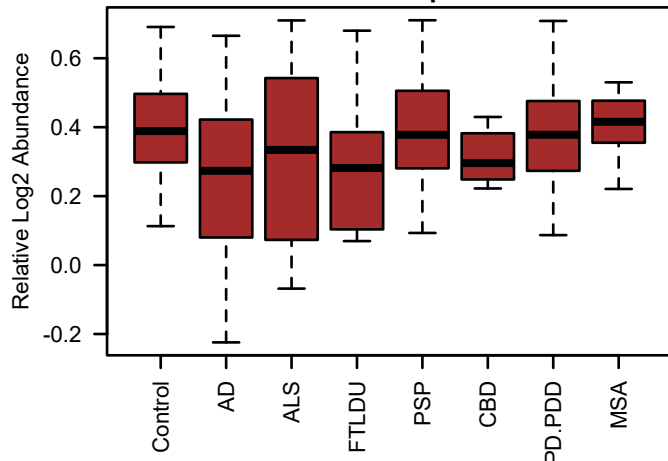
bicor=0.12, p=0.26
cor=0.17, p=0.12



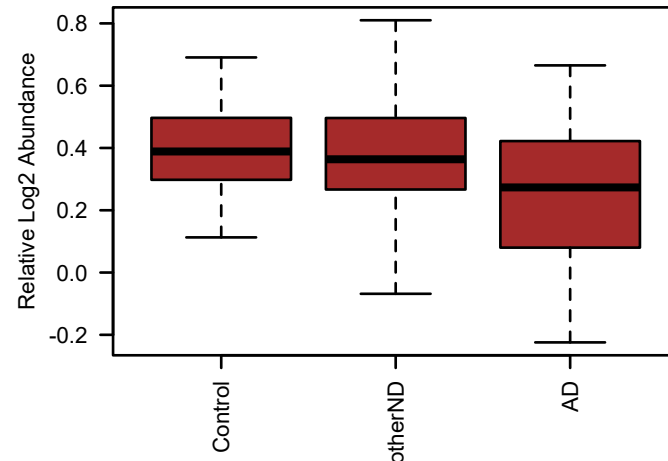
bicor=0.085, p=0.4
cor=0.12, p=0.23



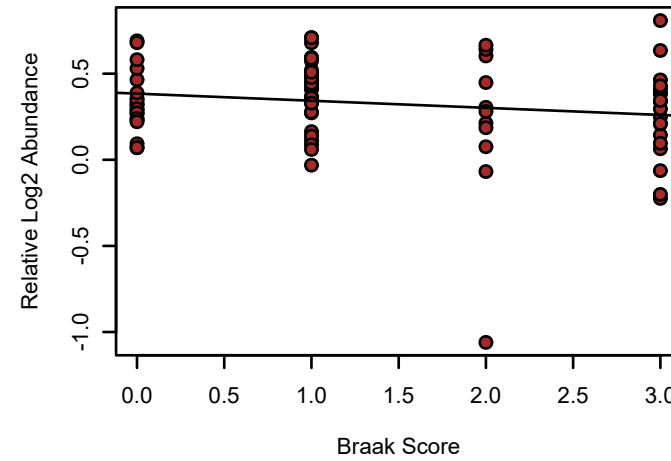
ATP5C1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.16



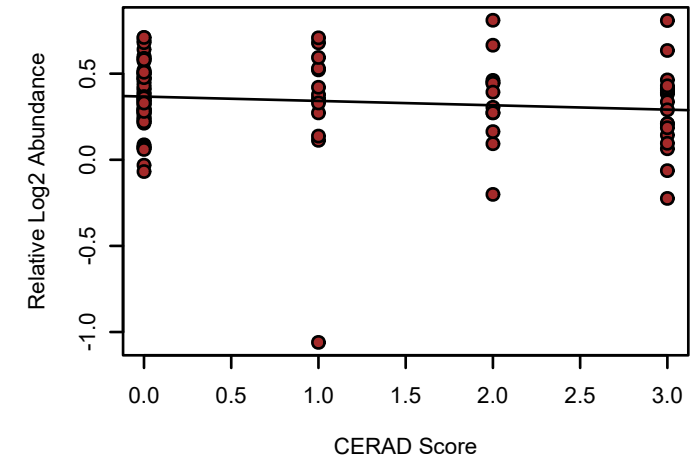
ATP5C1 UPenn Mixed PRM
K-W ANOVA p: 0.2



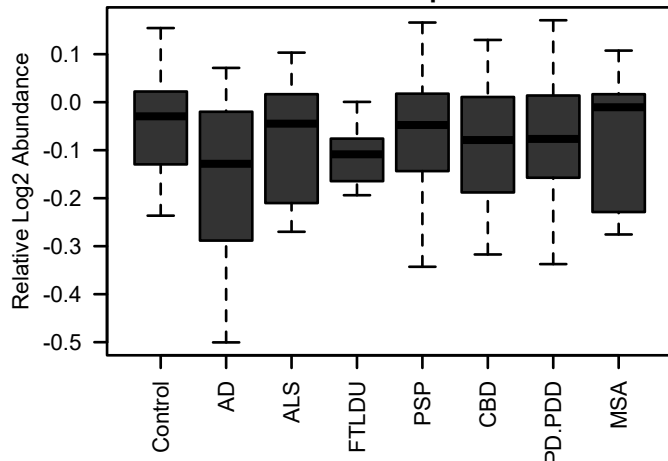
bicor=-0.12, p=0.26
cor=-0.17, p=0.12



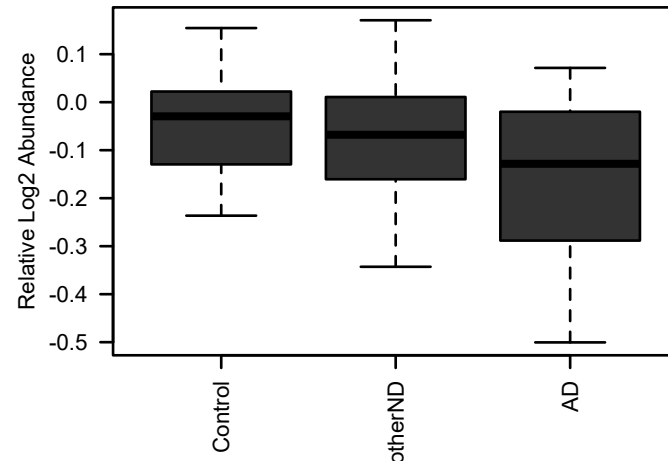
bicor=-0.13, p=0.18
cor=-0.12, p=0.23



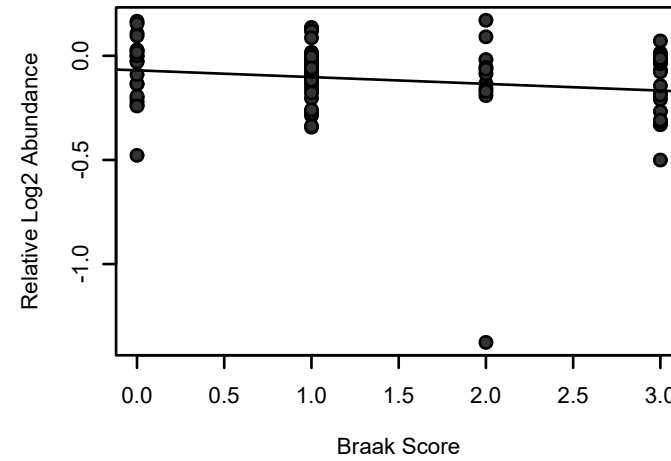
ATP6V1E2 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.21



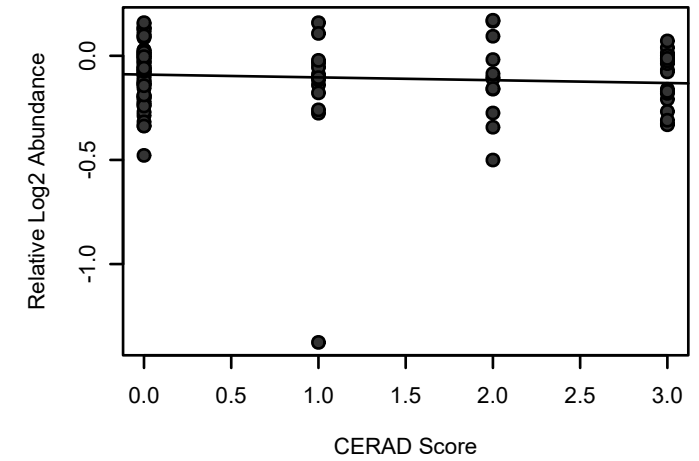
ATP6V1E2 UPenn Mixed PRM
K-W ANOVA p: 0.37



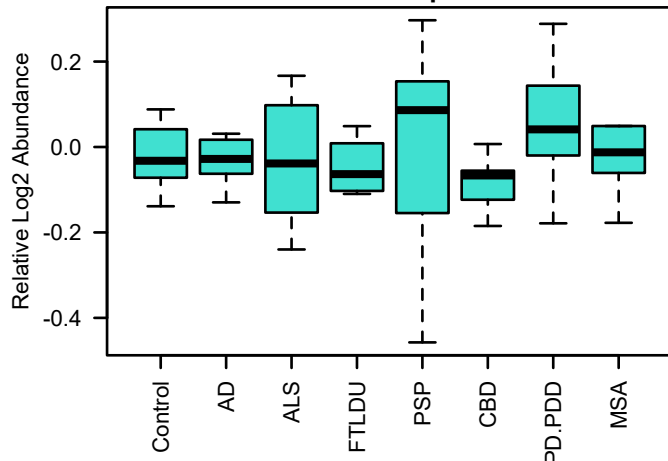
bicor=-0.18, p=0.096
cor=-0.18, p=0.1



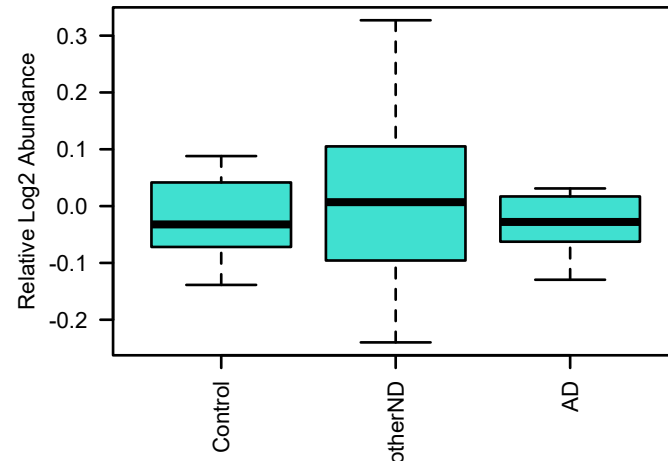
bicor=-0.1, p=0.31
cor=-0.083, p=0.41



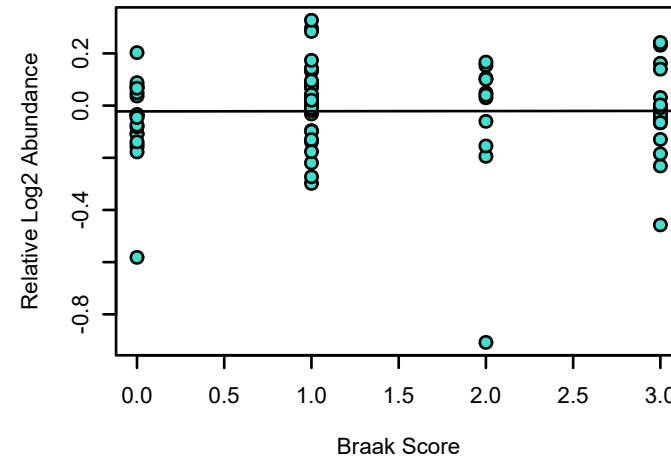
ATP6V1A UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.15



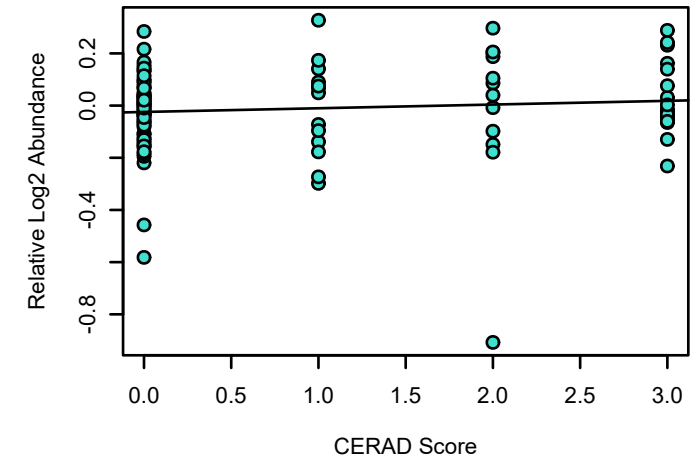
ATP6V1A UPenn Mixed PRM
K-W ANOVA p: 0.31



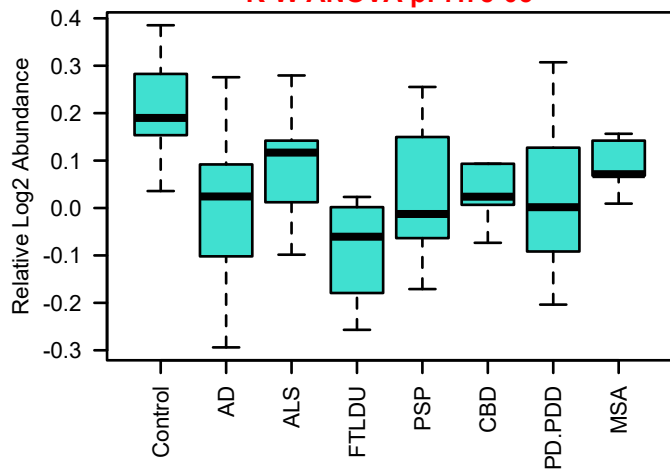
bicor=0.052, p=0.64
cor=0.0036, p=0.97



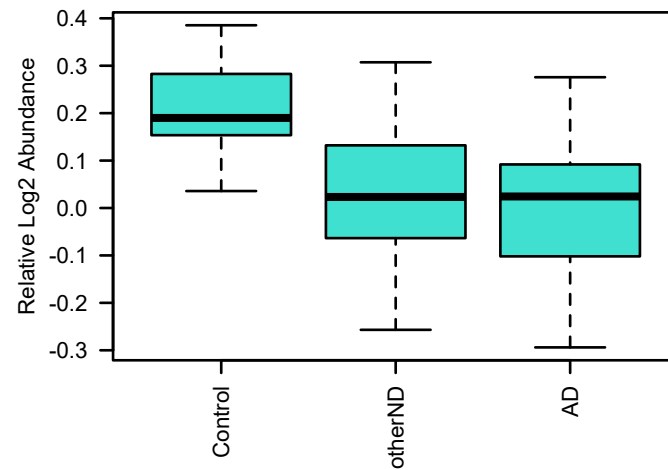
bicor=0.14, p=0.15
cor=0.097, p=0.34



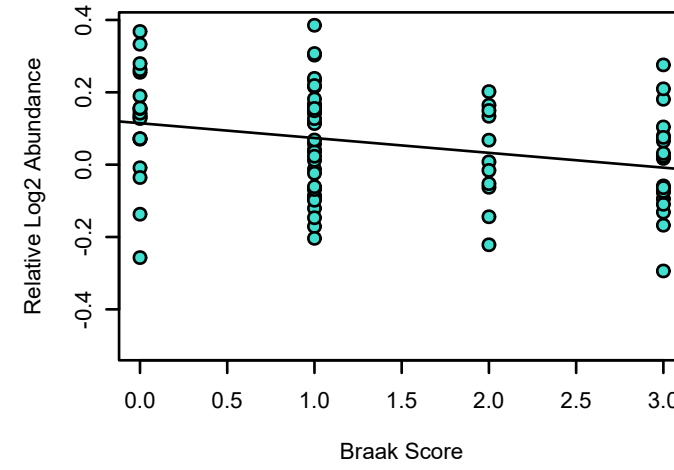
GRIA2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 7.7e-05



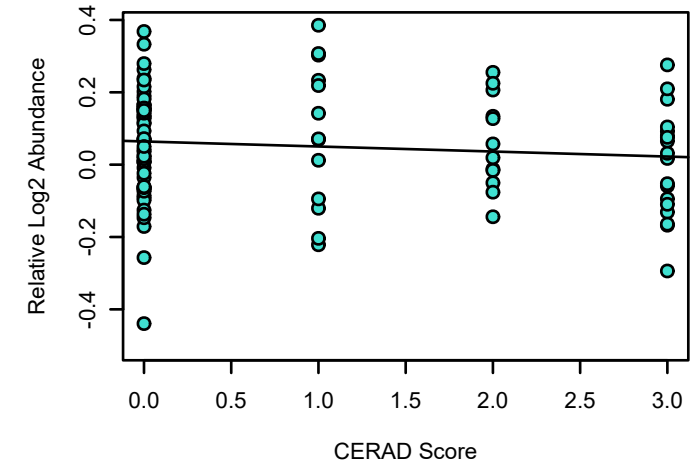
GRIA2 UPenn Mixed PRM
K-W ANOVA p: 3.4e-05



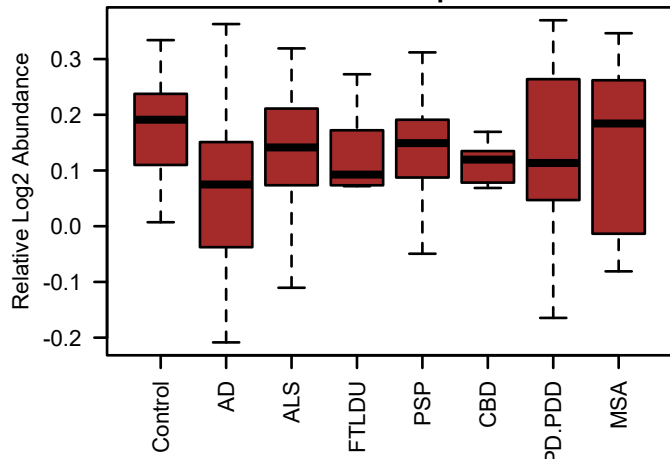
bicor=-0.3, p=0.005
cor=-0.29, p=0.0075



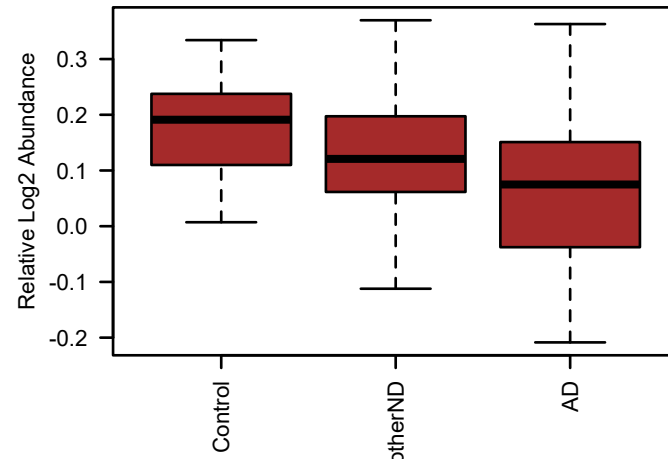
bicor=-0.12, p=0.25
cor=-0.11, p=0.28



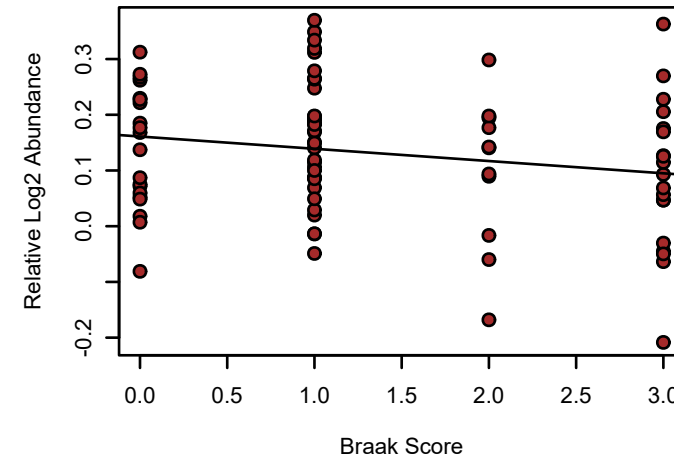
UQCRFS1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.5



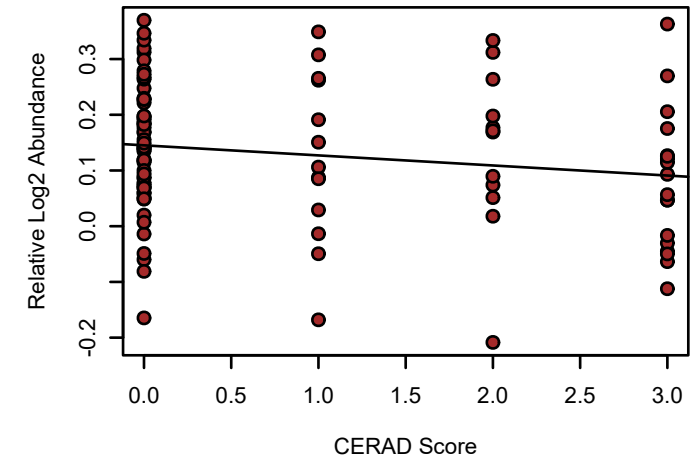
UQCRFS1 UPenn Mixed PRM
K-W ANOVA p: 0.059



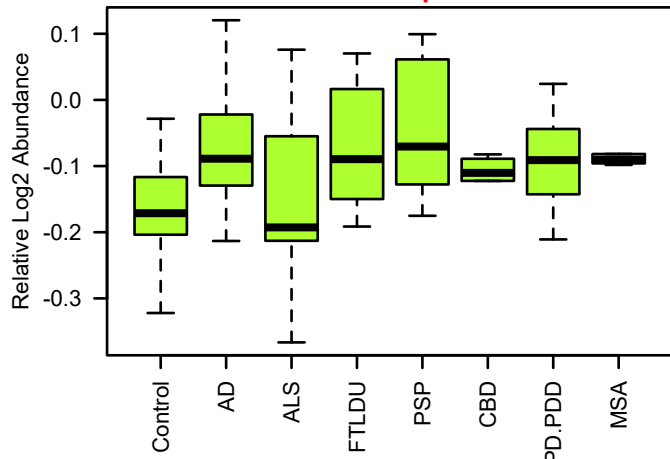
bicor=-0.19, p=0.085
cor=-0.2, p=0.068



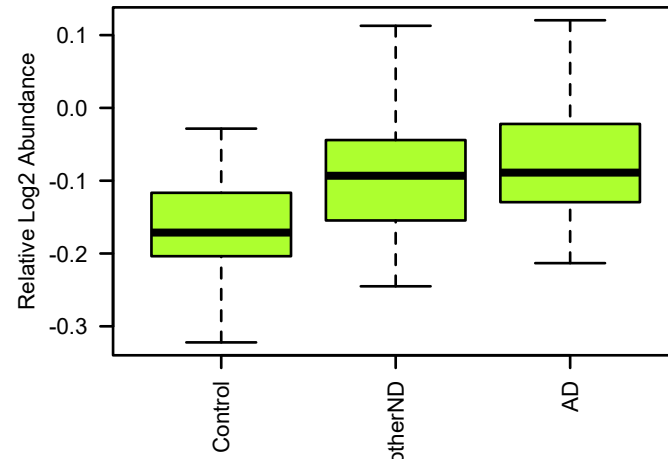
bicor=-0.18, p=0.075
cor=-0.17, p=0.091



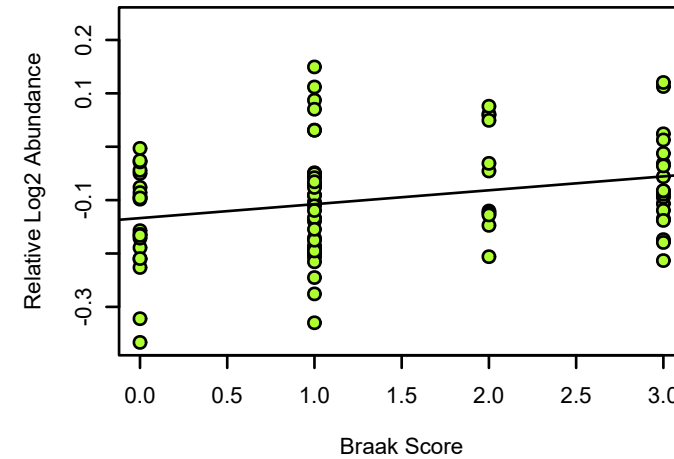
CCT5 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.017



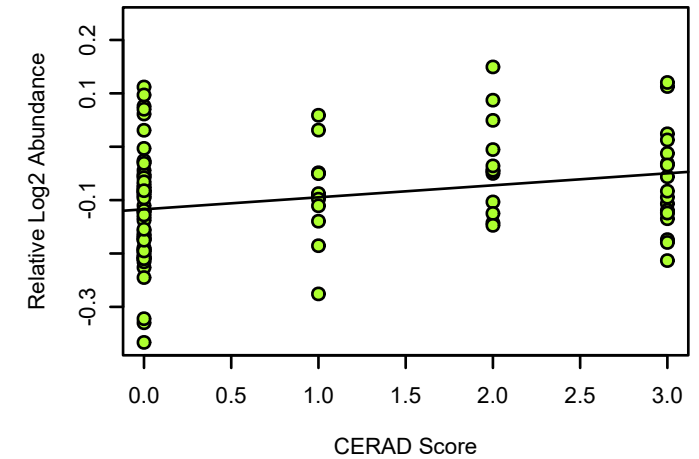
CCT5 UPenn Mixed PRM
K-W ANOVA p: 0.042



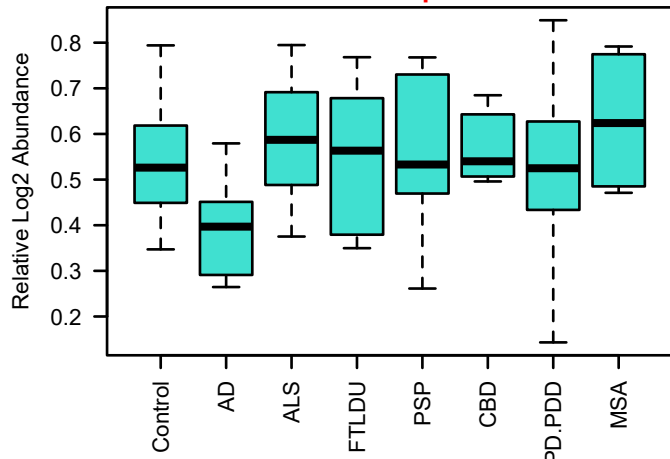
bicor=0.24, p=0.025
cor=0.27, p=0.013



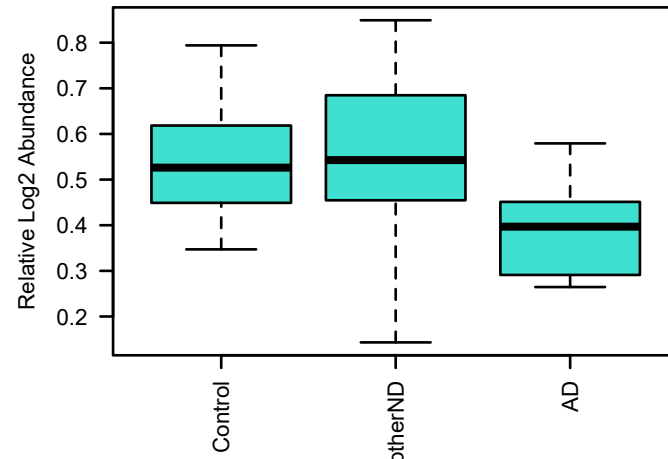
bicor=0.26, p=0.0084
cor=0.27, p=0.0066



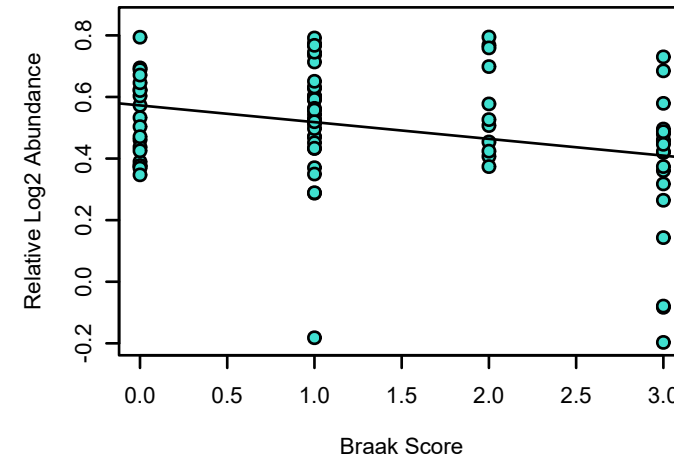
IDH2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.001



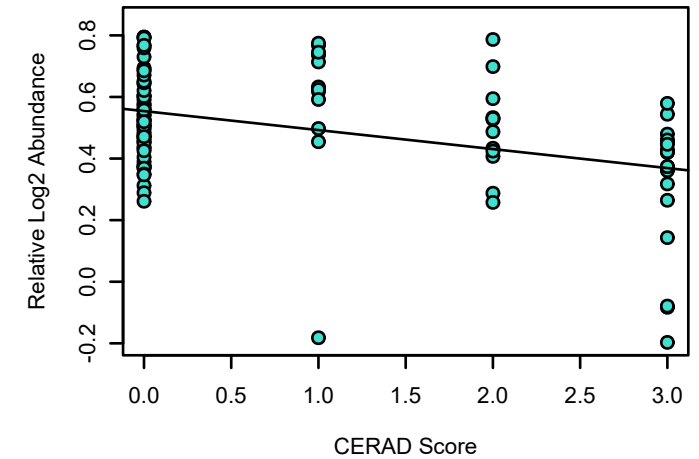
IDH2 UPenn Mixed PRM
K-W ANOVA p: 2.4e-05



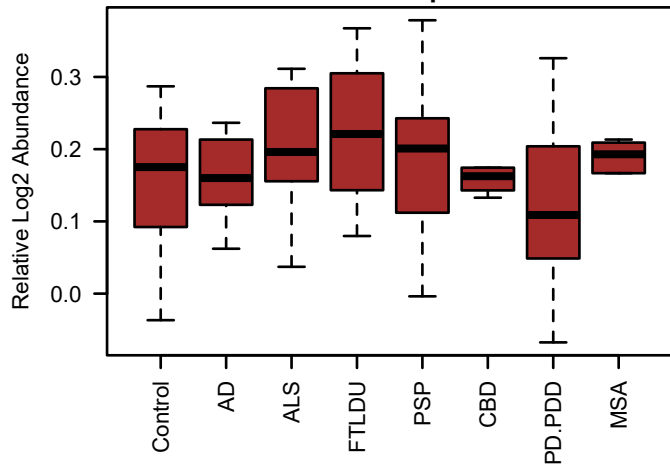
bicor=-0.22, p=0.049
cor=-0.29, p=0.0075



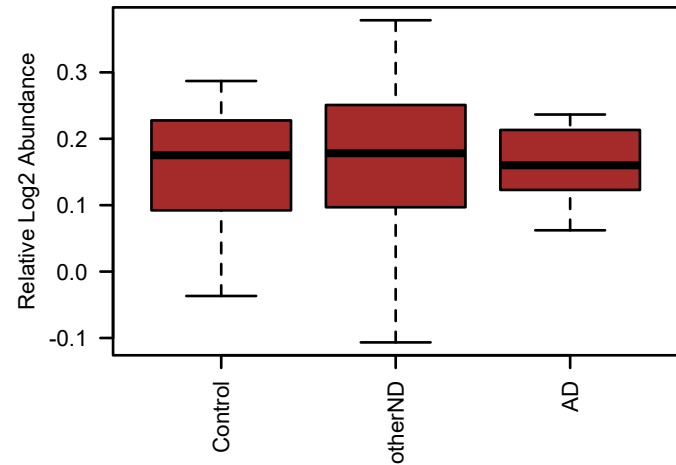
bicor=-0.33, p=0.00071
cor=-0.38, p=9.6e-05



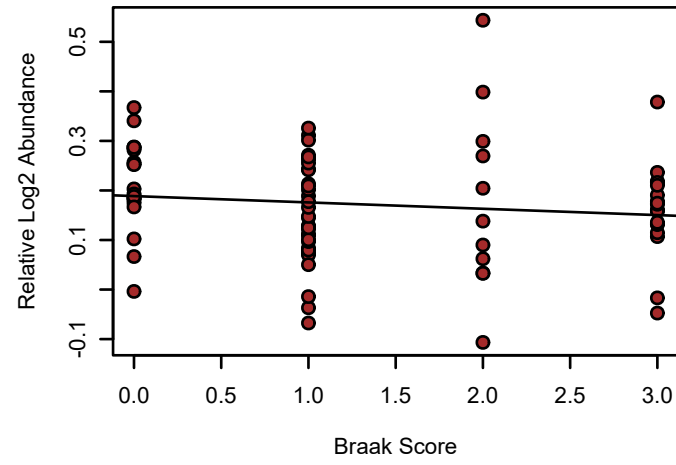
TUFM UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.13



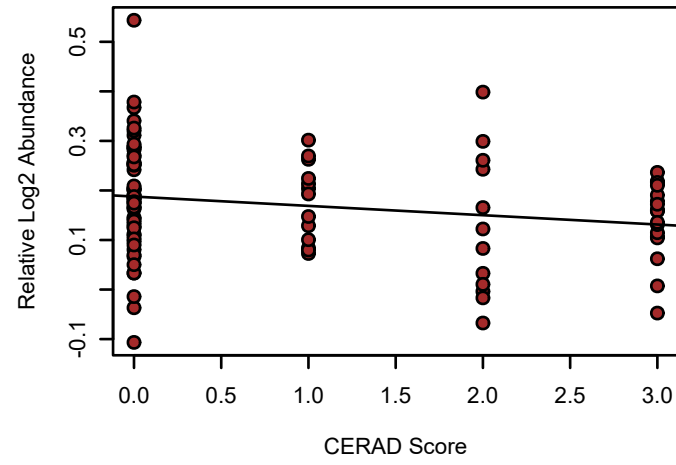
TUFM UPenn Mixed PRM
K-W ANOVA p: 0.88



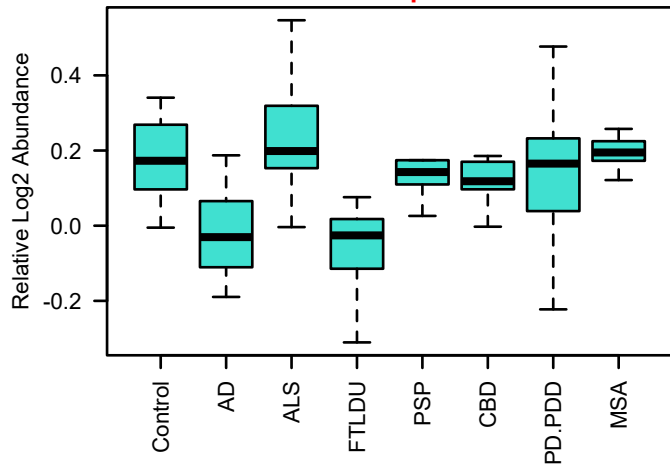
bicor=-0.16, p=0.15
cor=-0.12, p=0.28



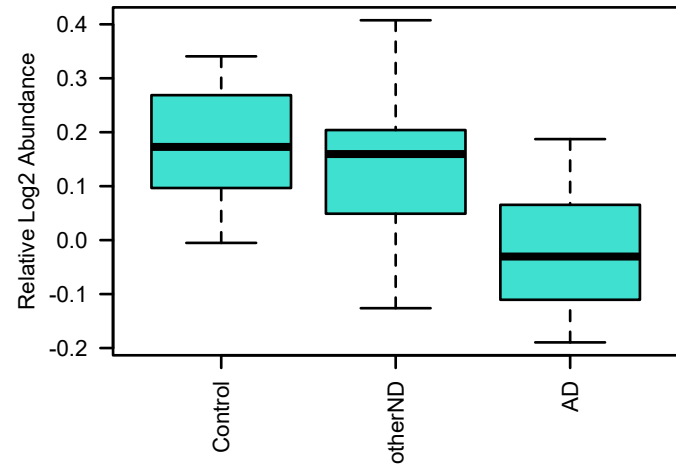
bicor=-0.21, p=0.036
cor=-0.21, p=0.036



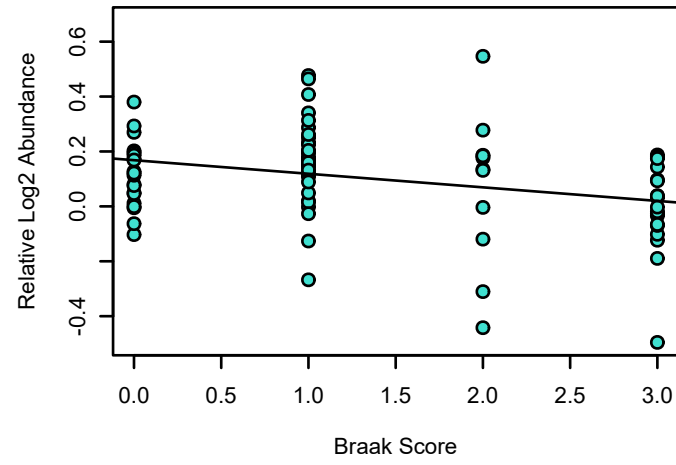
RGS7 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 1.1e-05



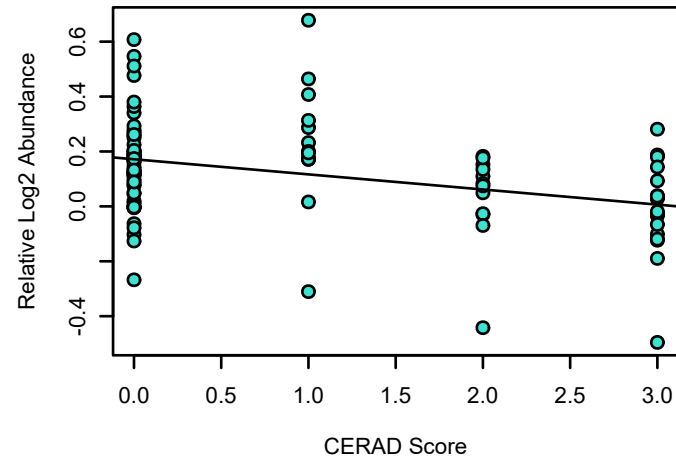
RGS7 UPenn Mixed PRM
K-W ANOVA p: 0.00012



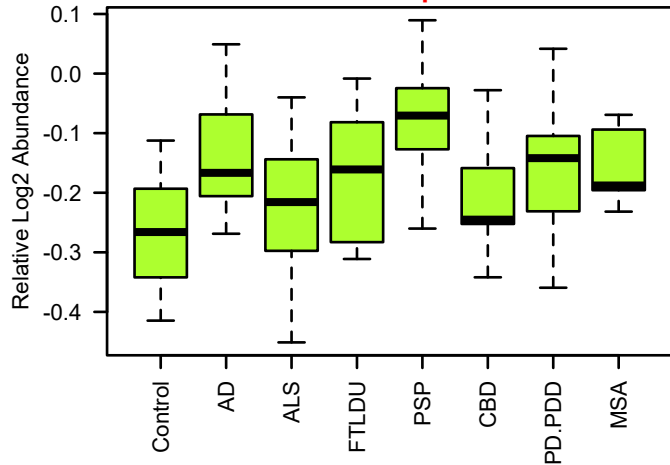
bicor=-0.3, p=0.0054
cor=-0.3, p=0.0056



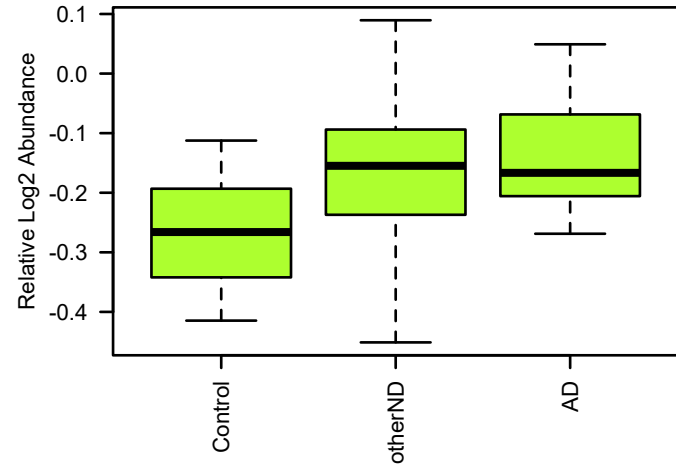
bicor=-0.35, p=0.00036
cor=-0.35, p=0.00036



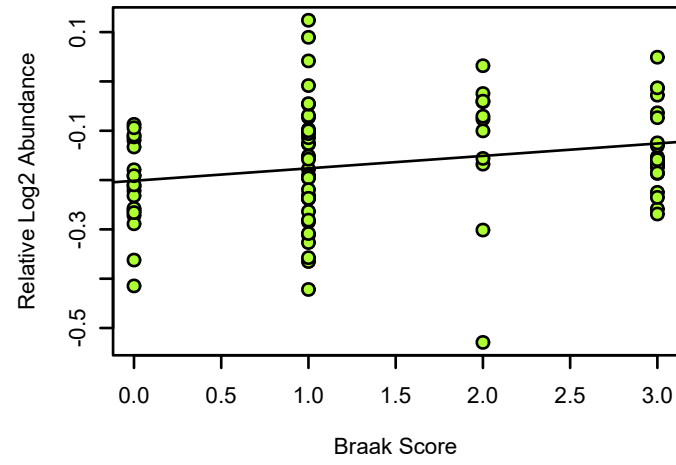
CCT8 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 6e-04



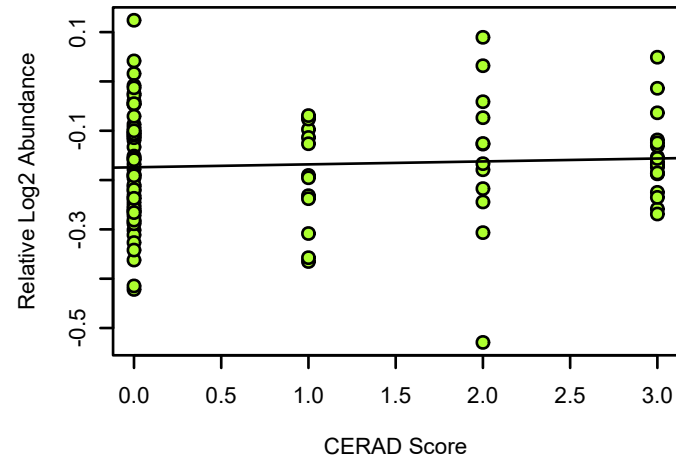
CCT8 UPenn Mixed PRM
K-W ANOVA p: 0.003



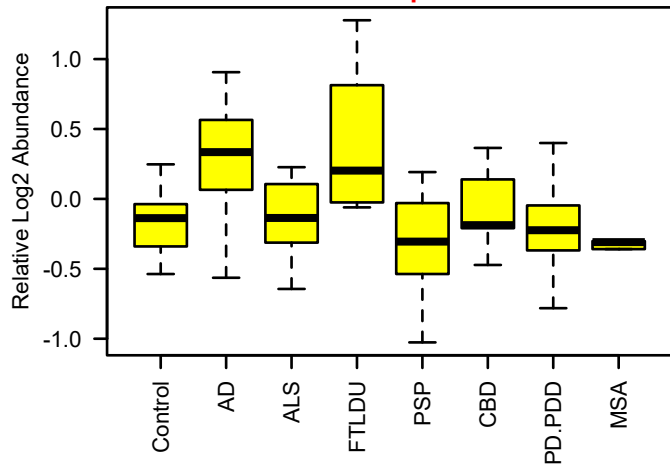
bicor=0.26, p=0.019
cor=0.23, p=0.035



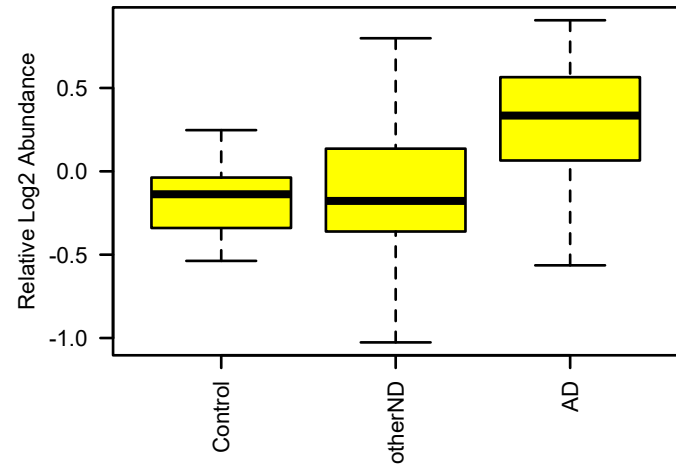
bicor=0.073, p=0.47
cor=0.062, p=0.54



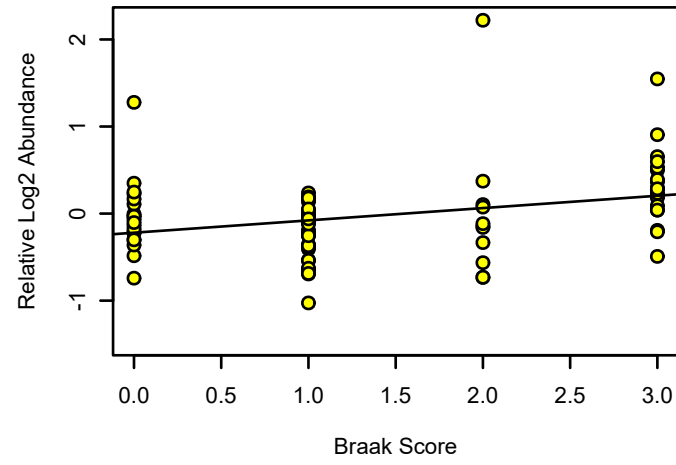
PLCD1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 5.3e-06



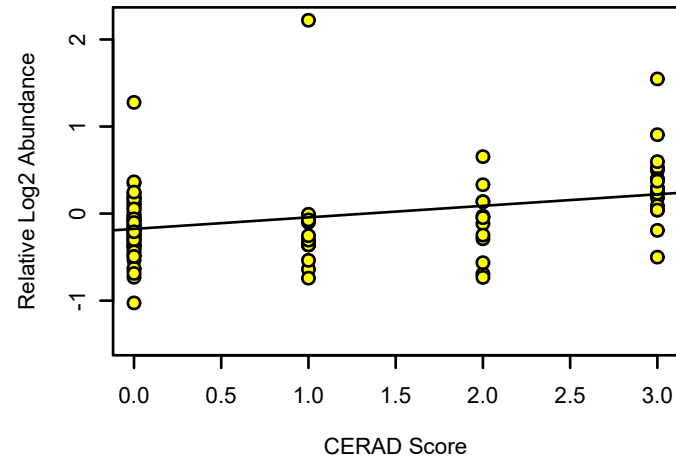
PLCD1 UPenn Mixed PRM
K-W ANOVA p: 0.00045



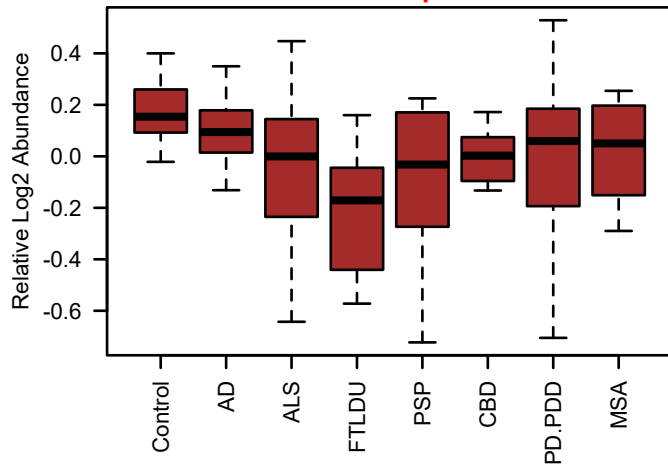
bicor=0.31, p=0.0046
cor=0.31, p=0.0041



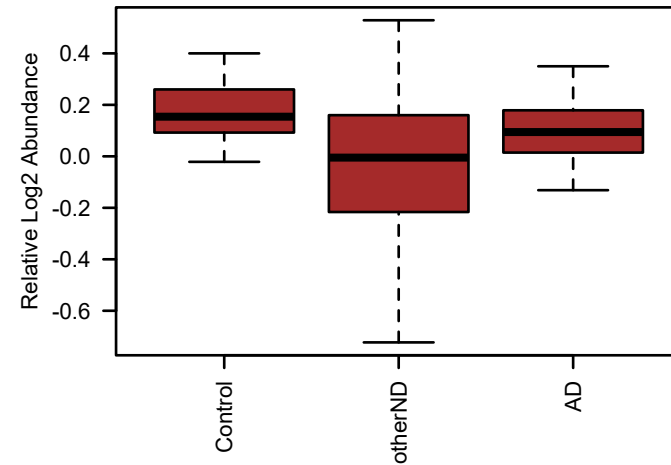
bicor=0.39, p=6.3e-05
cor=0.34, p=0.00054



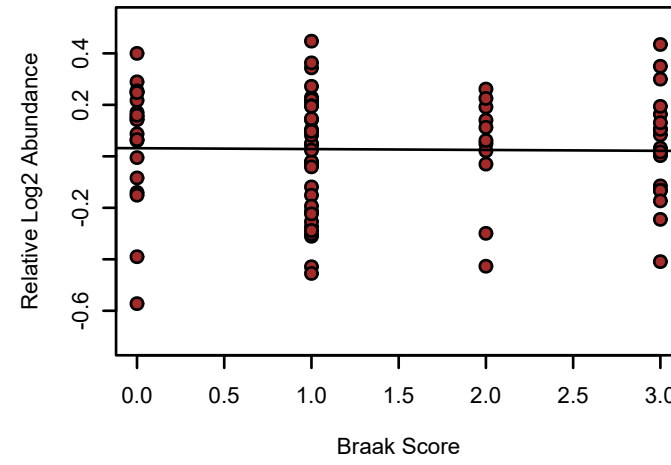
NDUFA8 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.011



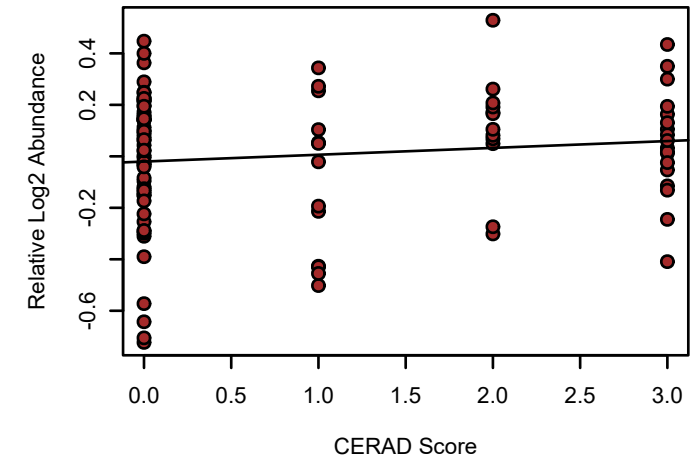
NDUFA8 UPenn Mixed PRM
K-W ANOVA p: 0.0019



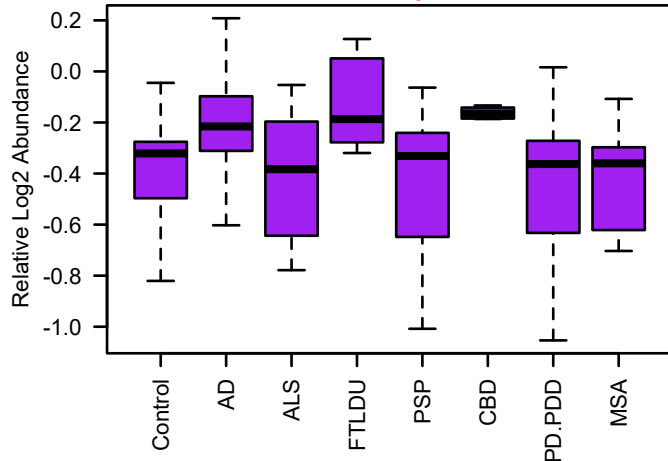
bicor=-0.076, p=0.49
cor=-0.016, p=0.89



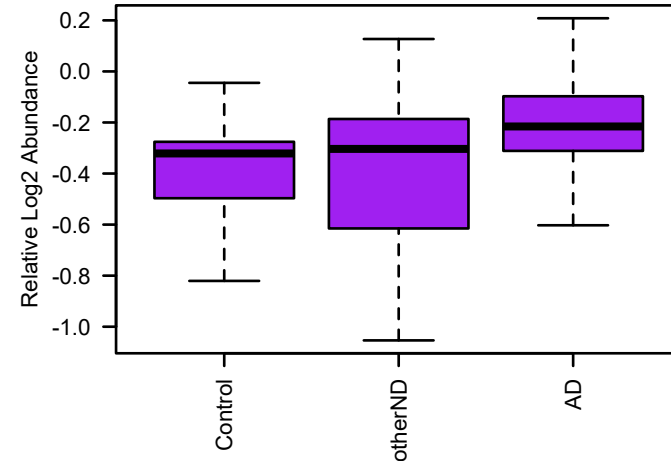
bicor=0.1, p=0.32
cor=0.12, p=0.23



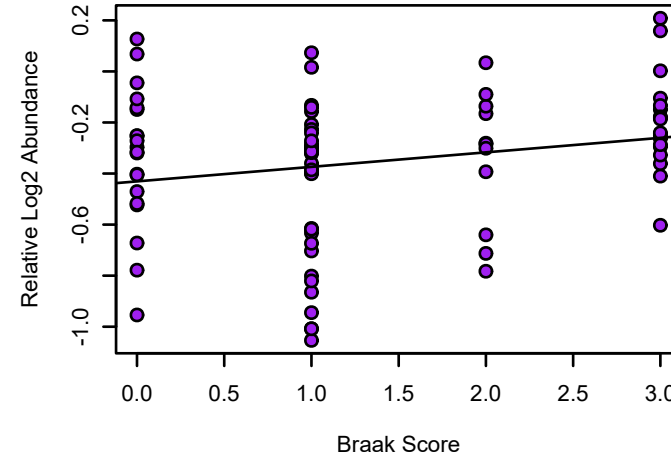
HNRNPA3 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.0052



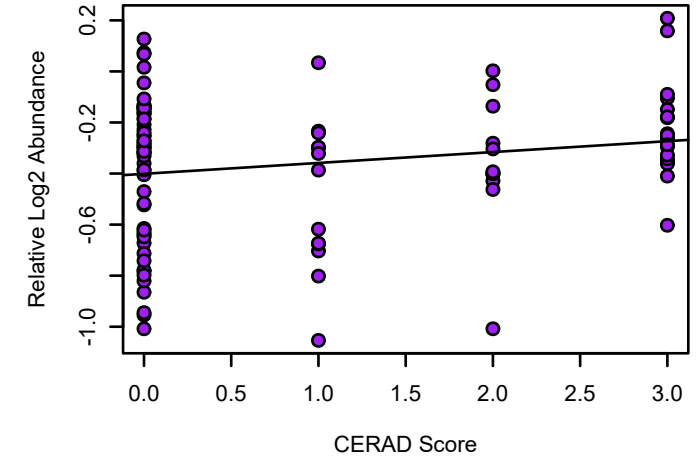
HNRNPA3 UPenn Mixed PRM
K-W ANOVA p: 0.031



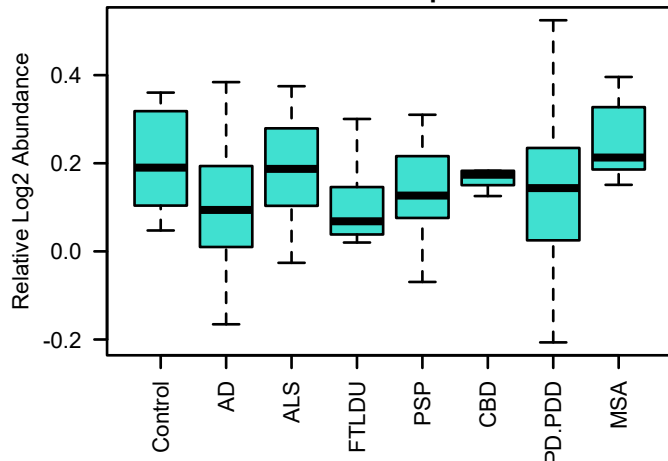
bicor=0.16, p=0.14
cor=0.22, p=0.044



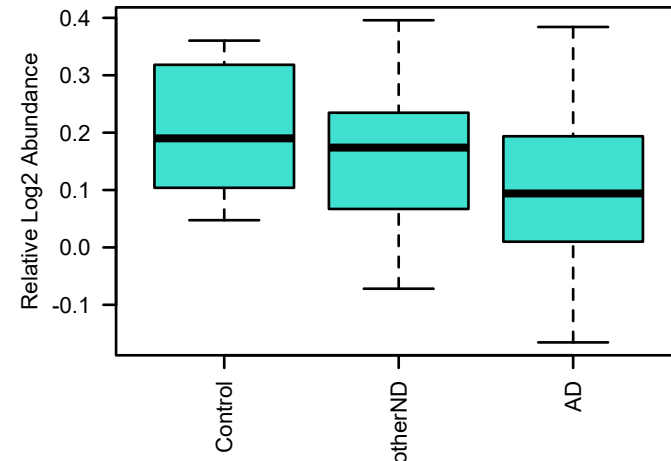
bicor=0.17, p=0.085
cor=0.19, p=0.058



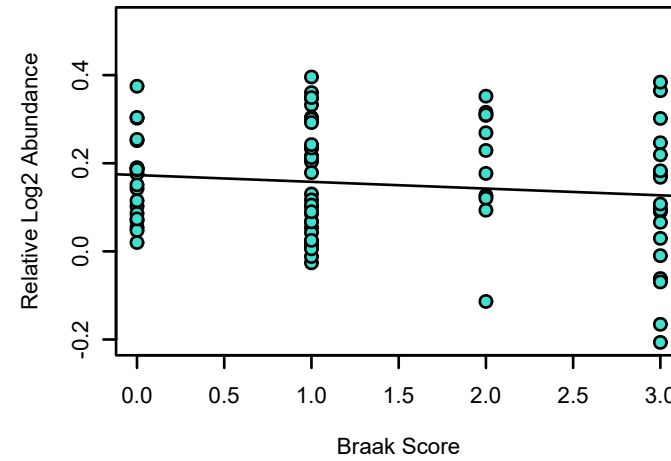
CACNA2D1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.11



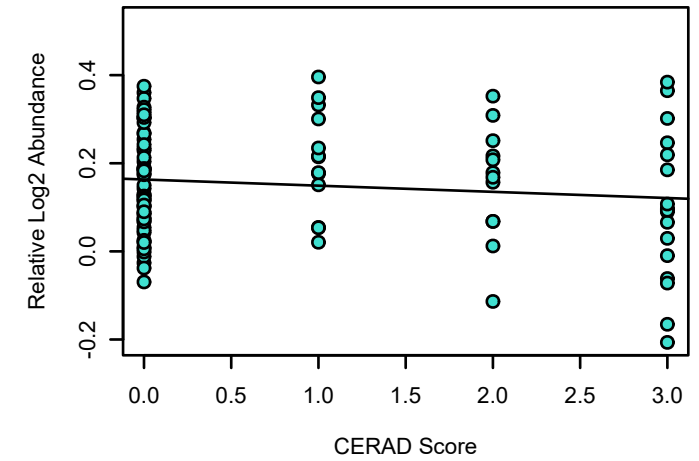
CACNA2D1 UPenn Mixed PRM
K-W ANOVA p: 0.061



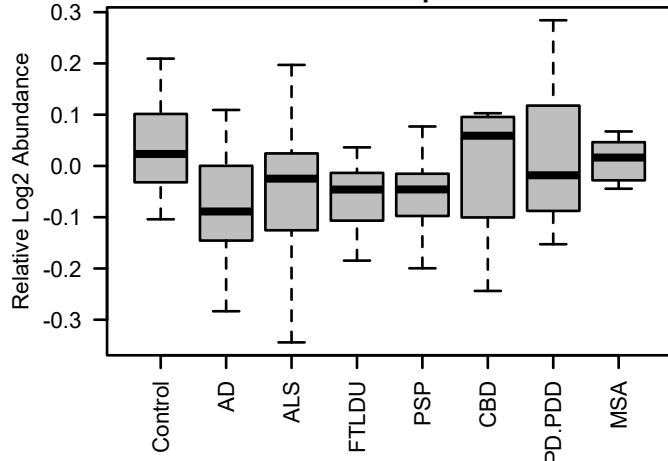
bicor=-0.079, p=0.47
cor=-0.13, p=0.24



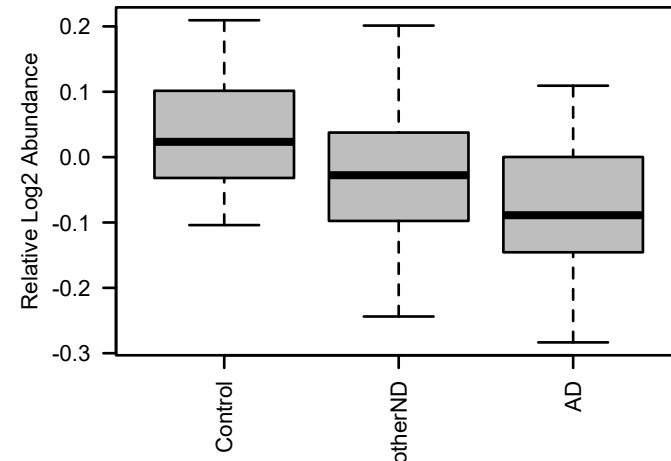
bicor=-0.11, p=0.29
cor=-0.13, p=0.2



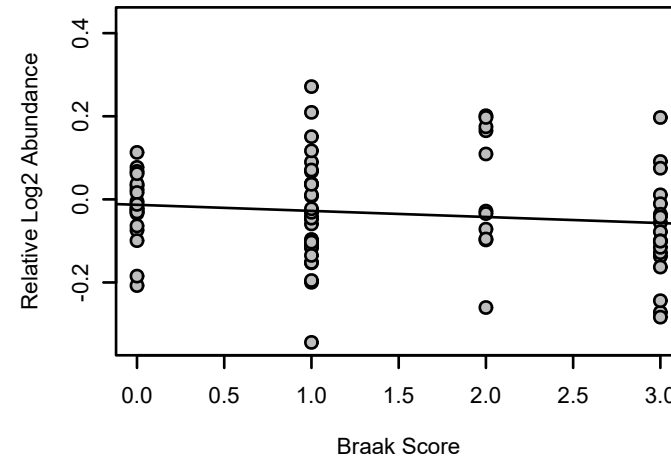
YARS UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.067



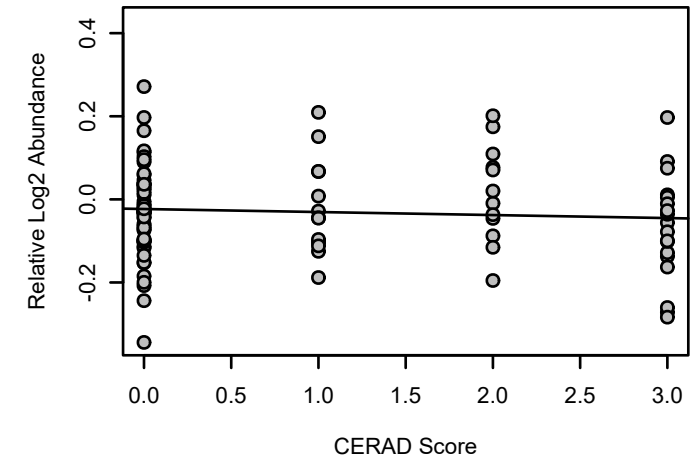
YARS UPenn Mixed PRM
K-W ANOVA p: 0.047



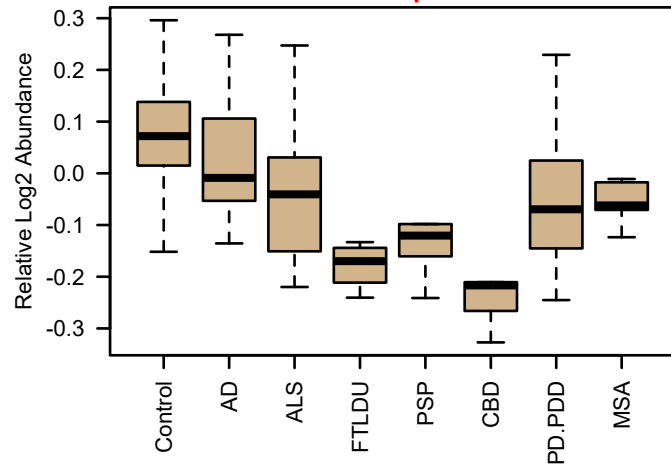
bicor=-0.14, p=0.21
cor=-0.13, p=0.24



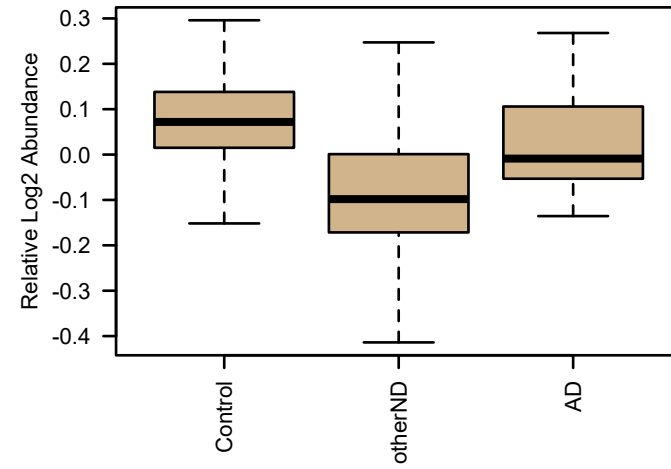
bicor=-0.074, p=0.47
cor=-0.076, p=0.45



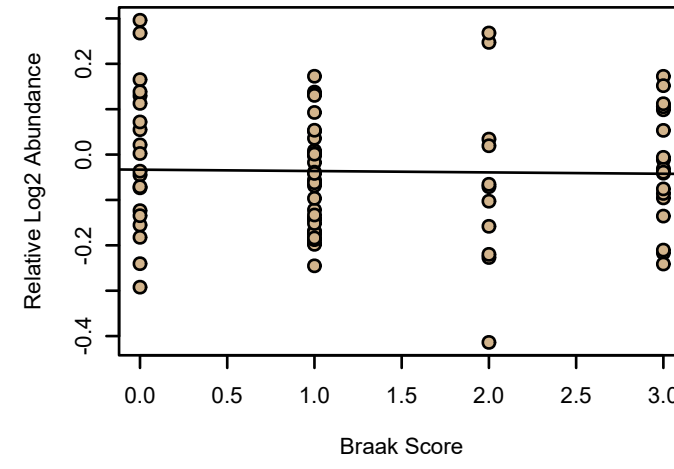
NAPA UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 7.2e-06



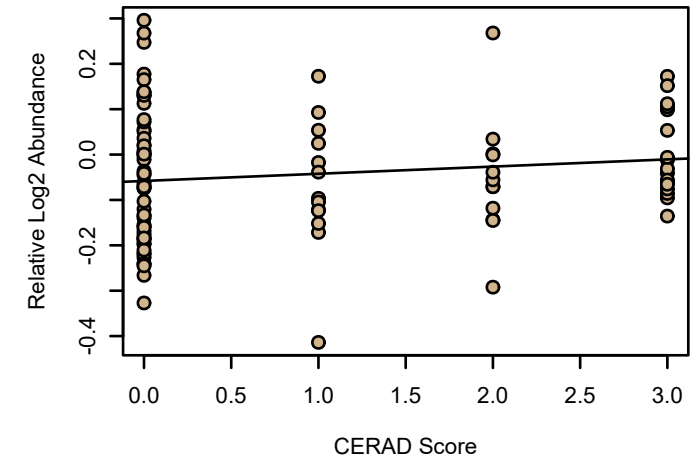
NAPA UPenn Mixed PRM
K-W ANOVA p: 7e-06



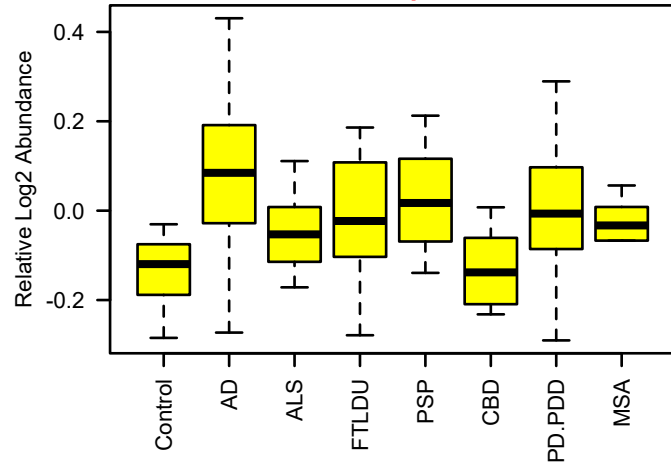
bicor=-0.01, p=0.93
cor=-0.023, p=0.84



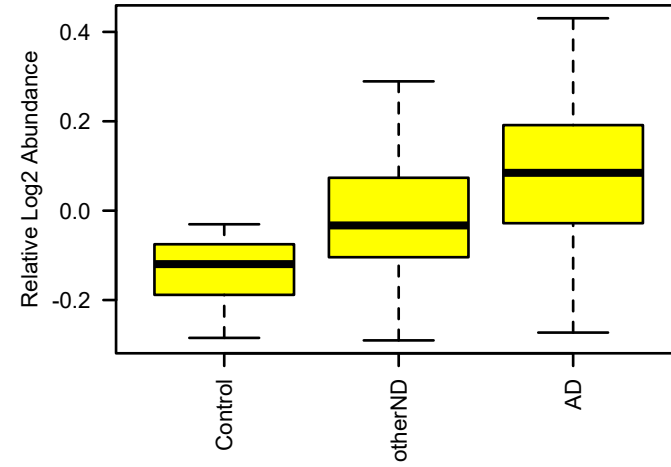
bicor=0.15, p=0.13
cor=0.14, p=0.16



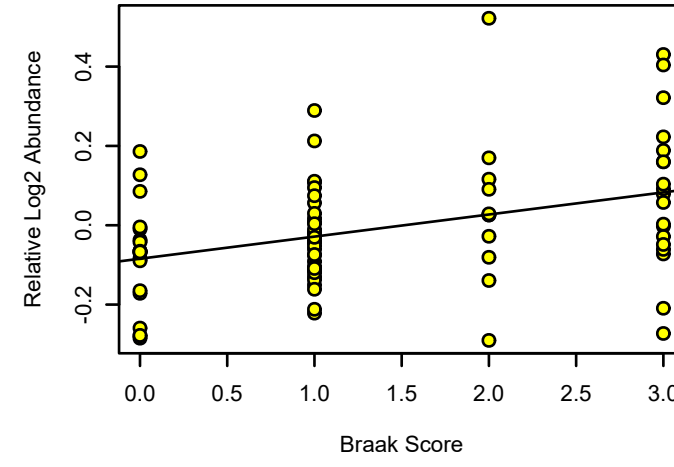
VCP UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.00057



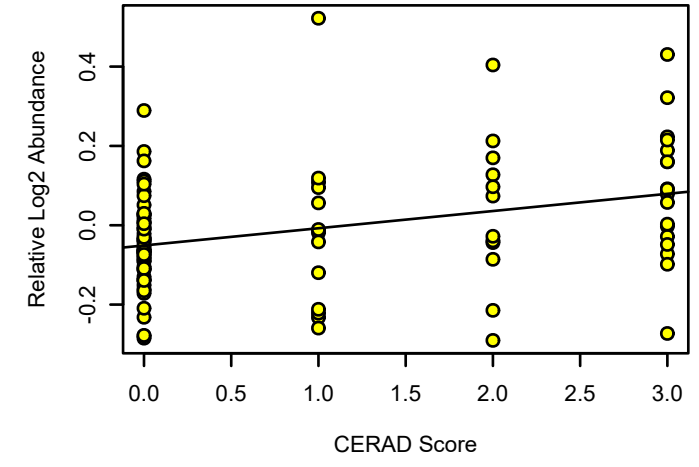
VCP UPenn Mixed PRM
K-W ANOVA p: 5.9e-05



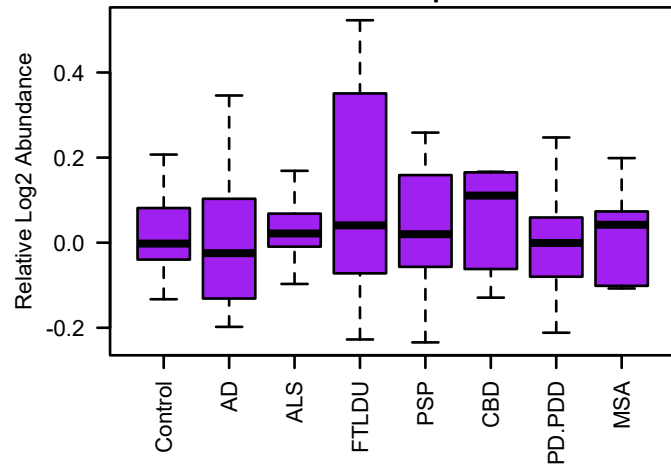
bicor=0.37, p=0.00051
cor=0.38, p=0.00036



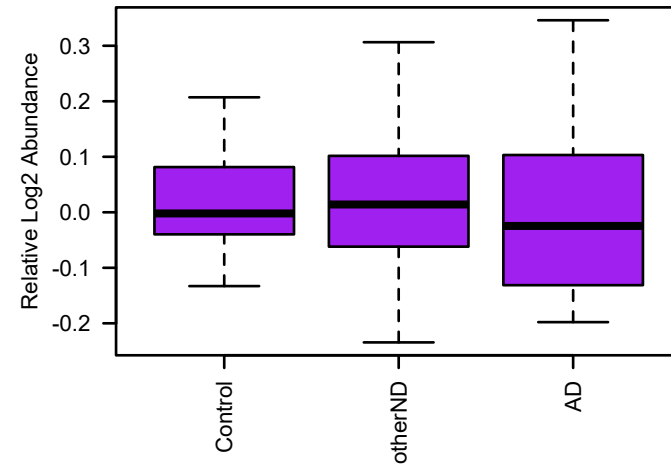
bicor=0.34, p=0.00062
cor=0.33, p=8e-04



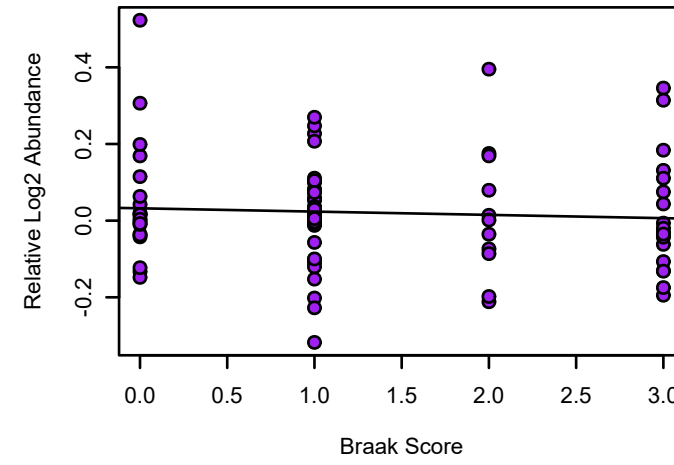
HNRNPH2 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.69



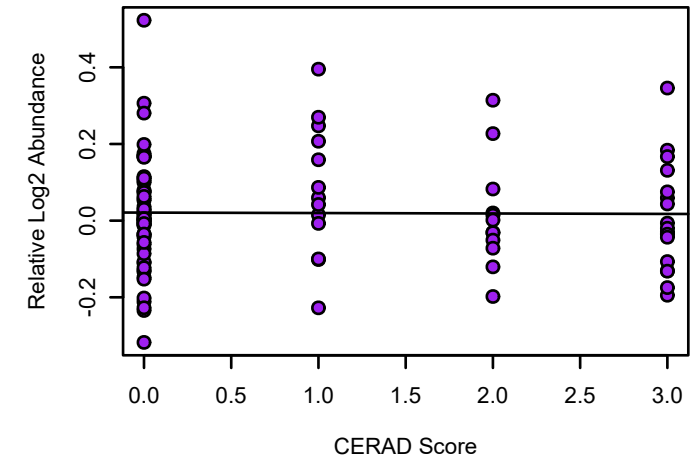
HNRNPH2 UPenn Mixed PRM
K-W ANOVA p: 0.82



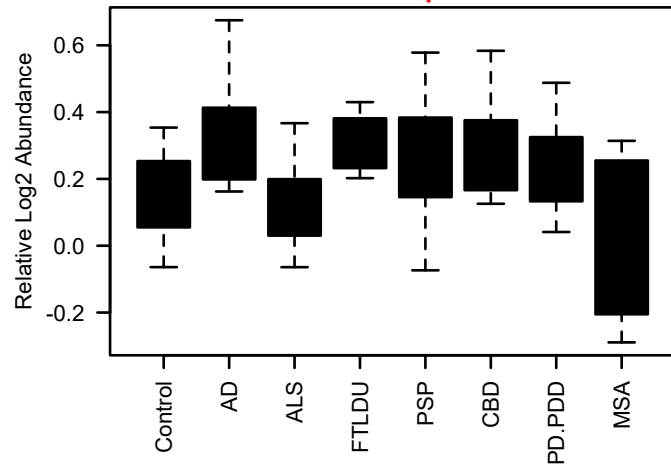
bicor=-0.045, p=0.69
cor=-0.063, p=0.57



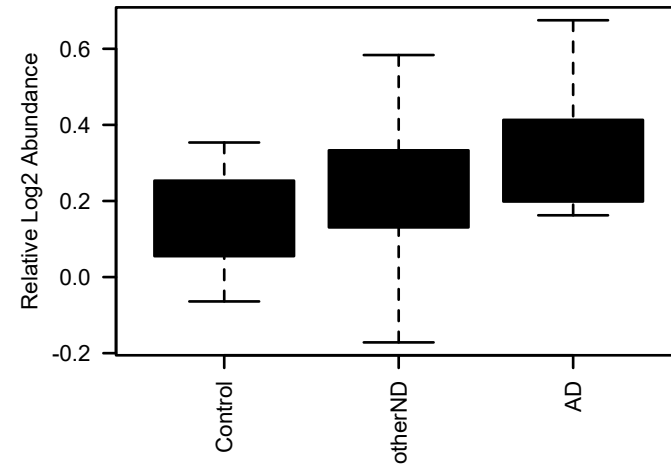
bicor=-0.017, p=0.87
cor=-0.0094, p=0.93



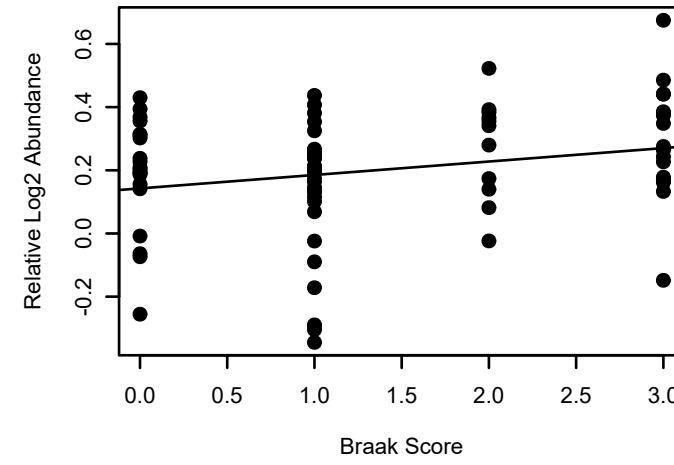
RPS3A UPenn Mixed PRM
M7 black MEGA module member
K-W ANOVA p: 0.015



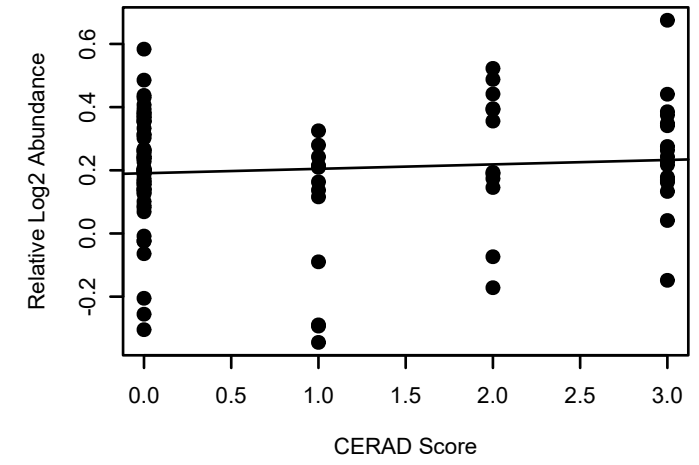
RPS3A UPenn Mixed PRM
K-W ANOVA p: 0.023



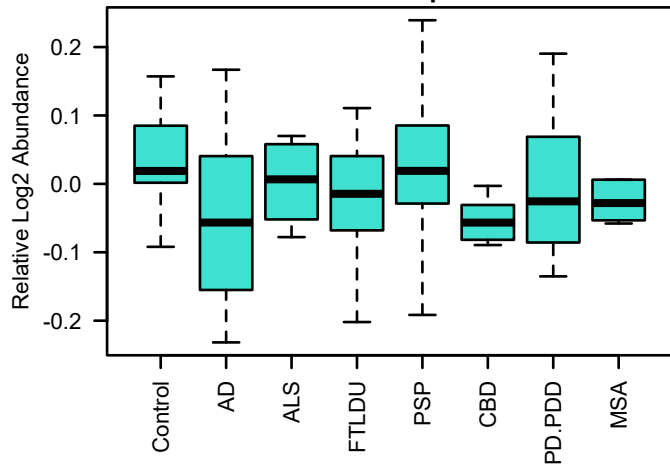
bicor=0.23, p=0.037
cor=0.24, p=0.028



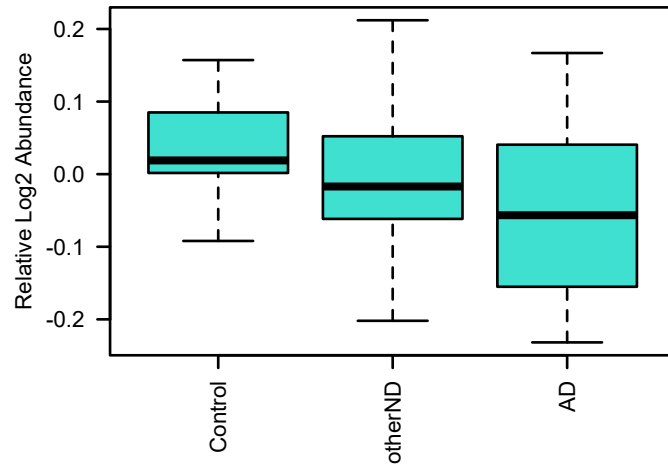
bicor=0.077, p=0.45
cor=0.087, p=0.39



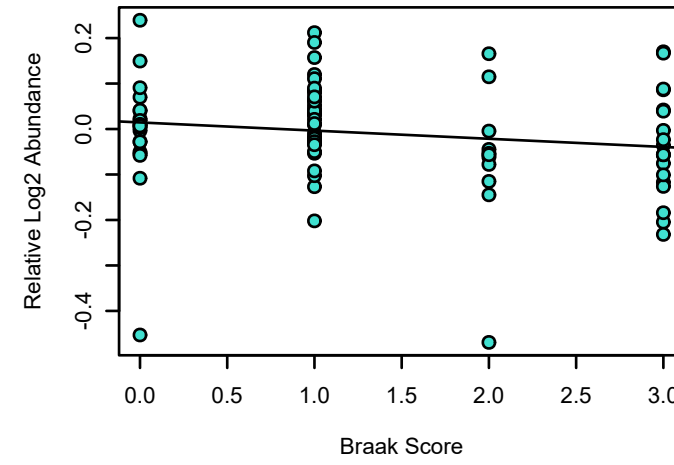
ATP6V0D1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.35



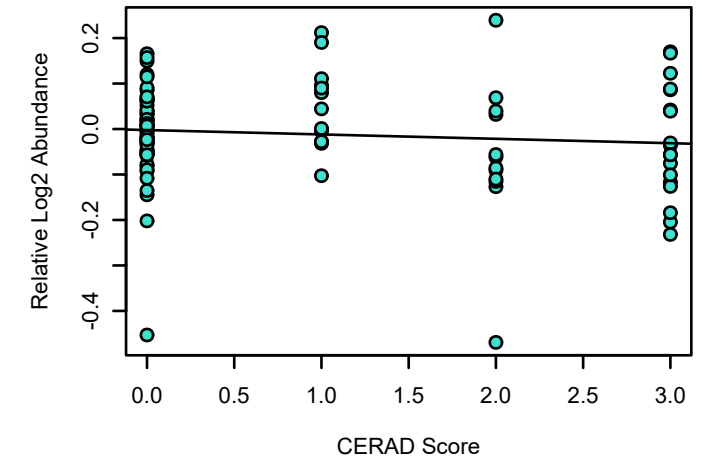
ATP6V0D1 UPenn Mixed PRM
K-W ANOVA p: 0.04



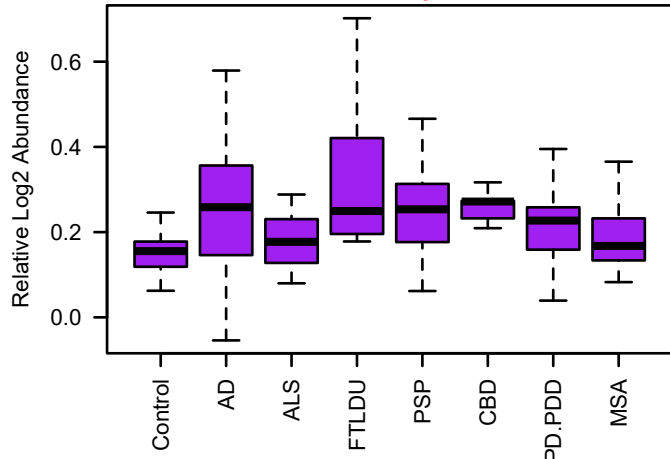
bicor=-0.21, p=0.055
cor=-0.16, p=0.15



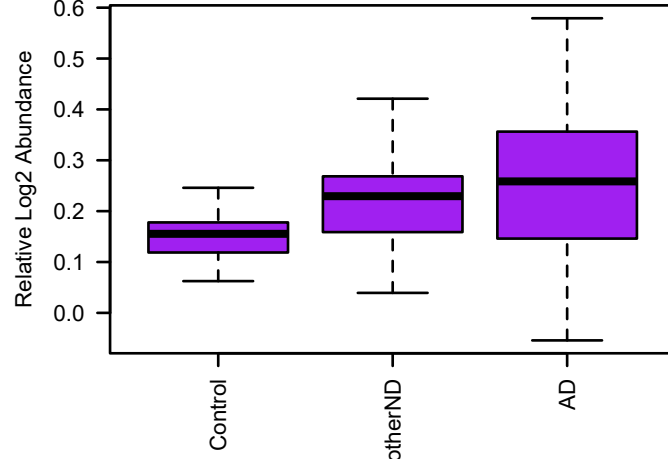
bicor=-0.12, p=0.22
cor=-0.1, p=0.32



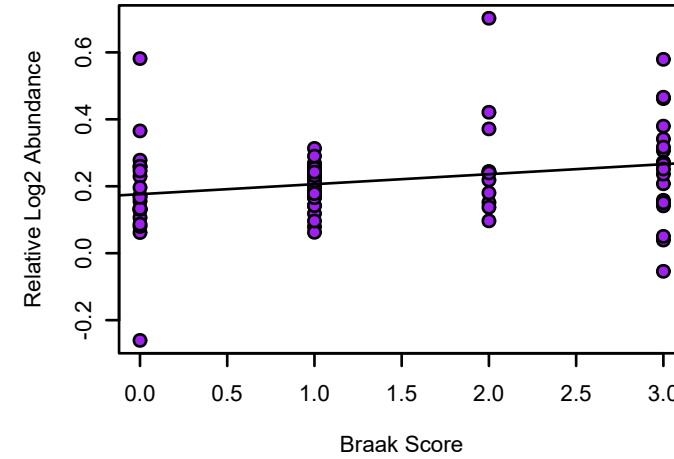
HNRNPK UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.016



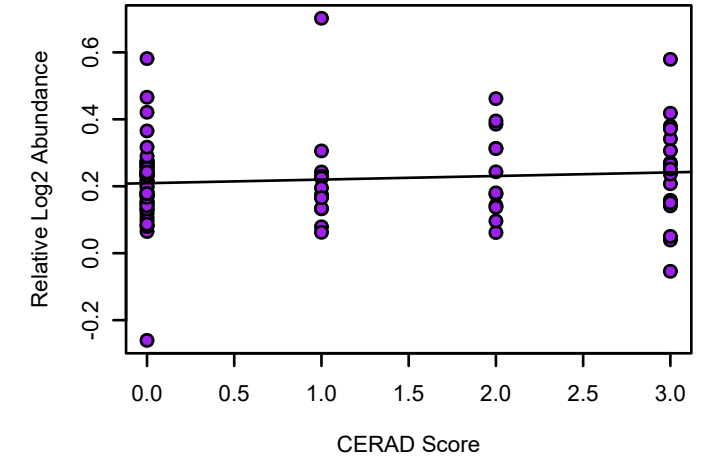
HNRNPK UPenn Mixed PRM
K-W ANOVA p: 0.076



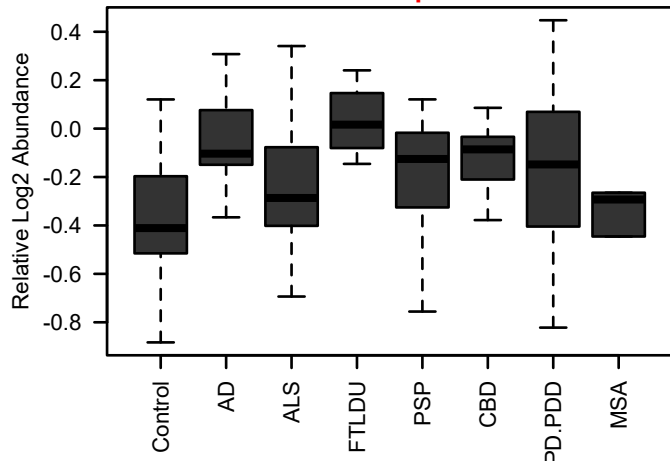
bicor=0.2, p=0.063
cor=0.25, p=0.022



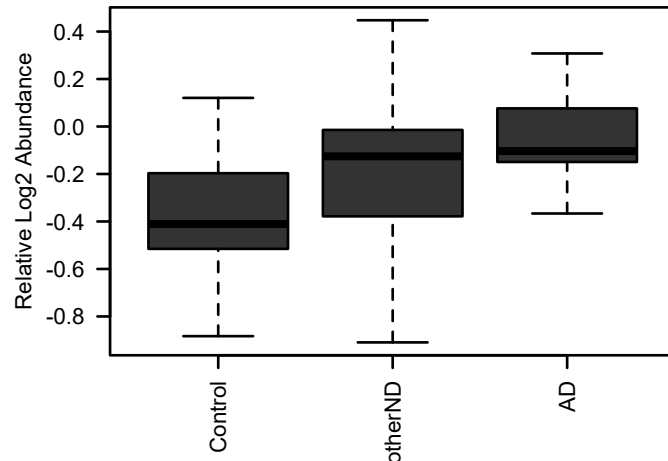
bicor=0.089, p=0.38
cor=0.1, p=0.32



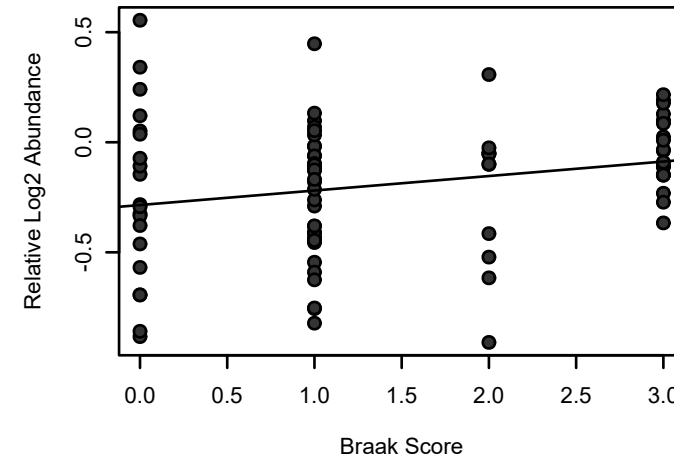
PPIAL4E UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.0045



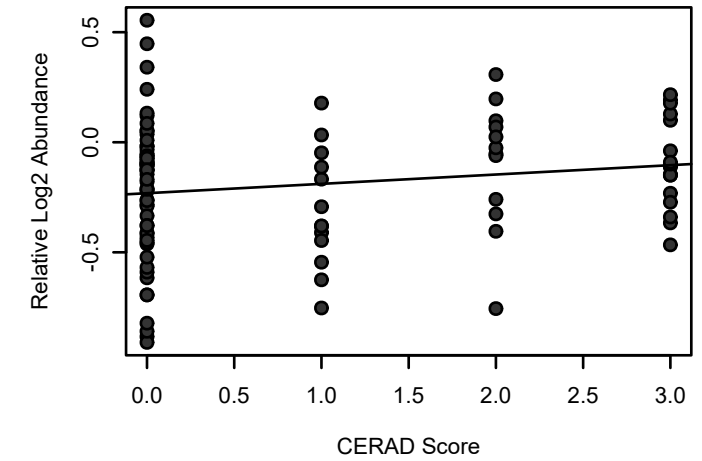
PPIAL4E UPenn Mixed PRM
K-W ANOVA p: 0.0047



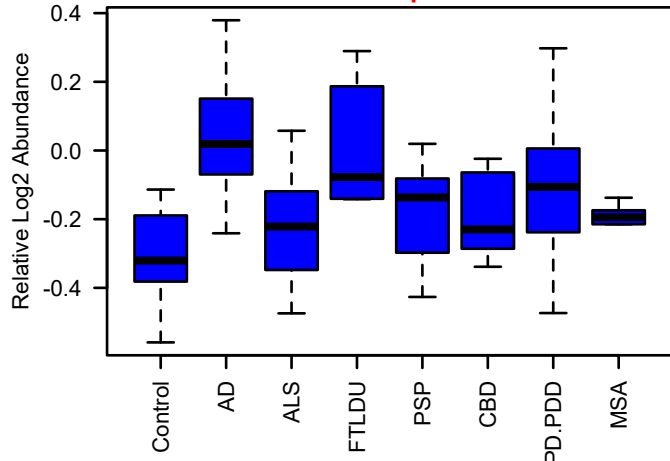
bicor=0.16, p=0.14
cor=0.23, p=0.035



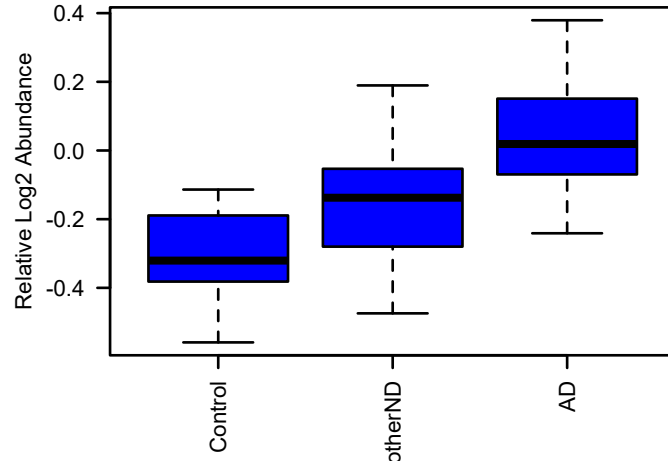
bicor=0.17, p=0.089
cor=0.17, p=0.091



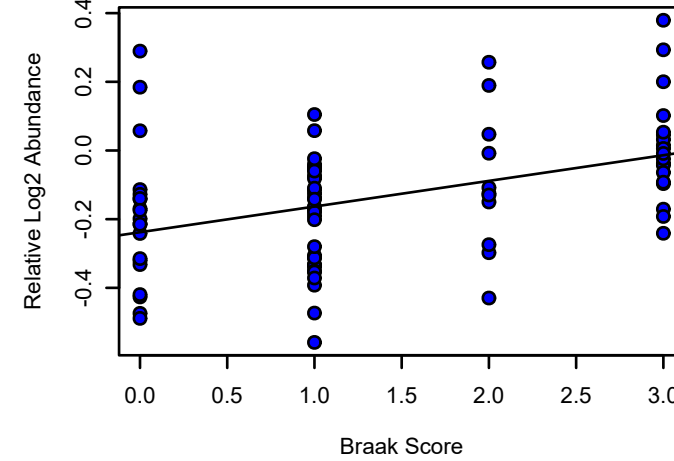
PPIA UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 2.5e-07



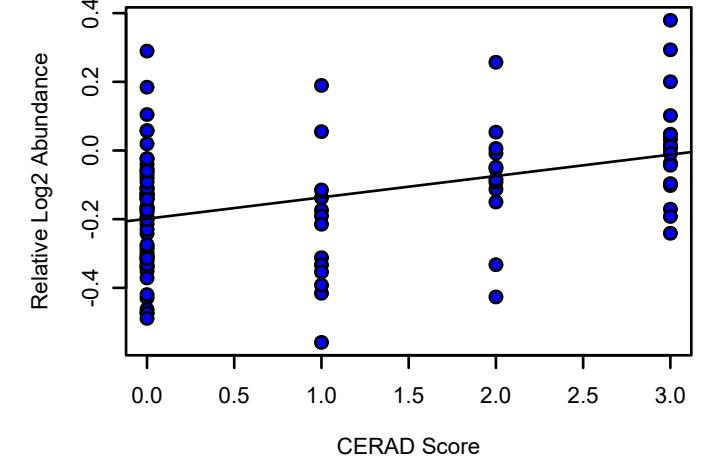
PPIA UPenn Mixed PRM
K-W ANOVA p: 5.1e-07



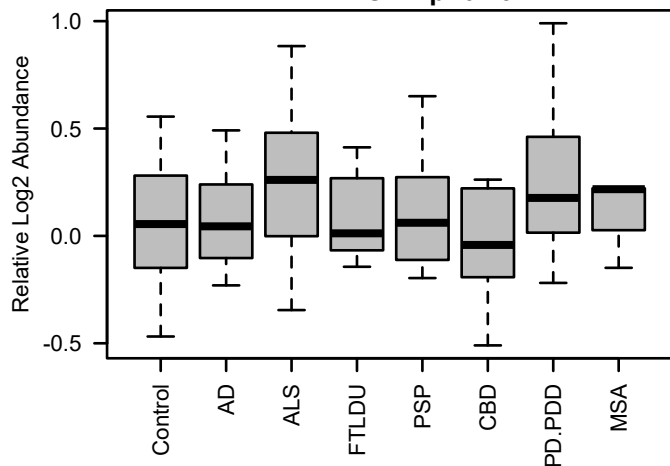
bicor=0.41, p=0.00011
cor=0.42, p=7e-05



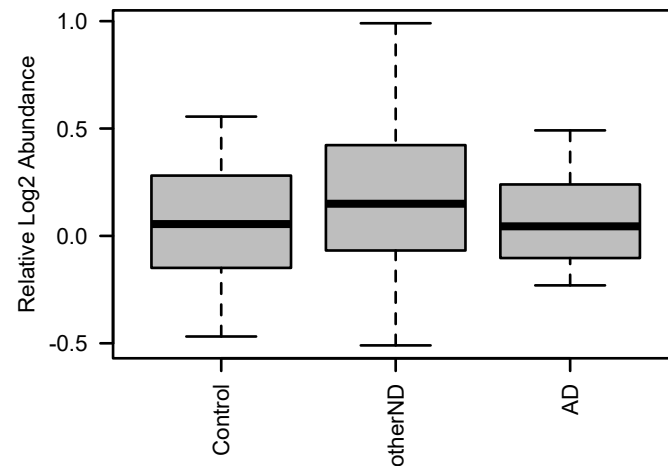
bicor=0.4, p=3.2e-05
cor=0.4, p=3.7e-05



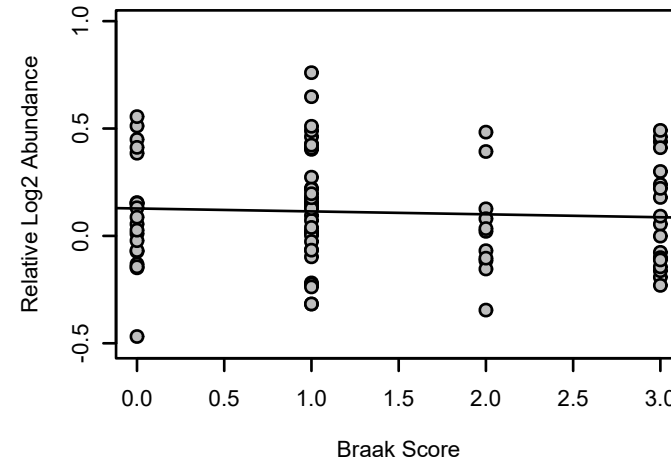
RAC1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.23



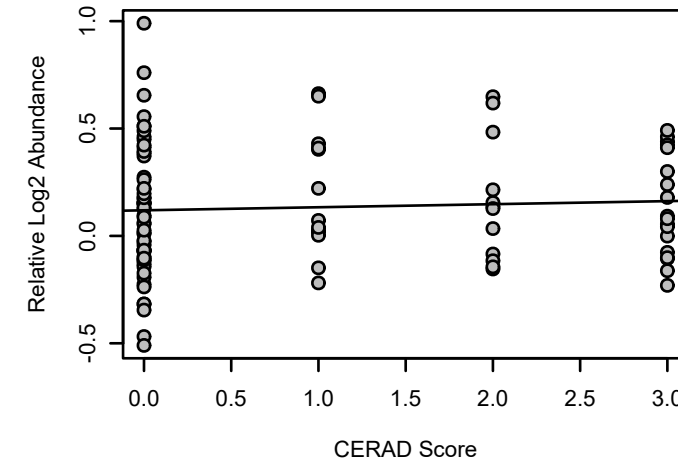
RAC1 UPenn Mixed PRM
K-W ANOVA p: 0.19



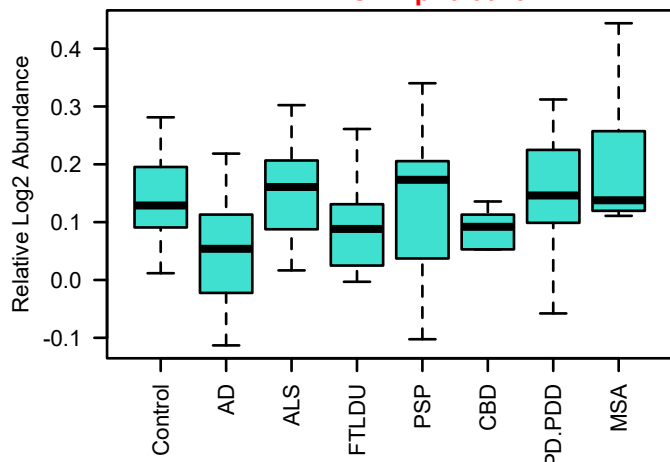
bicor=-0.033, p=0.76
cor=-0.057, p=0.61



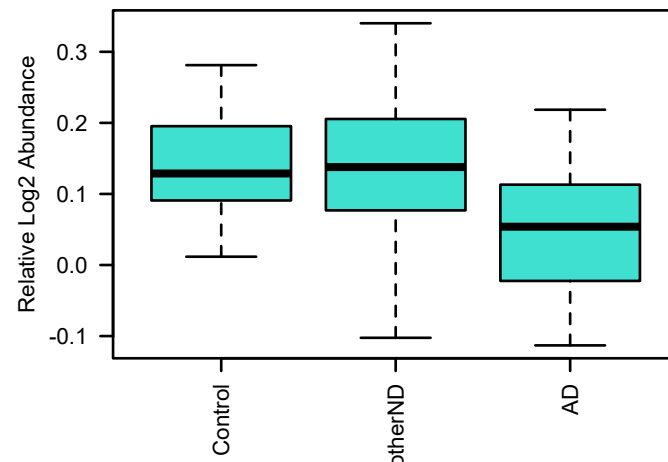
bicor=0.07, p=0.49
cor=0.059, p=0.56



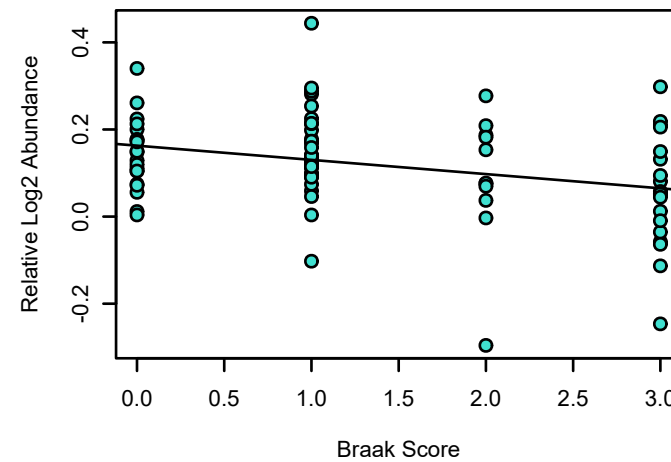
AP2B1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0029



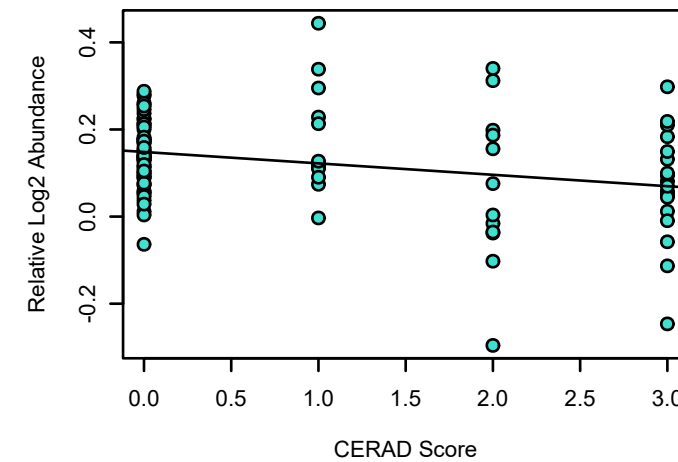
AP2B1 UPenn Mixed PRM
K-W ANOVA p: 0.00053



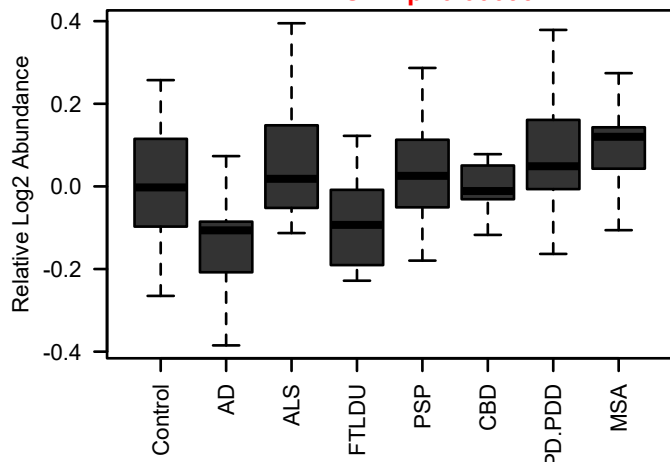
bicor=-0.27, p=0.013
cor=-0.31, p=0.0041



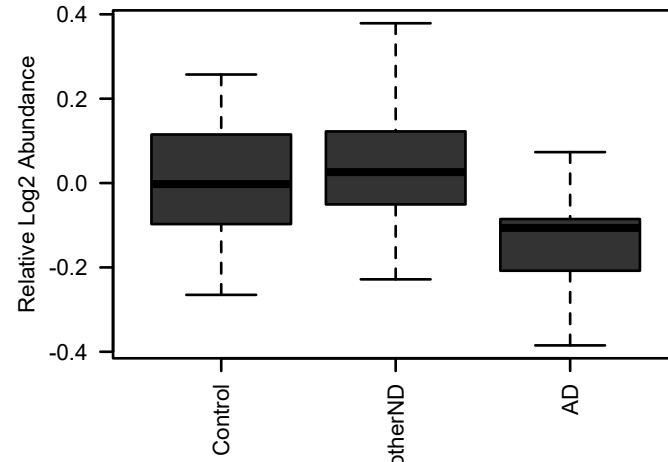
bicor=-0.25, p=0.013
cor=-0.27, p=0.0066



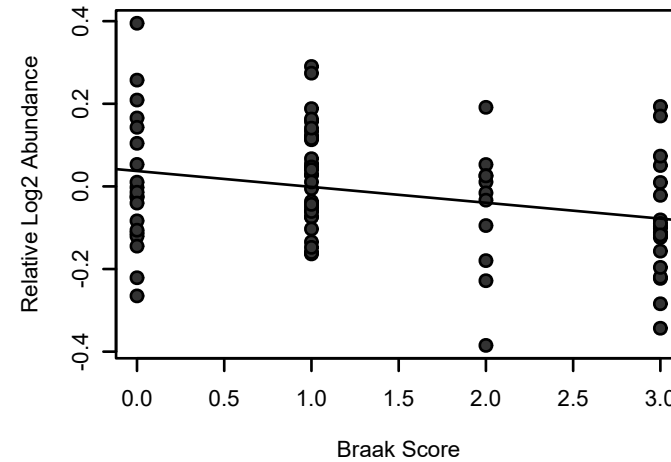
GNAT3 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.00099



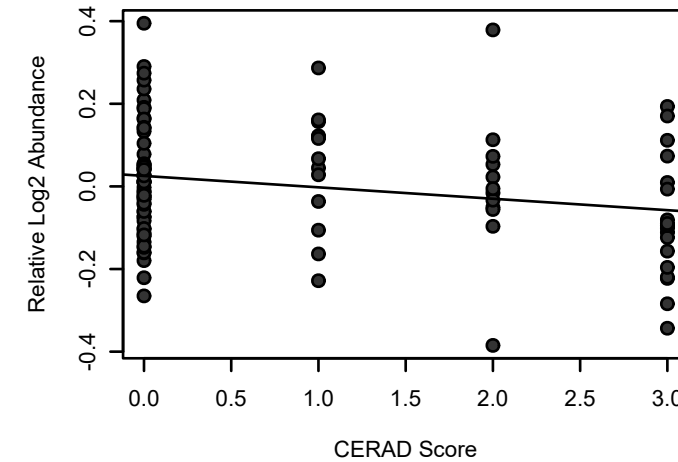
GNAT3 UPenn Mixed PRM
K-W ANOVA p: 0.00047



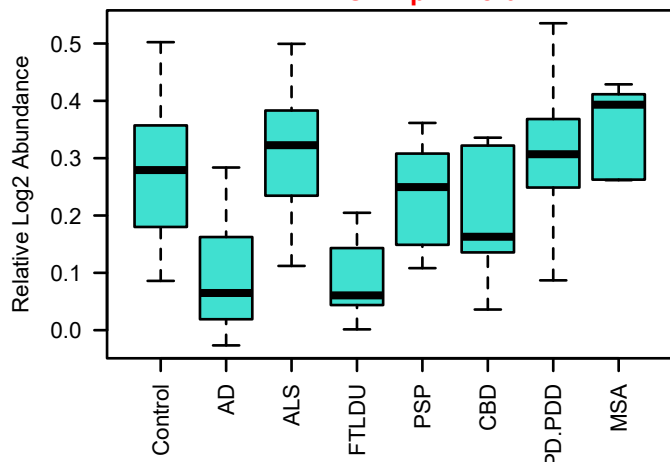
bicor=-0.25, p=0.024
cor=-0.28, p=0.0099



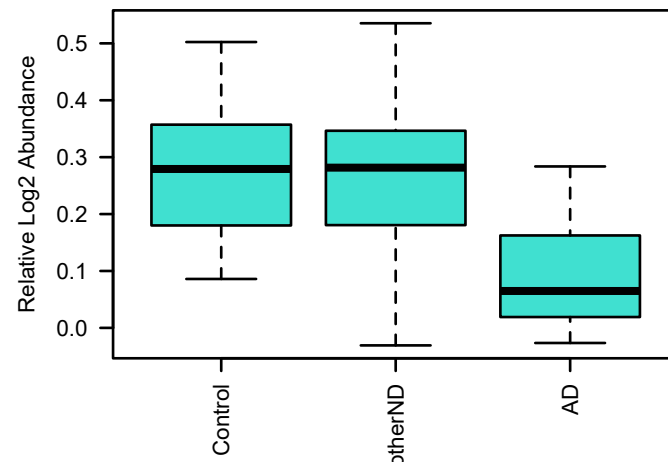
bicor=-0.22, p=0.03
cor=-0.22, p=0.028



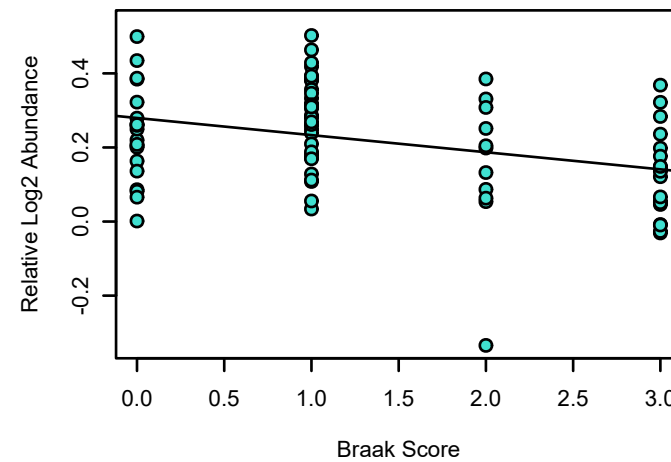
GNAI1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 1.2e-07



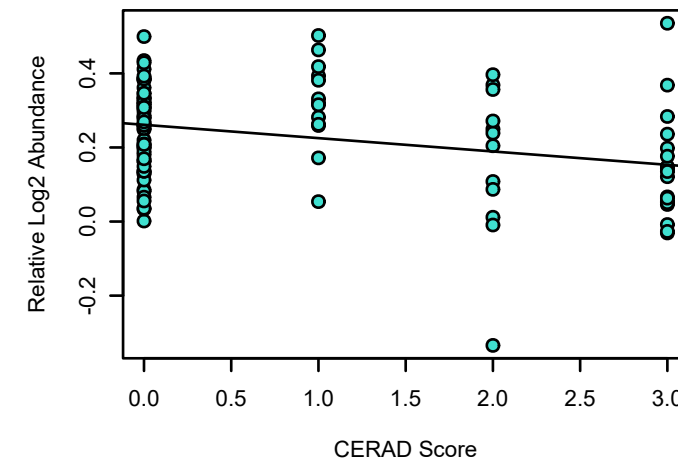
GNAI1 UPenn Mixed PRM
K-W ANOVA p: 1.9e-06



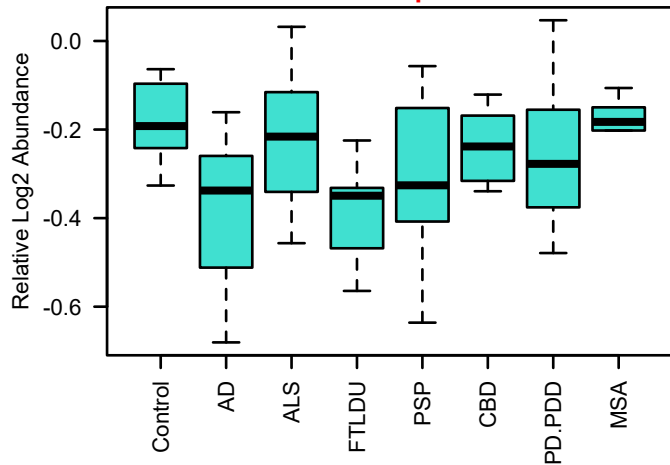
bicor=-0.35, p=0.0013
cor=-0.35, p=0.0011



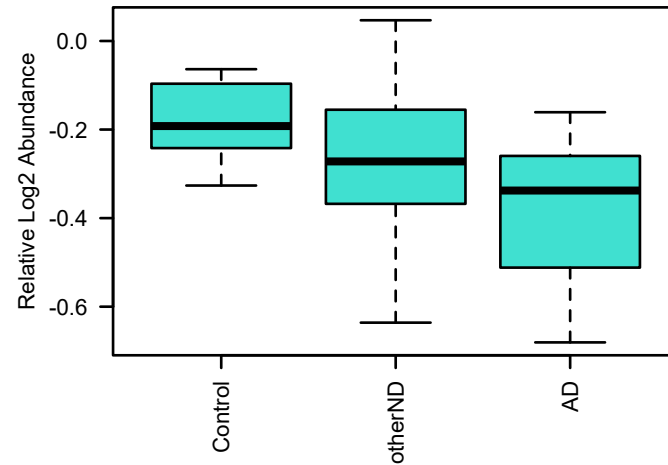
bicor=-0.29, p=0.0032
cor=-0.3, p=0.0024



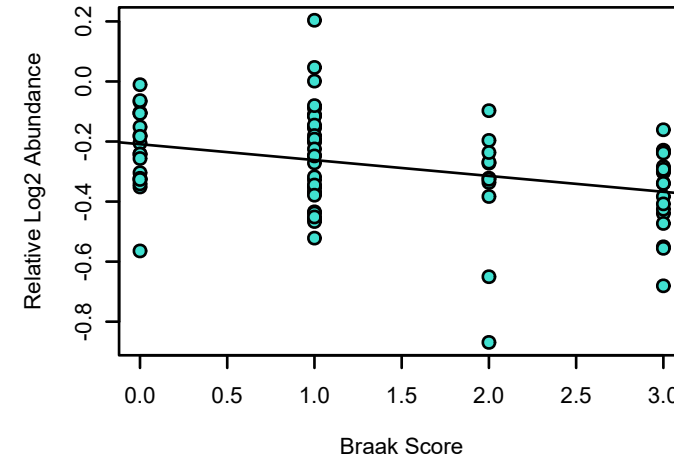
SIRPA UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0011



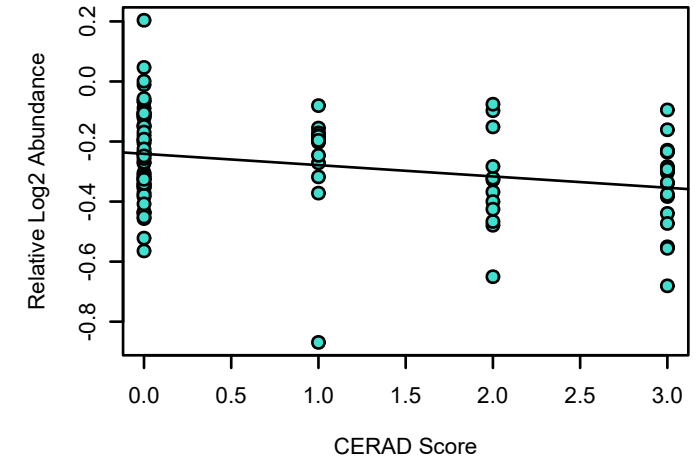
SIRPA UPenn Mixed PRM
K-W ANOVA p: 0.0013



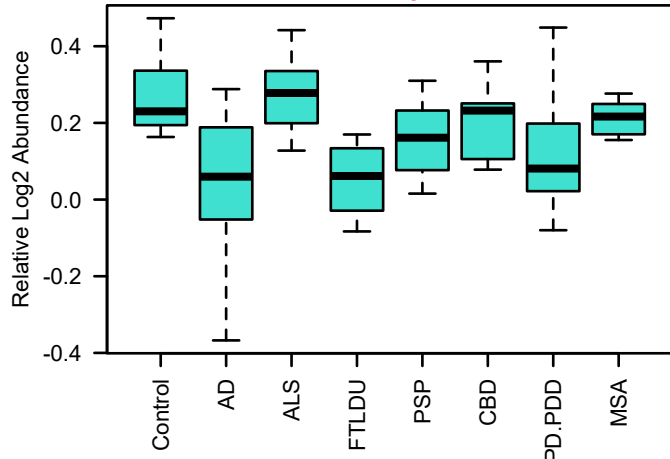
bicor=-0.34, p=0.0014
cor=-0.34, p=0.0016



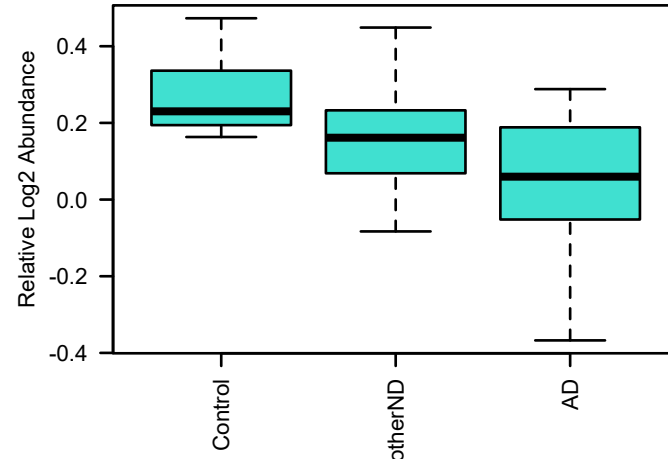
bicor=-0.28, p=0.0054
cor=-0.28, p=0.0048



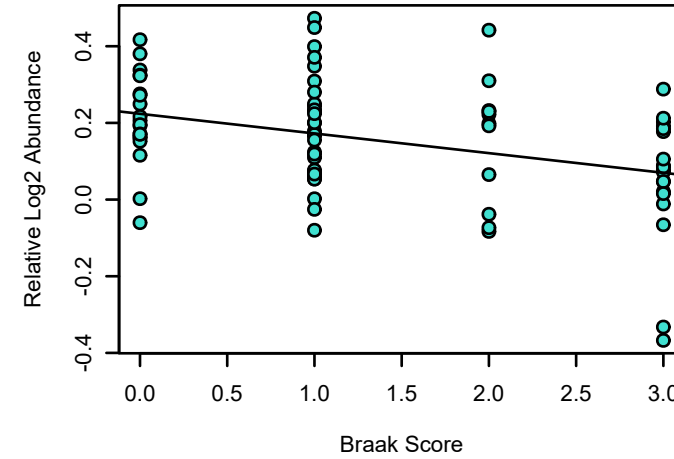
DLG4 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 3.5e-07



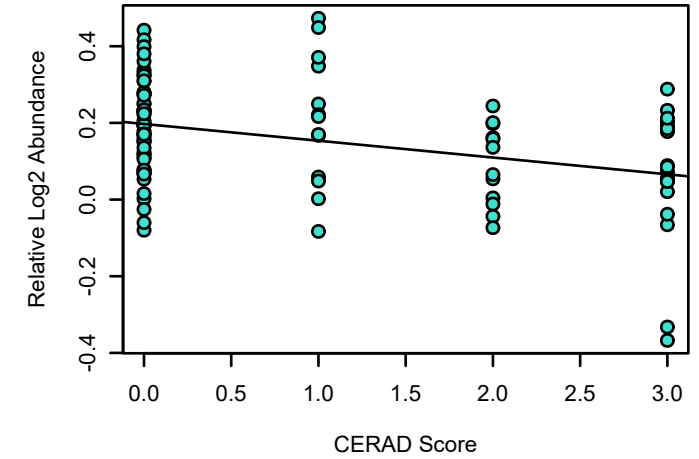
DLG4 UPenn Mixed PRM
K-W ANOVA p: 7e-05



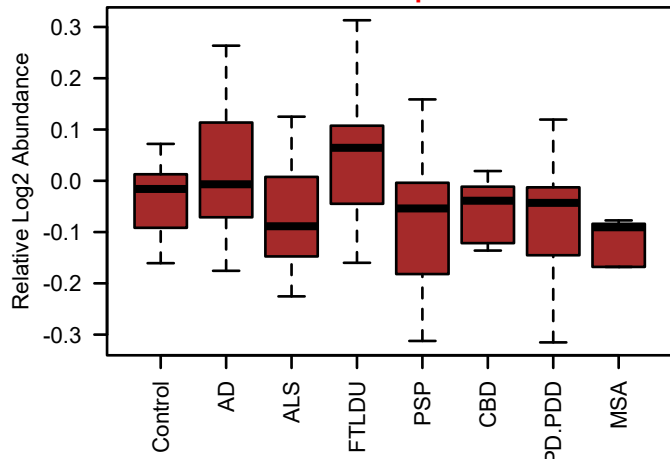
bicor=-0.35, p=0.0011
cor=-0.37, p=0.00053



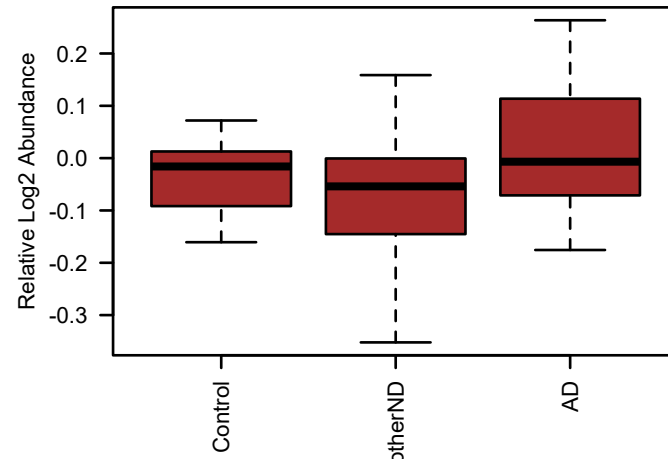
bicor=-0.32, p=0.00099
cor=-0.36, p=0.00023



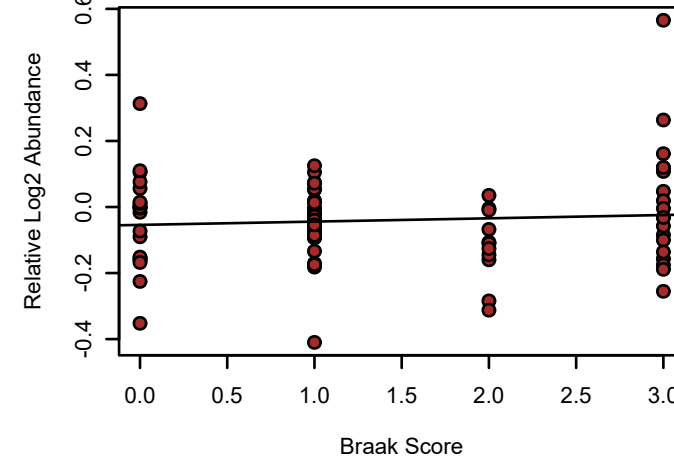
ABAT UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0094



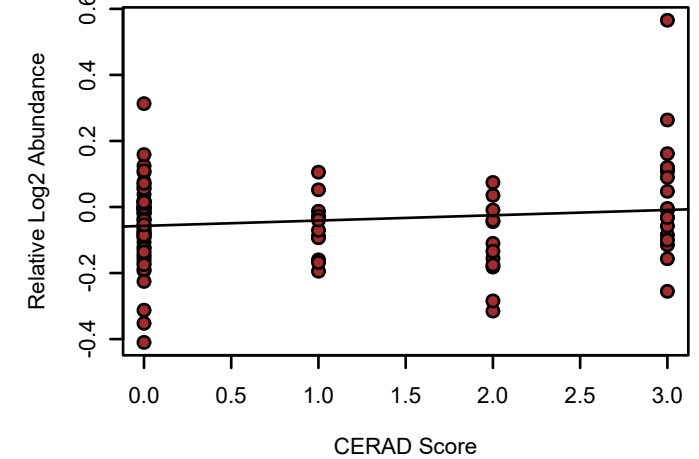
ABAT UPenn Mixed PRM
K-W ANOVA p: 0.01



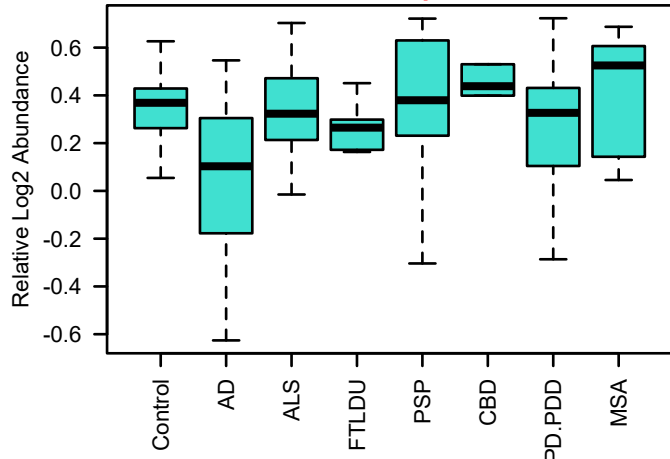
bicor=-0.051, p=0.64
cor=0.077, p=0.49



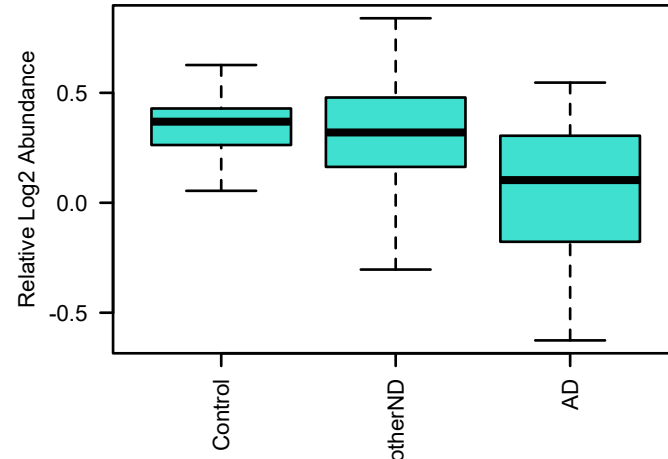
bicor=0.056, p=0.58
cor=0.14, p=0.16



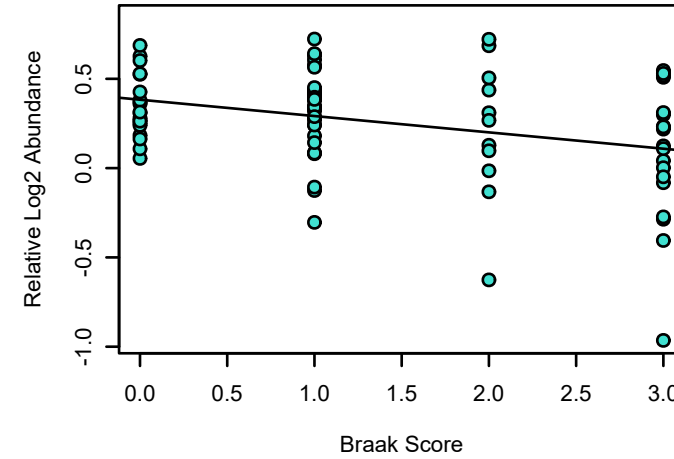
HPCA UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.009



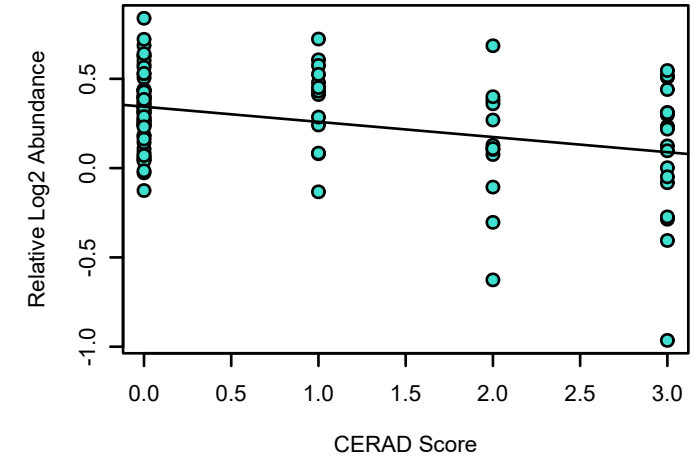
HPCA UPenn Mixed PRM
K-W ANOVA p: 0.00038



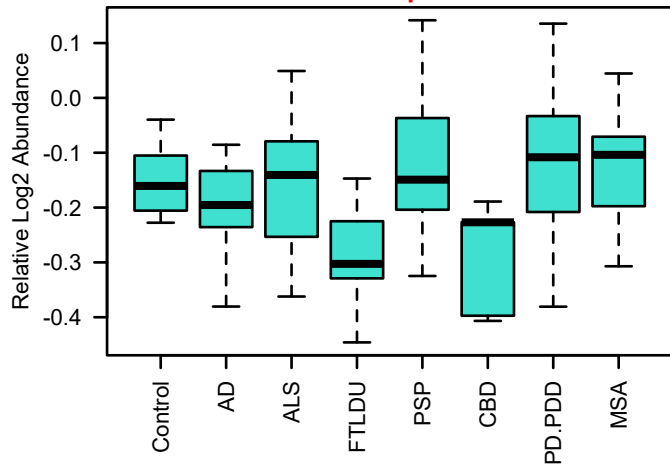
bicor=-0.27, p=0.011
cor=-0.33, p=0.0022



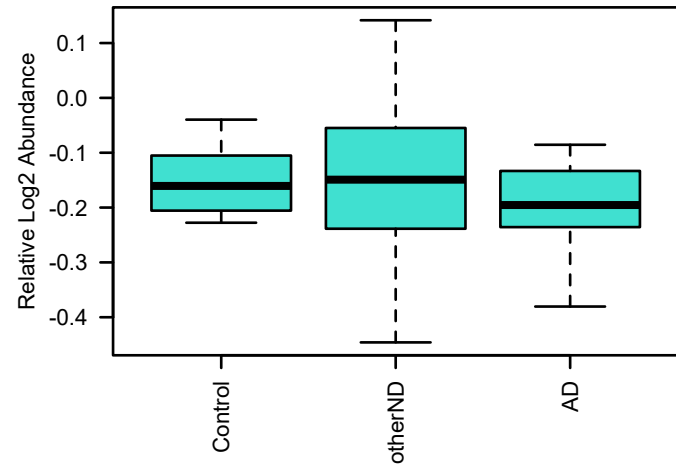
bicor=-0.28, p=0.0046
cor=-0.35, p=0.00036



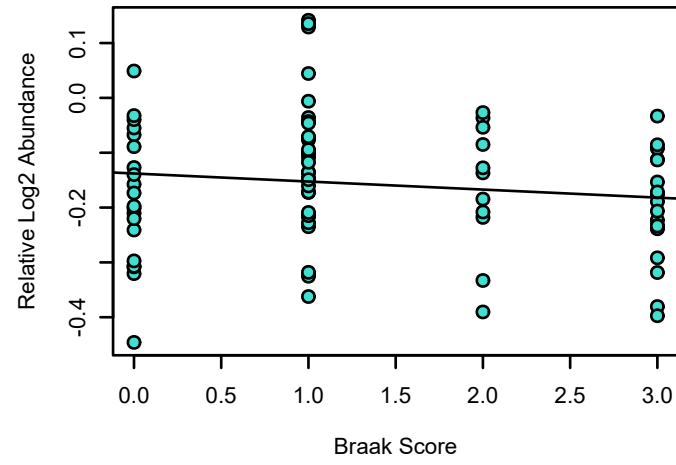
CLTC UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00091



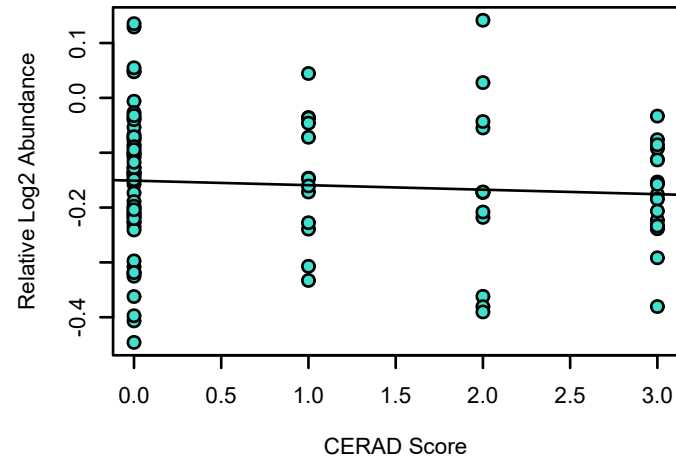
CLTC UPenn Mixed PRM
K-W ANOVA p: 0.32



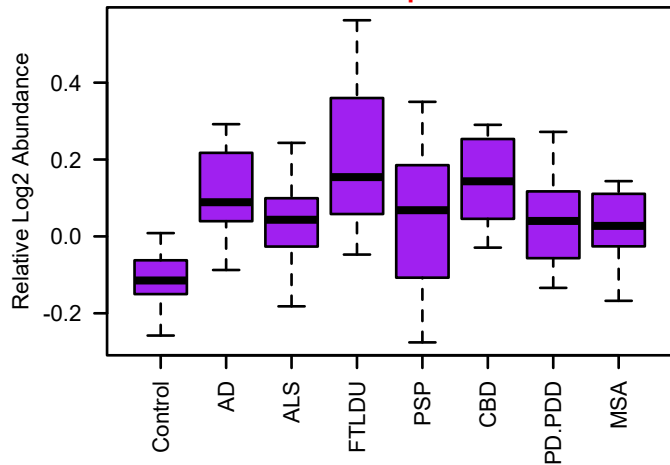
bicor=-0.14, p=0.2
cor=-0.13, p=0.24



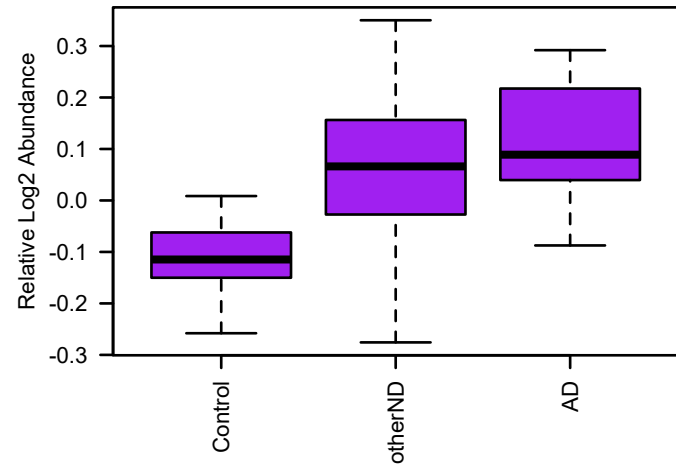
bicor=-0.088, p=0.39
cor=-0.08, p=0.43



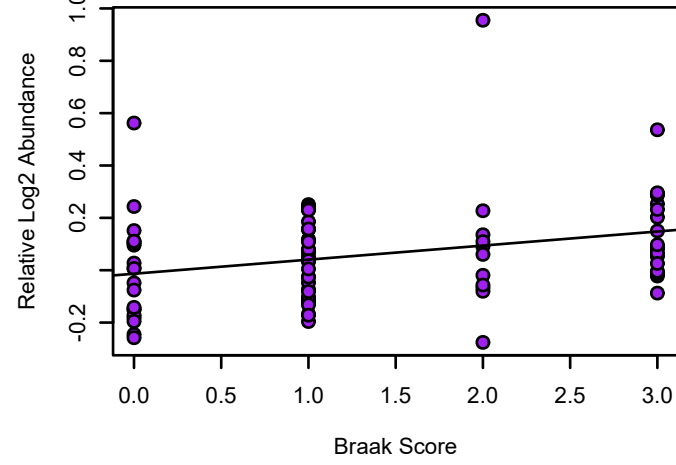
HNRNPU UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.00047



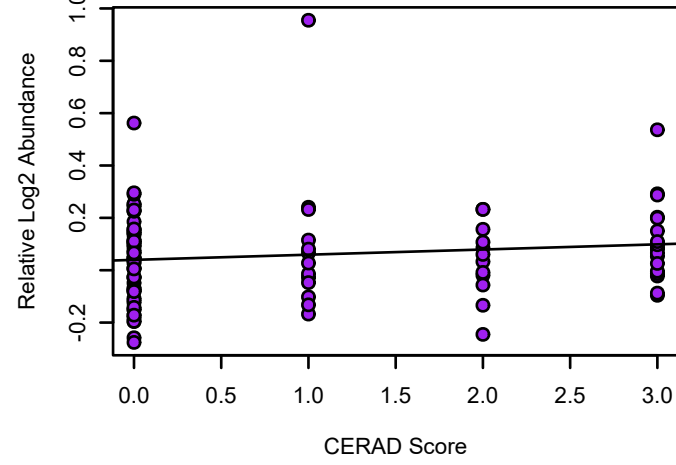
HNRNPU UPenn Mixed PRM
K-W ANOVA p: 0.00099



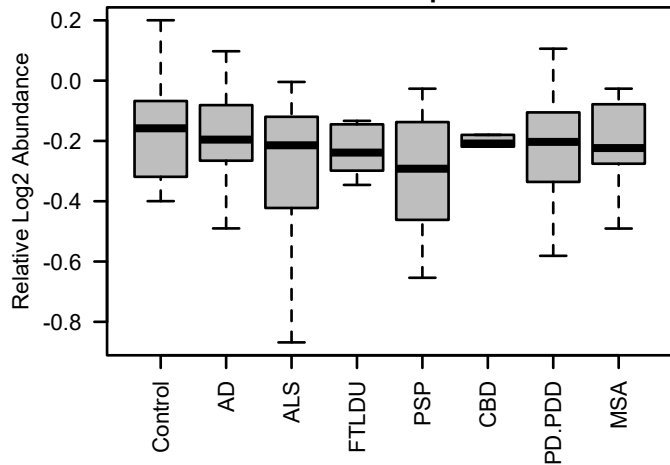
bicor=0.3, p=0.005
cor=0.3, p=0.0056



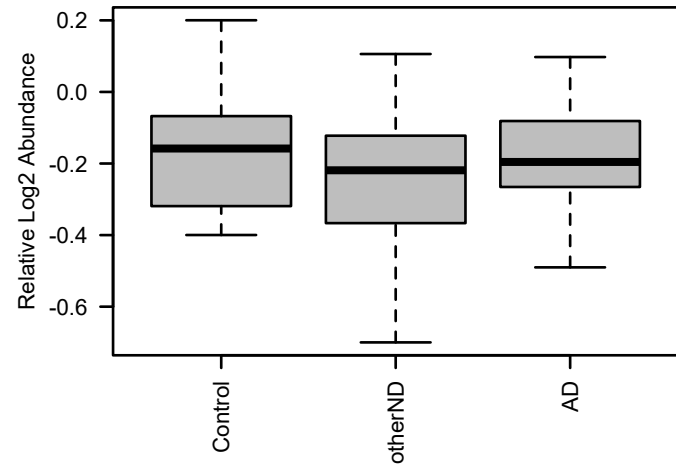
bicor=0.14, p=0.16
cor=0.13, p=0.2



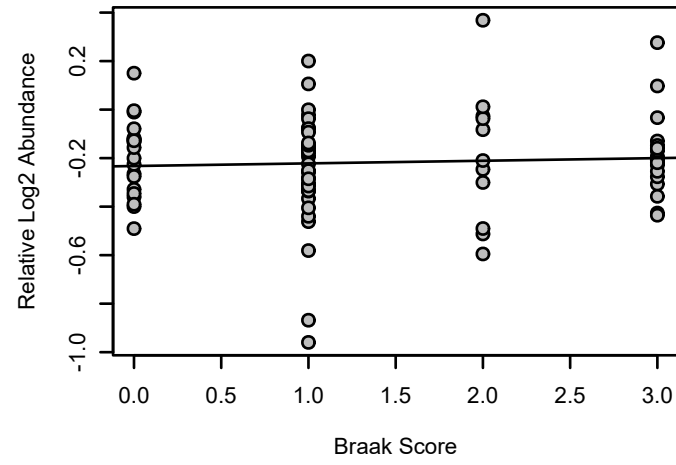
SPTBN1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.24



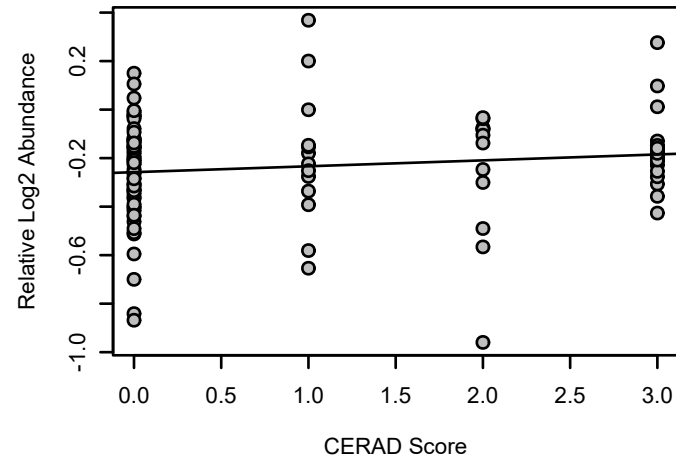
SPTBN1 UPenn Mixed PRM
K-W ANOVA p: 0.11



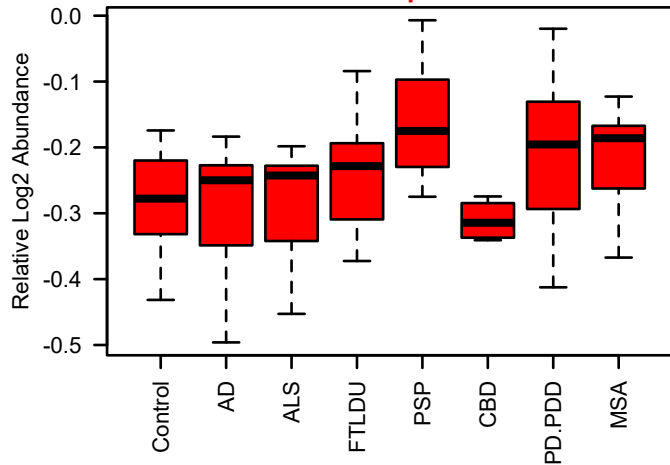
bicor=0.015, p=0.89
cor=0.056, p=0.61



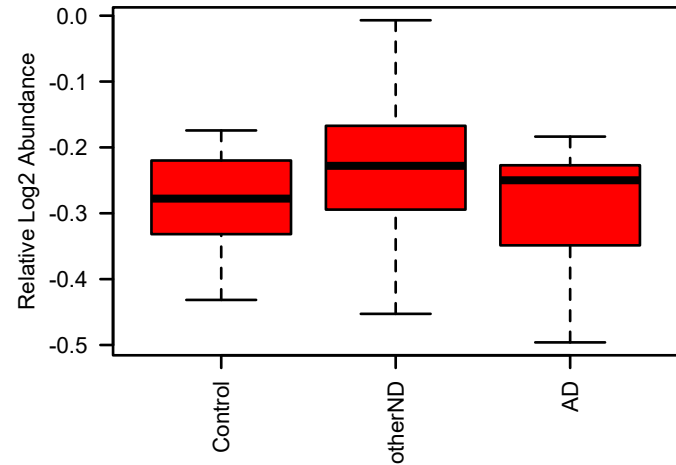
bicor=0.14, p=0.16
cor=0.13, p=0.2



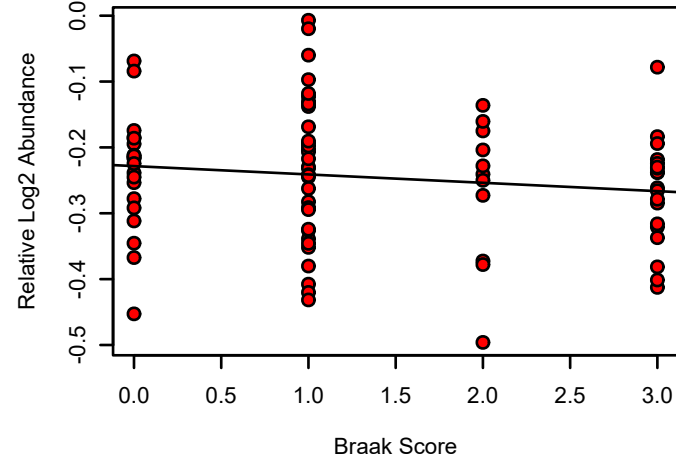
ANK2 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.00036



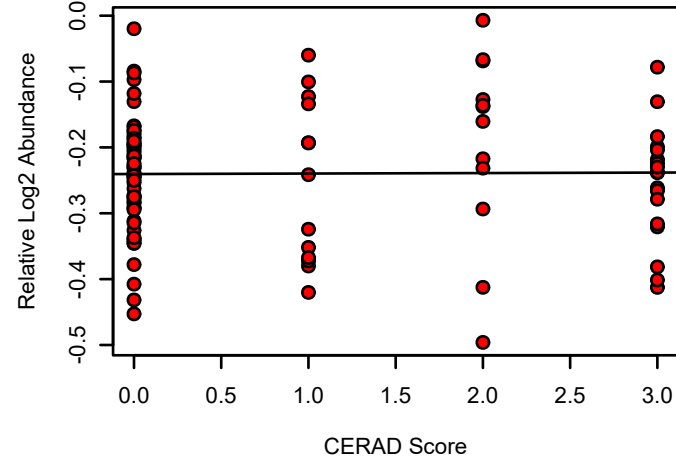
ANK2 UPenn Mixed PRM
K-W ANOVA p: 0.013



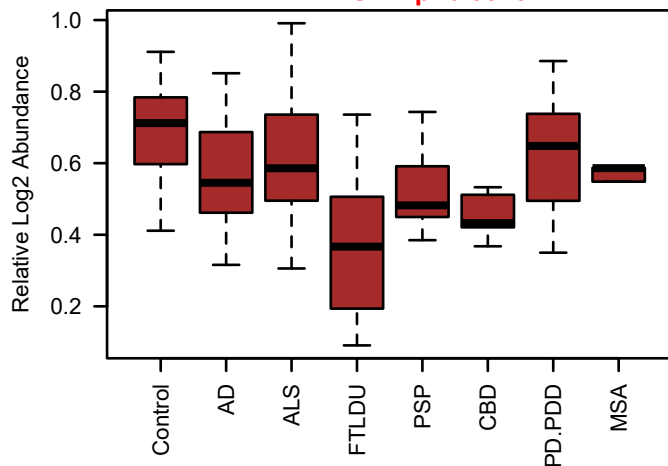
bicor=-0.16, p=0.16
cor=-0.14, p=0.2



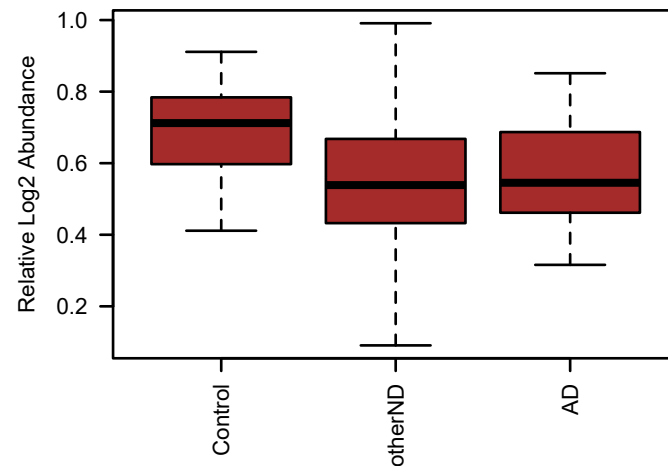
bicor=0.018, p=0.86
cor=0.0088, p=0.93



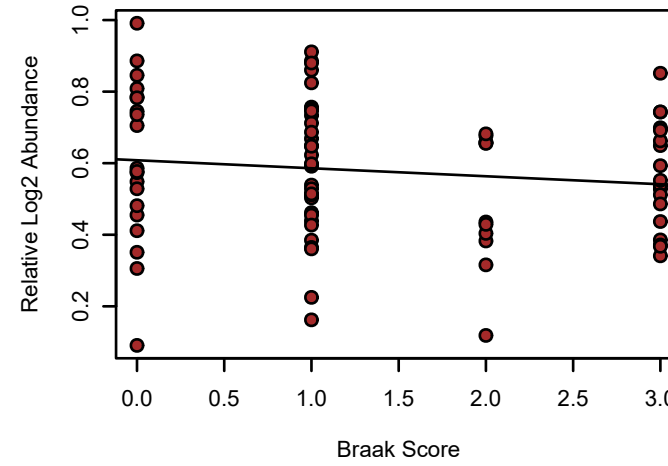
ATP2B2 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0013



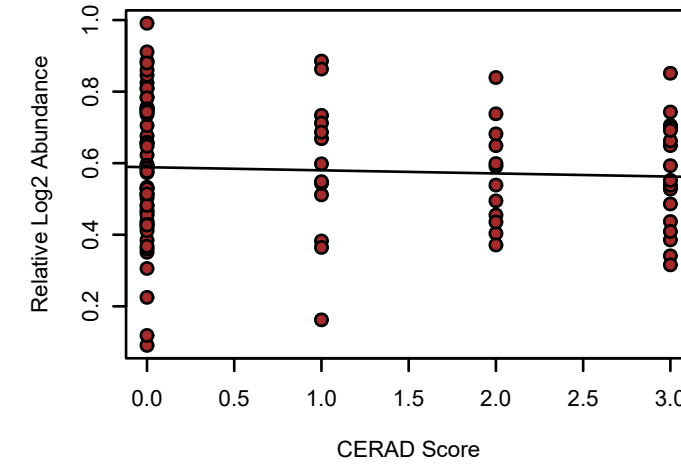
ATP2B2 UPenn Mixed PRM
K-W ANOVA p: 0.023



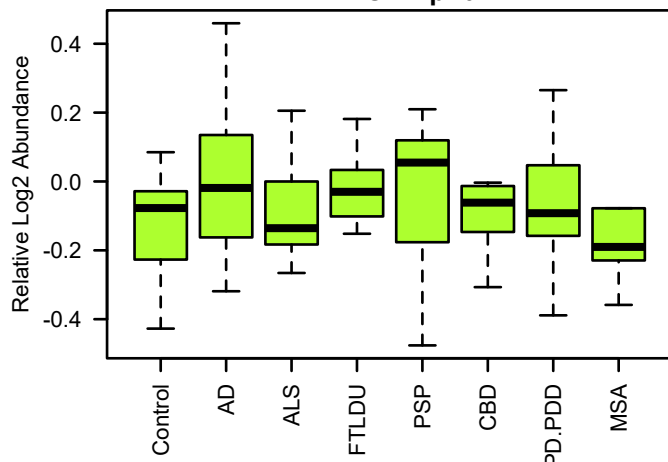
bicor=-0.14, p=0.22
cor=-0.13, p=0.24



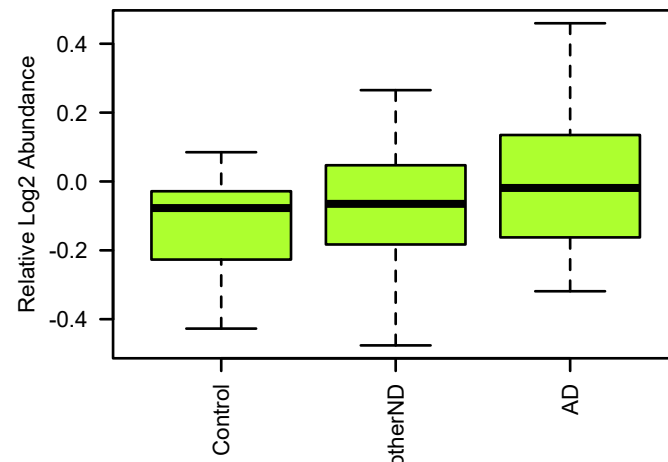
bicor=-0.065, p=0.52
cor=-0.057, p=0.57



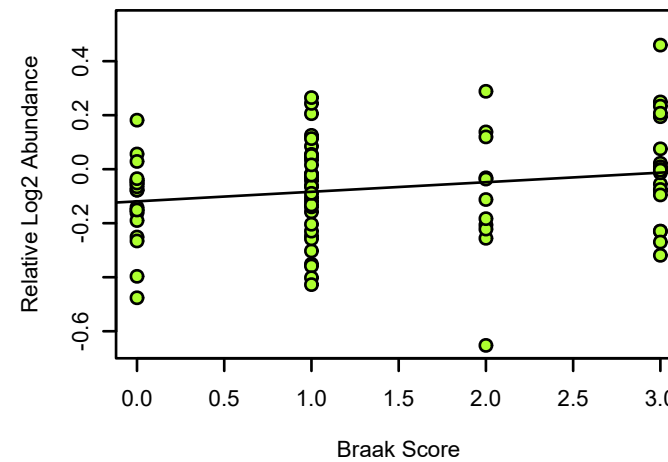
FKBP4 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.72



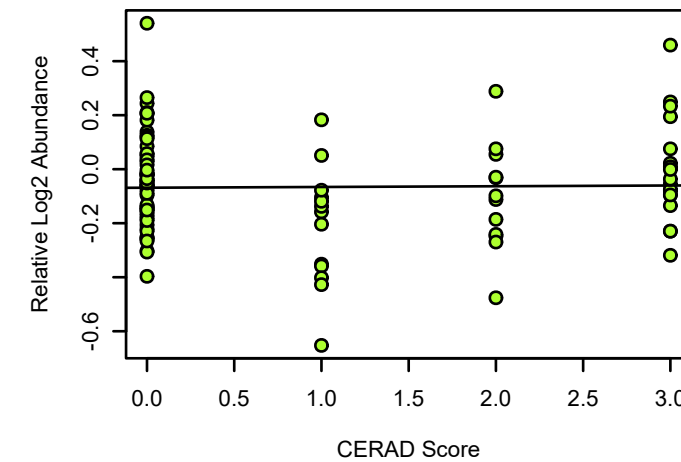
FKBP4 UPenn Mixed PRM
K-W ANOVA p: 0.18



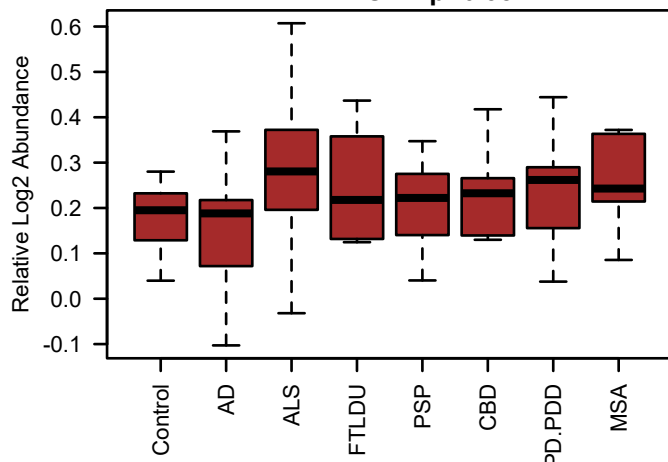
bicor=0.17, p=0.12
cor=0.2, p=0.068



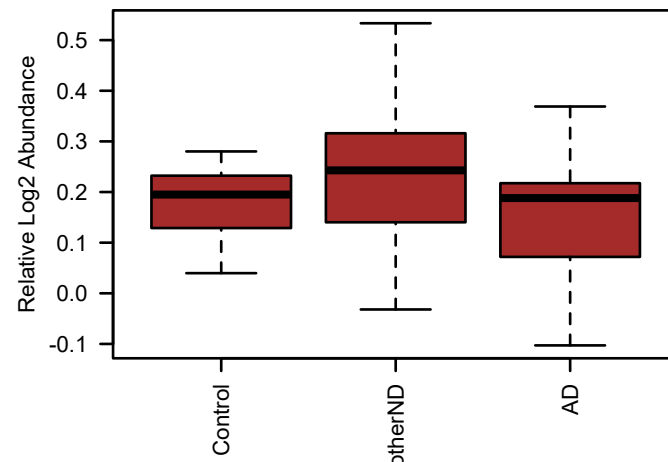
bicor=0.014, p=0.89
cor=0.017, p=0.87



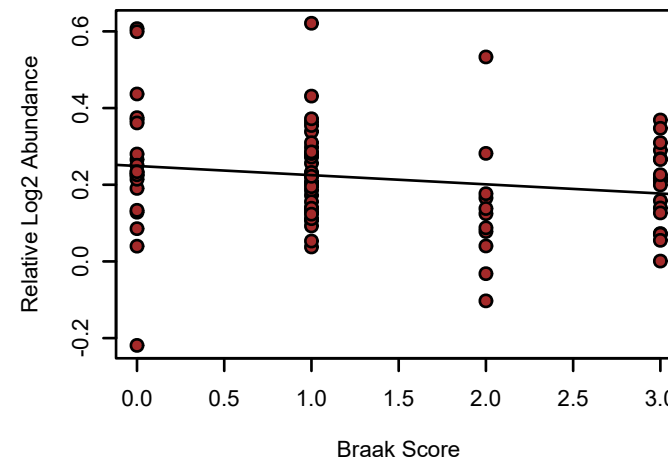
SLC25A11 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.38



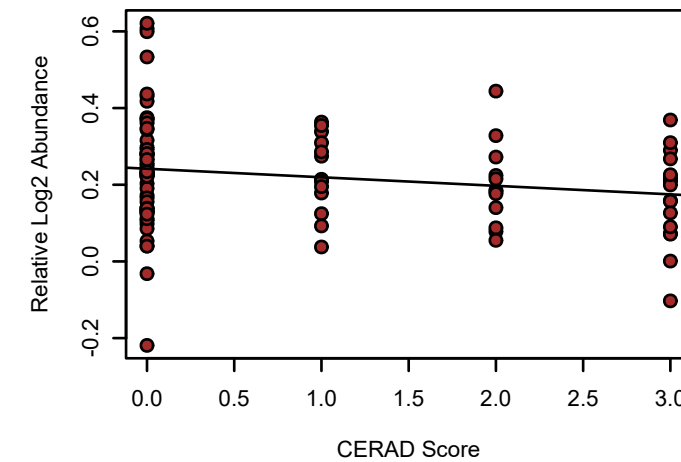
SLC25A11 UPenn Mixed PRM
K-W ANOVA p: 0.075



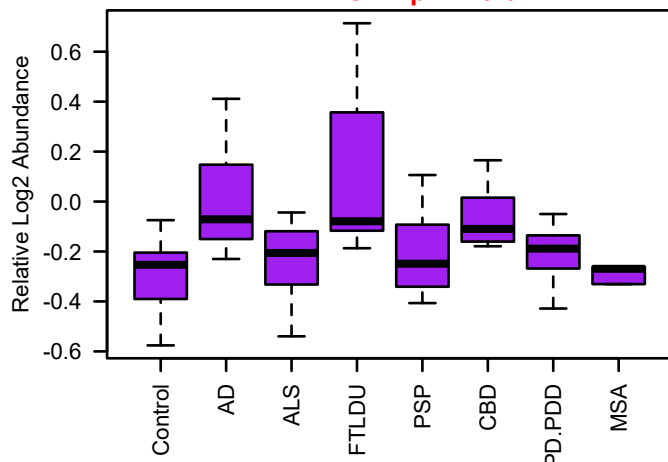
bicor=-0.21, p=0.061
cor=-0.18, p=0.1



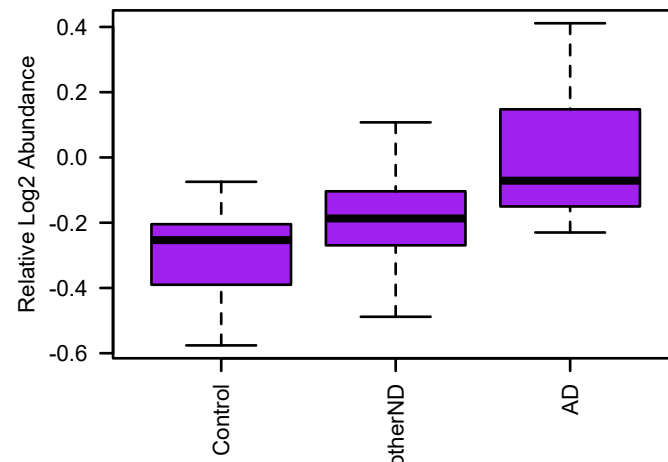
bicor=-0.19, p=0.052
cor=-0.19, p=0.058



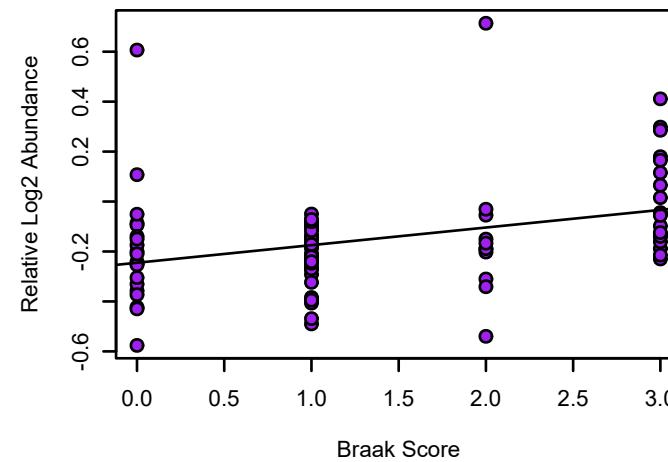
LMNB2 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 1.1e-07



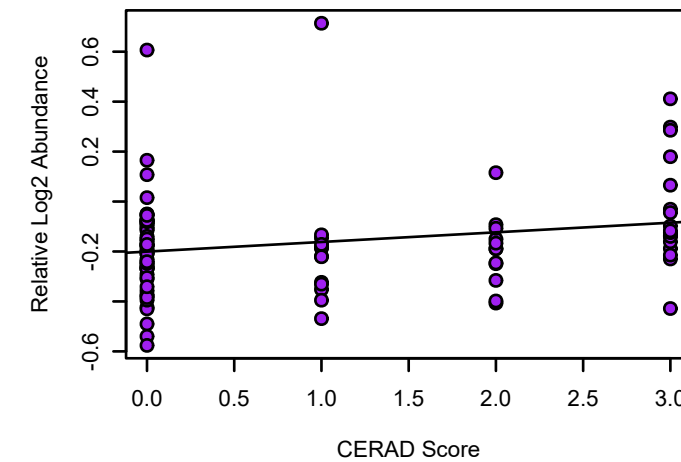
LMNB2 UPenn Mixed PRM
K-W ANOVA p: 1e-04



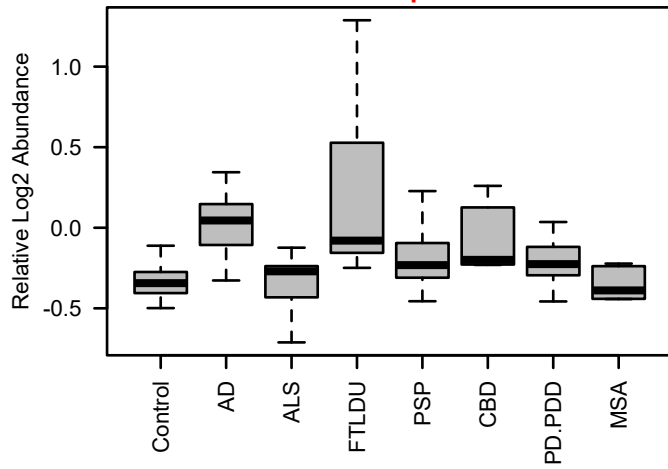
bicor=0.4, p=0.00019
cor=0.35, p=0.0011



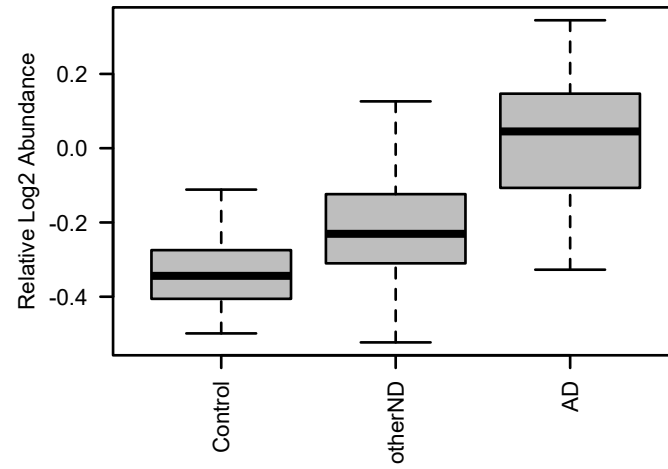
bicor=0.24, p=0.018
cor=0.22, p=0.028



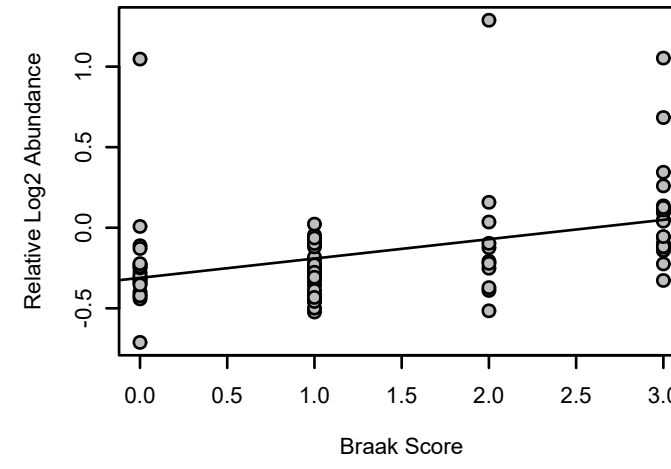
PRDX4 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 3.8e-07



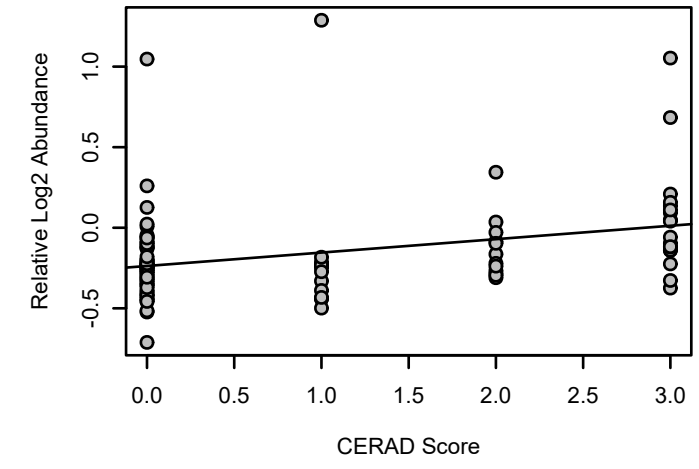
PRDX4 UPenn Mixed PRM
K-W ANOVA p: 0.00012



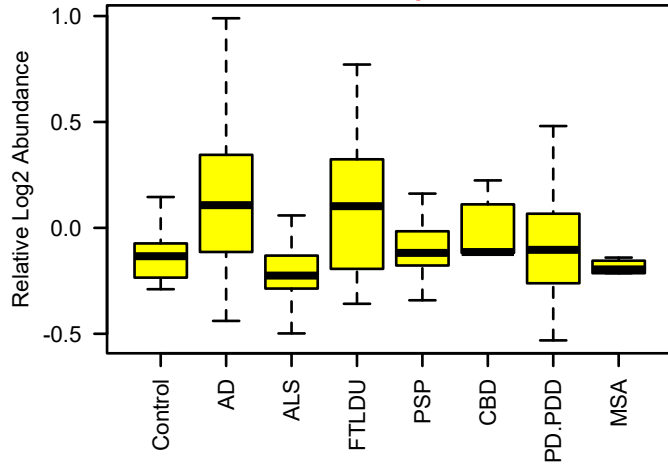
bicor=0.53, p=2.7e-07
cor=0.4, p=0.00016



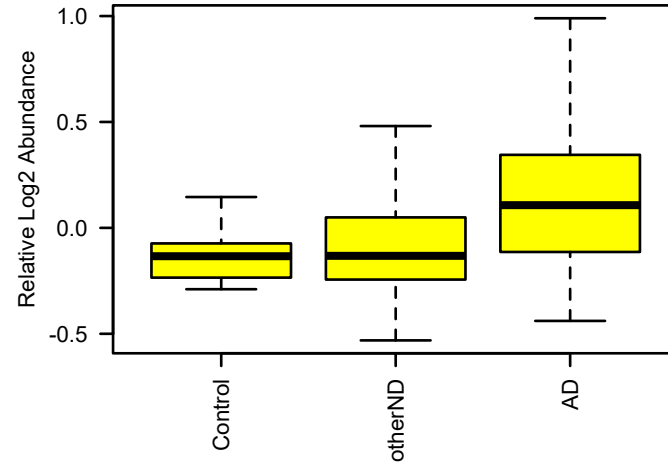
bicor=0.39, p=6.3e-05
cor=0.32, p=0.0012



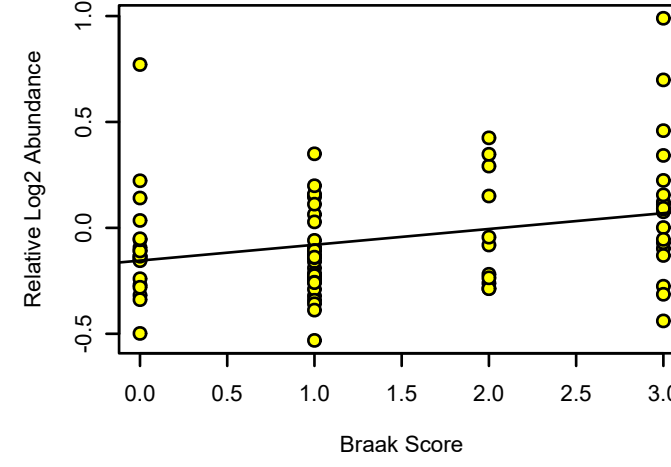
PRDX1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.0012



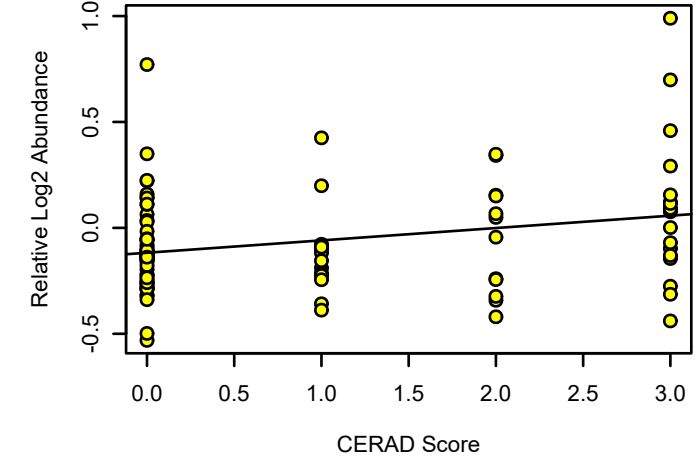
PRDX1 UPenn Mixed PRM
K-W ANOVA p: 0.0012



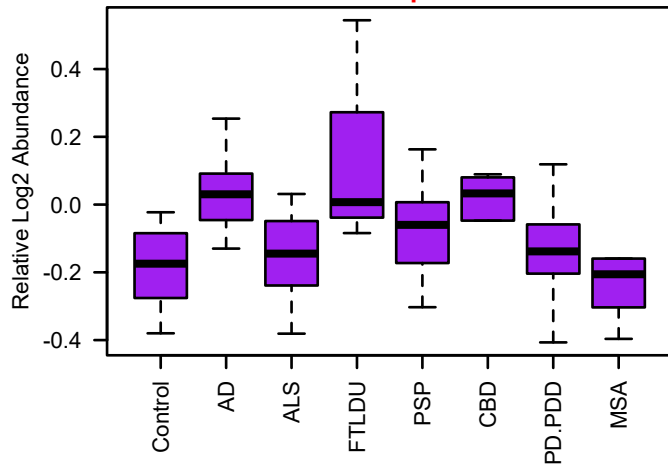
bicor=0.31, p=0.0046
cor=0.3, p=0.0056



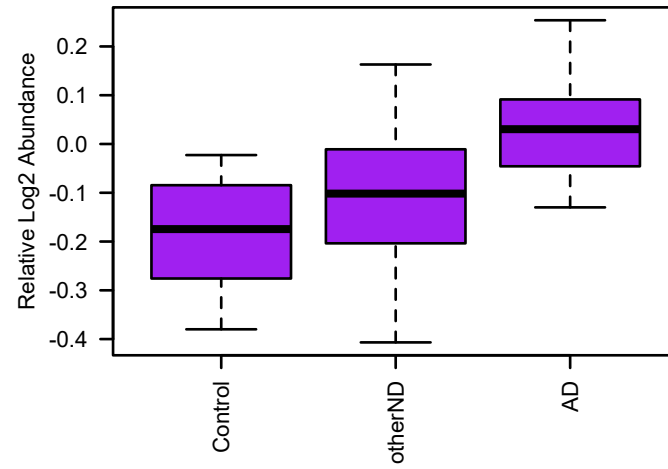
bicor=0.22, p=0.026
cor=0.27, p=0.0066



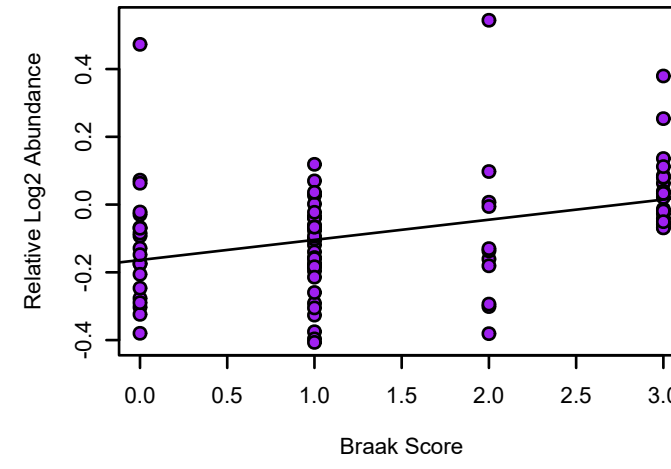
SRSF1 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 5.2e-07



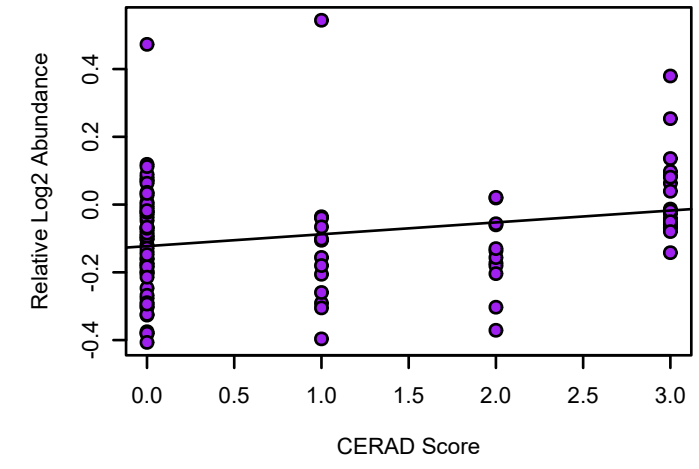
SRSF1 UPenn Mixed PRM
K-W ANOVA p: 0.00017



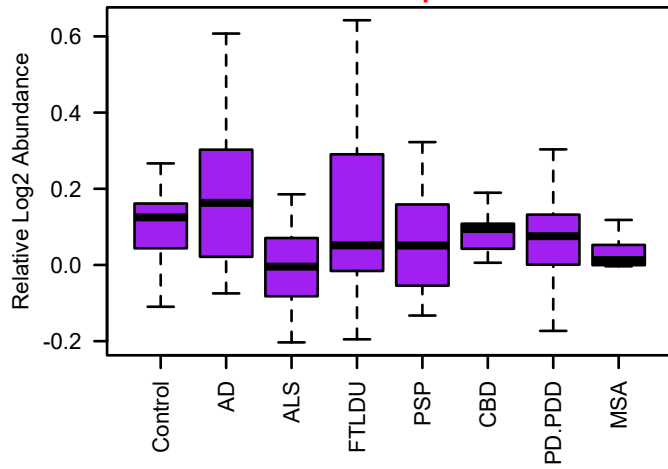
bicor=0.36, p=0.00067
cor=0.36, p=0.00077



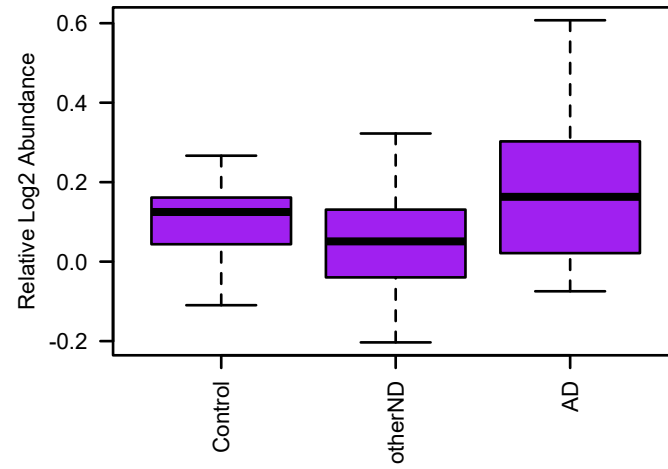
bicor=0.28, p=0.0055
cor=0.25, p=0.012



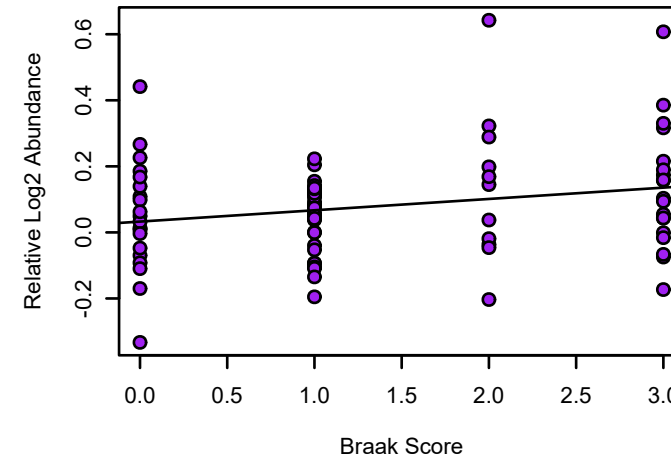
ILF3 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.038



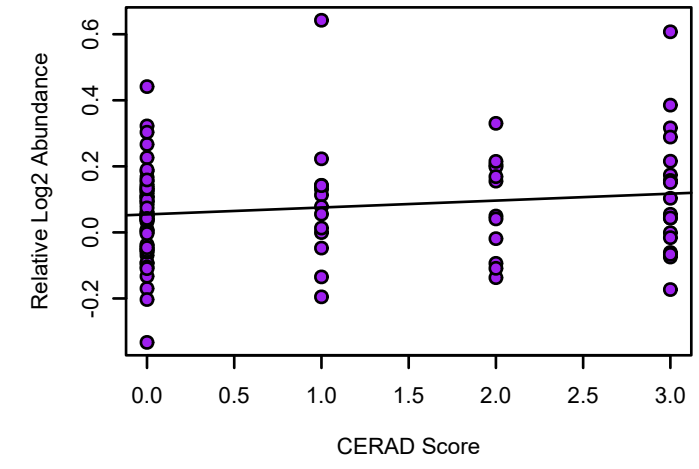
ILF3 UPenn Mixed PRM
K-W ANOVA p: 0.018



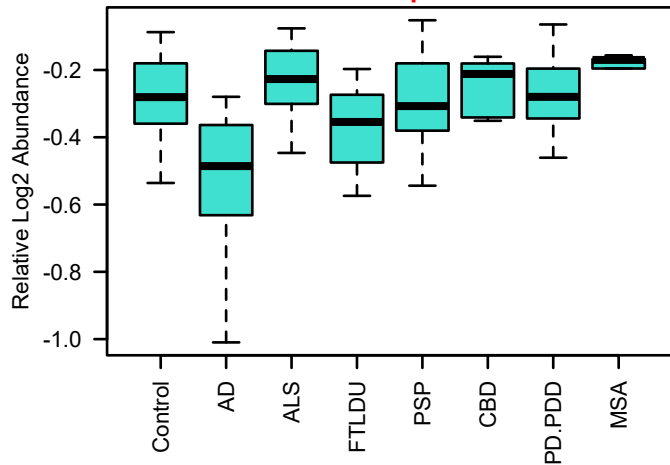
bicor=0.2, p=0.066
cor=0.23, p=0.035



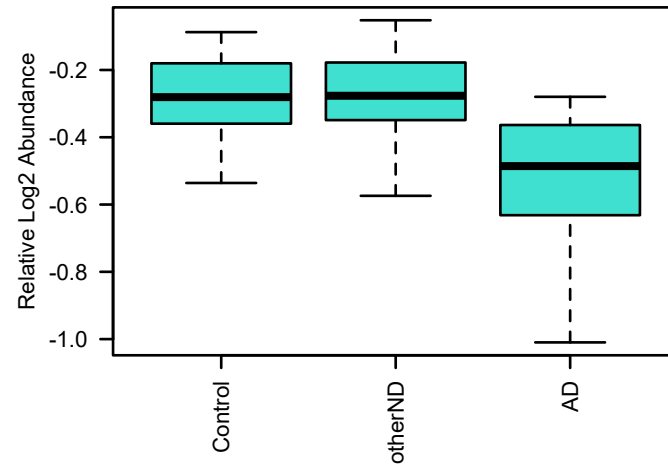
bicor=0.13, p=0.2
cor=0.16, p=0.11



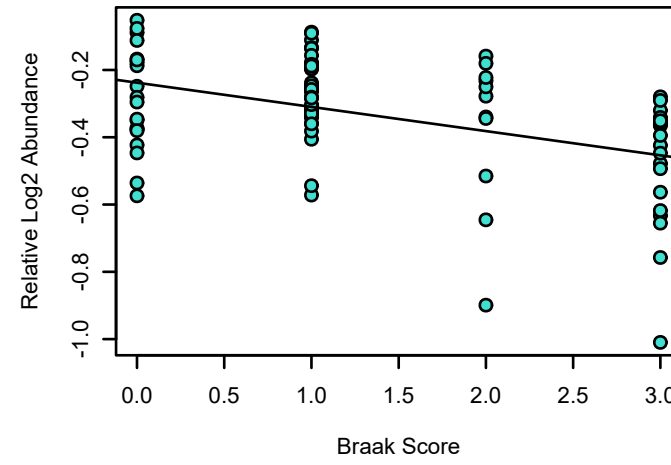
PAK1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 6.3e-06



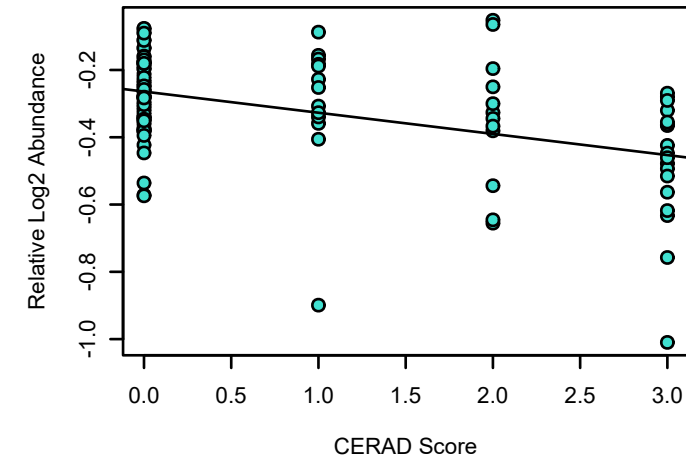
PAK1 UPenn Mixed PRM
K-W ANOVA p: 1.4e-06



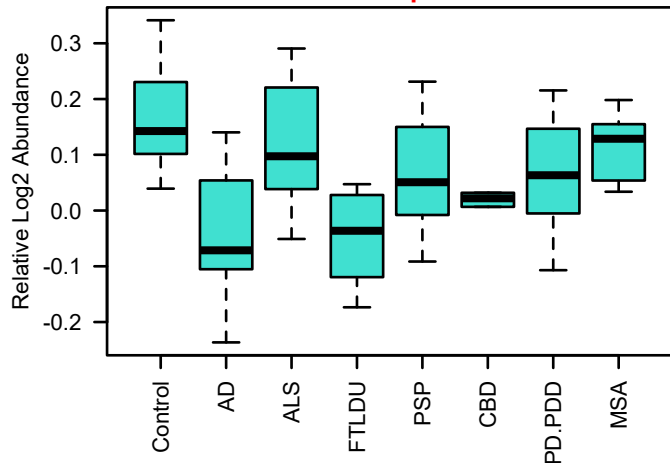
bicor=-0.37, p=0.00056
cor=-0.44, p=2.8e-05



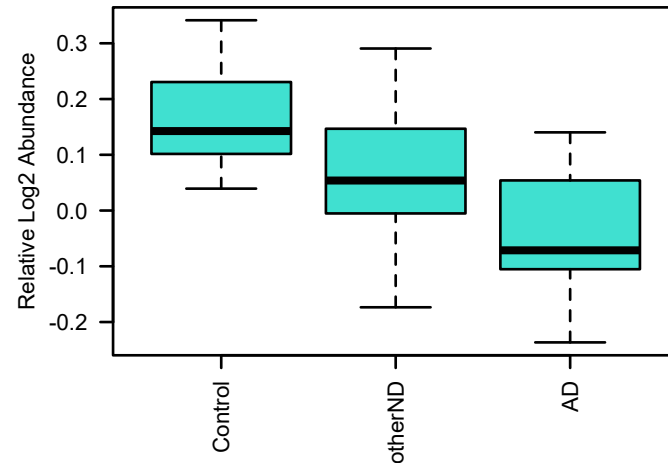
bicor=-0.42, p=1.5e-05
cor=-0.44, p=4.6e-06



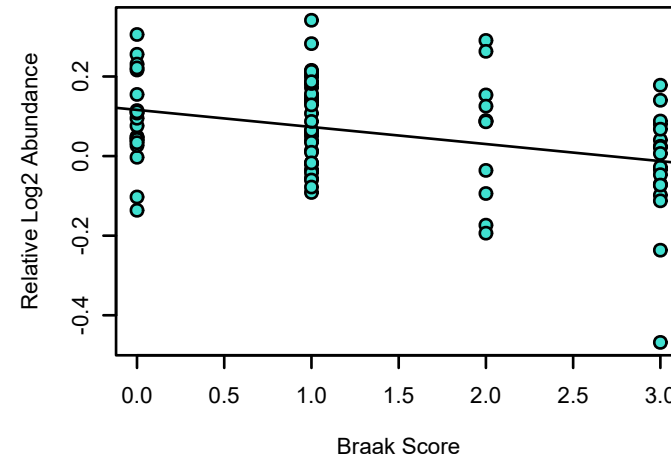
AP3B2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 1.5e-07



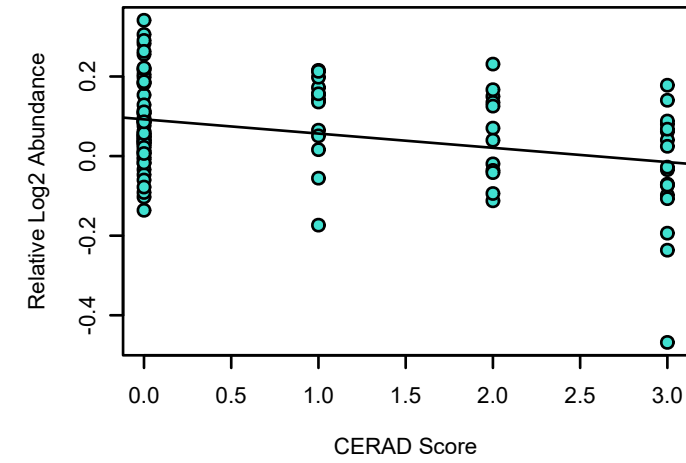
AP3B2 UPenn Mixed PRM
K-W ANOVA p: 2.8e-07



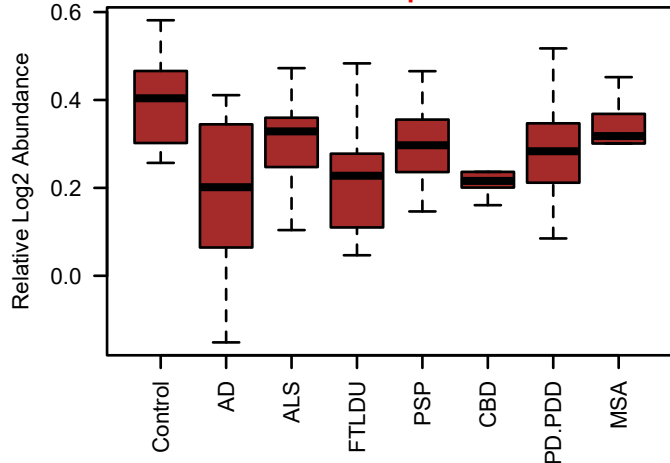
bicor=-0.31, p=0.0047
cor=-0.35, p=0.0011



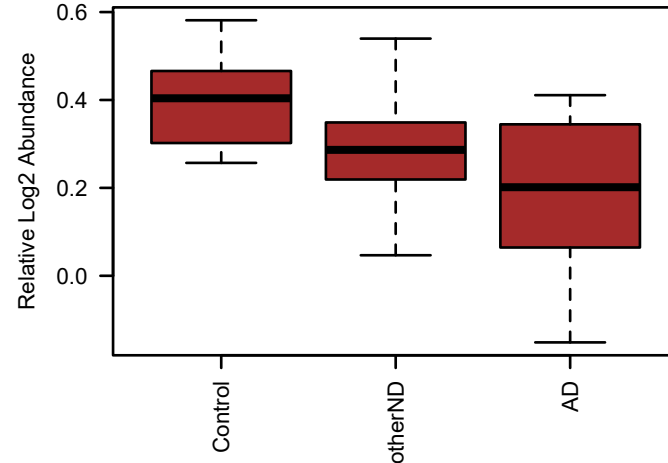
bicor=-0.29, p=0.0032
cor=-0.34, p=0.00054



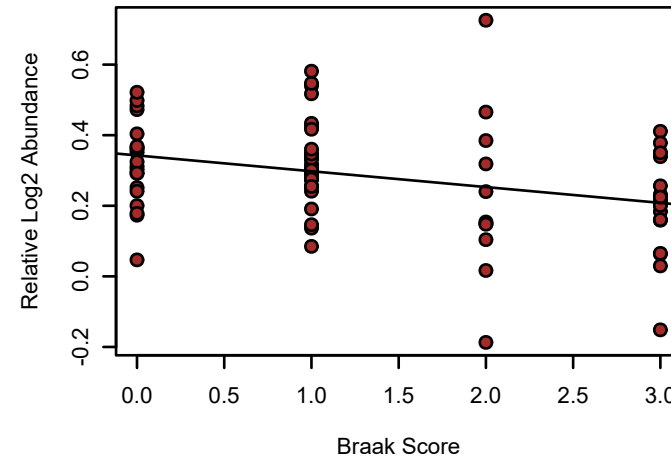
NNT UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.00079



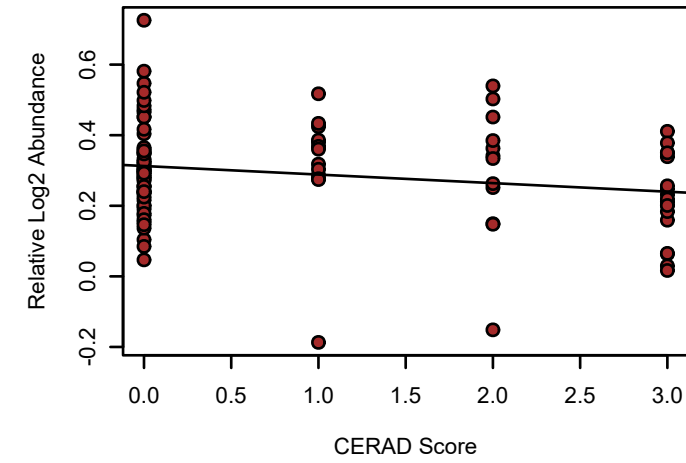
NNT UPenn Mixed PRM
K-W ANOVA p: 0.00018



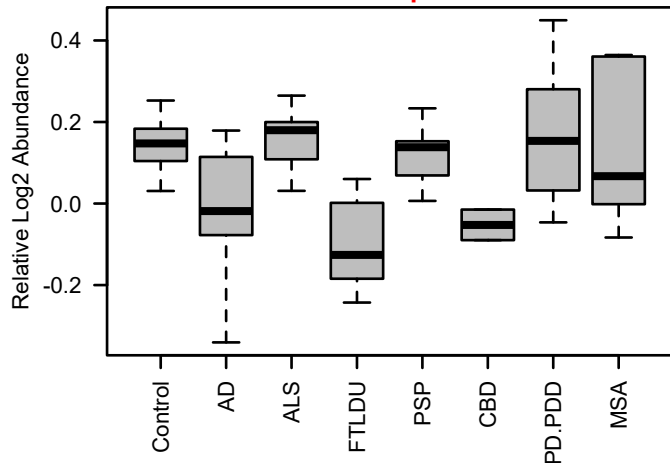
bicor=-0.34, p=0.0017
cor=-0.32, p=0.003



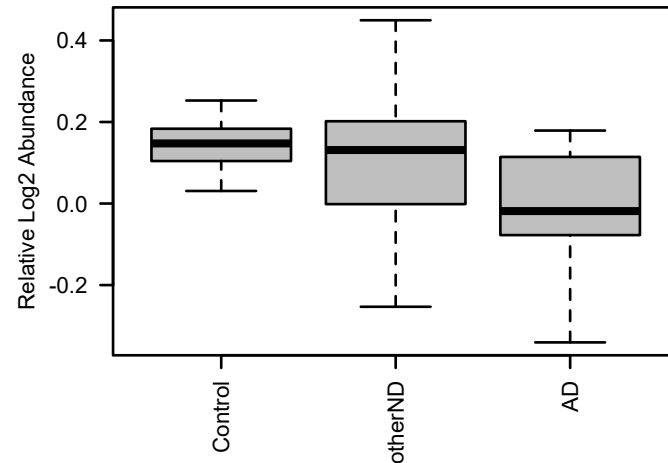
bicor=-0.18, p=0.074
cor=-0.2, p=0.046



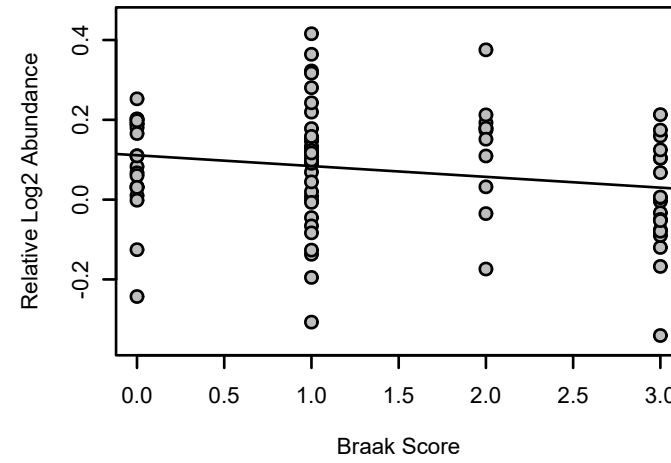
TUBB3 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 2.9e-05



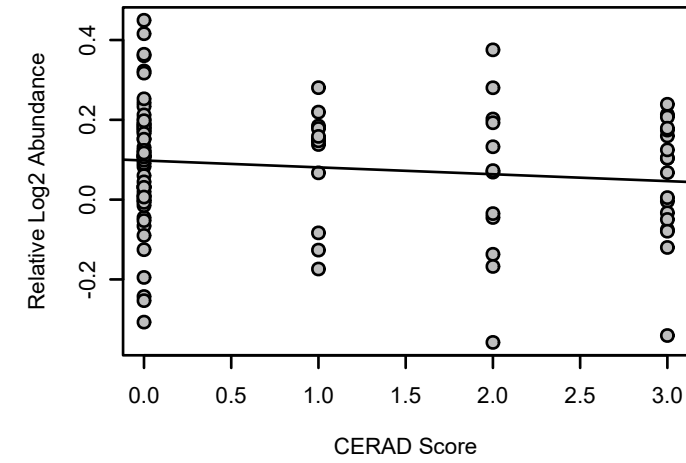
TUBB3 UPenn Mixed PRM
K-W ANOVA p: 0.016



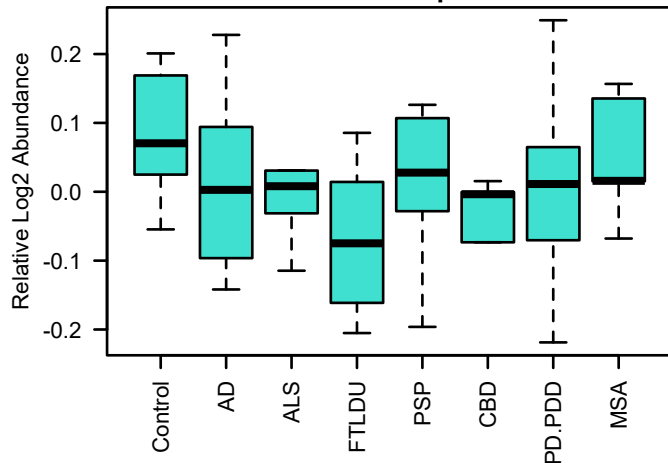
bicor=-0.24, p=0.03
cor=-0.2, p=0.068



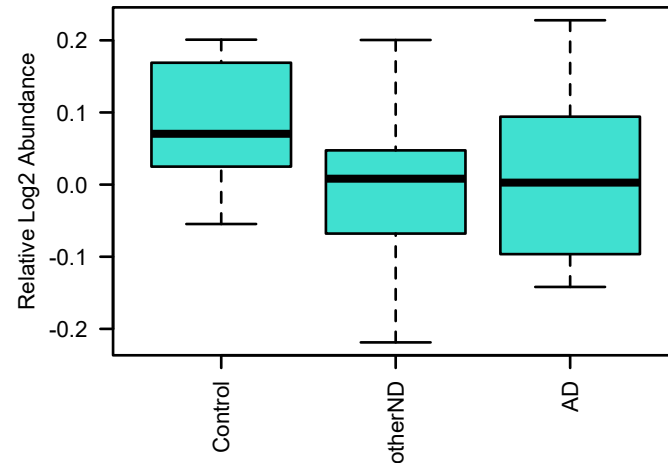
bicor=-0.11, p=0.26
cor=-0.13, p=0.2



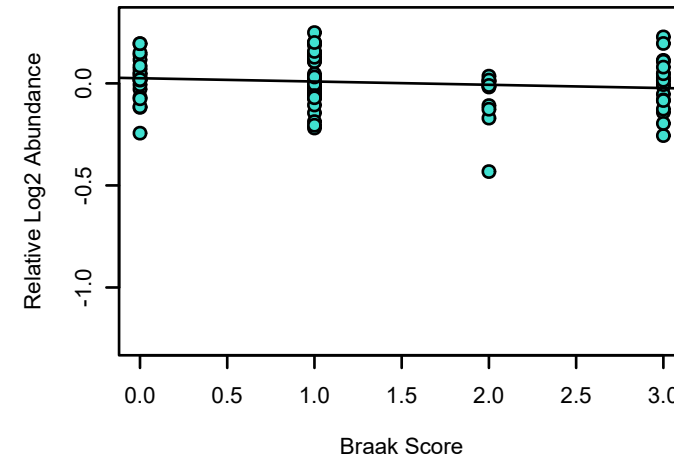
CAMK2B UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.4



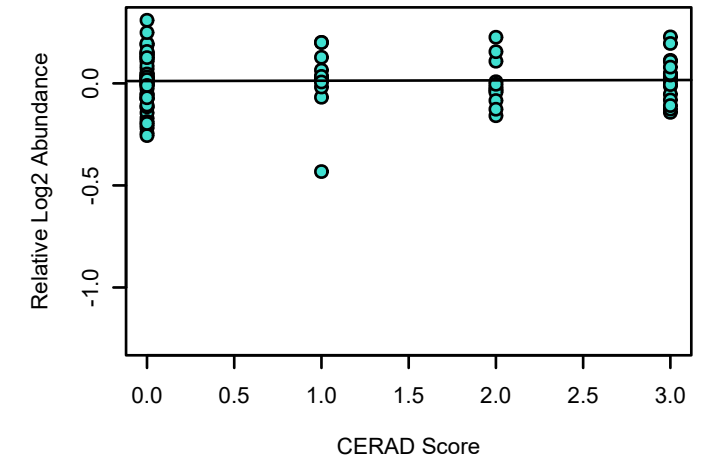
CAMK2B UPenn Mixed PRM
K-W ANOVA p: 0.18



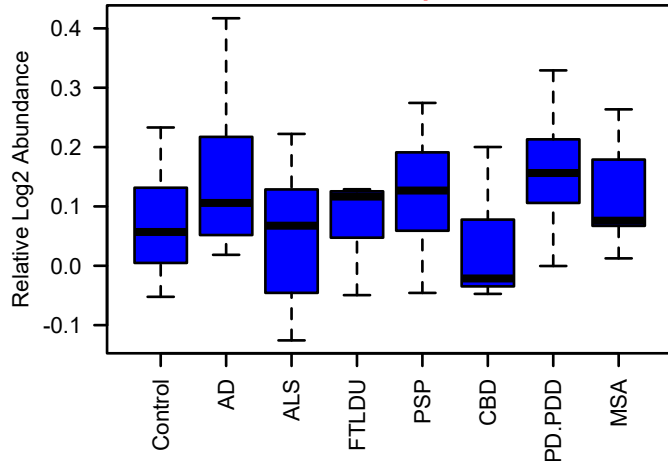
bicor=-0.15, p=0.18
cor=-0.14, p=0.2



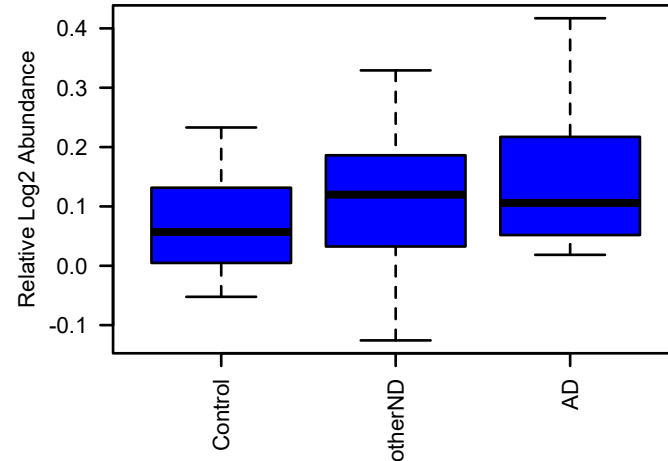
bicor=0.0079, p=0.94
cor=0.016, p=0.87



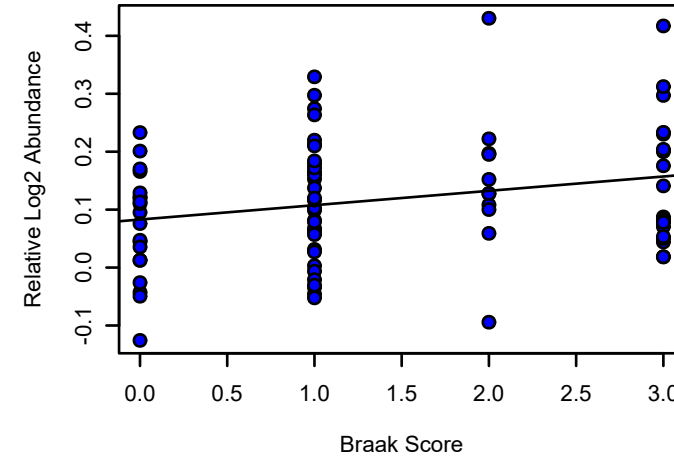
DCTN2 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.013



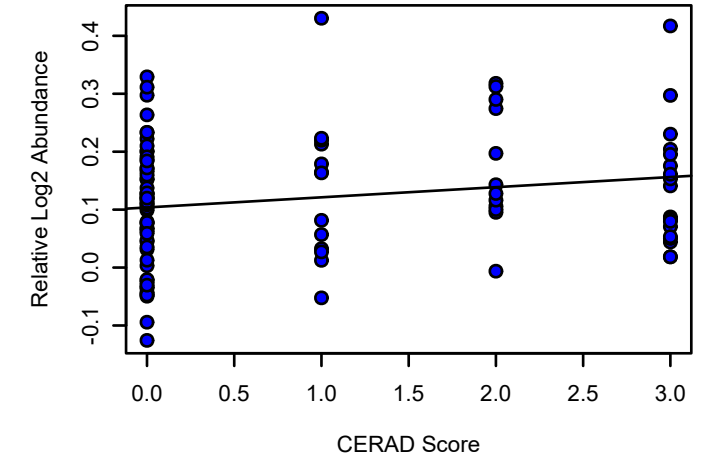
DCTN2 UPenn Mixed PRM
K-W ANOVA p: 0.13



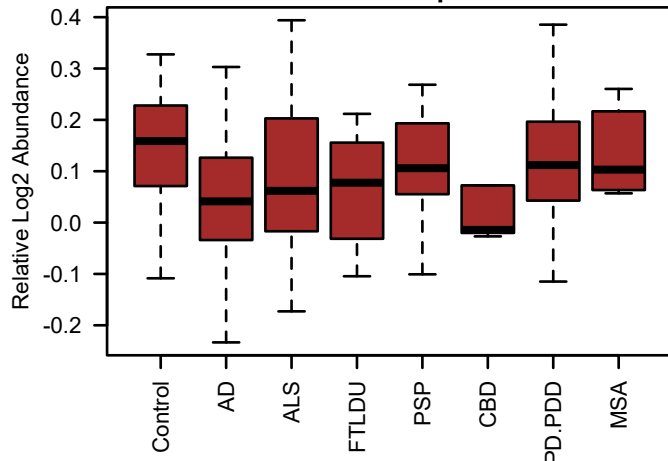
bicor=0.22, p=0.04
cor=0.25, p=0.022



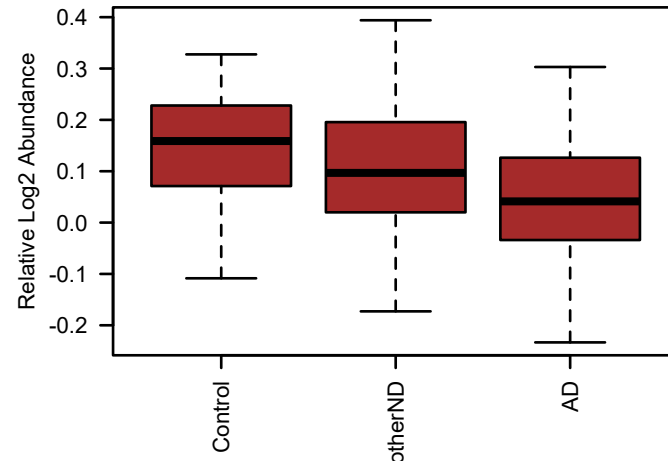
bicor=0.17, p=0.082
cor=0.19, p=0.058



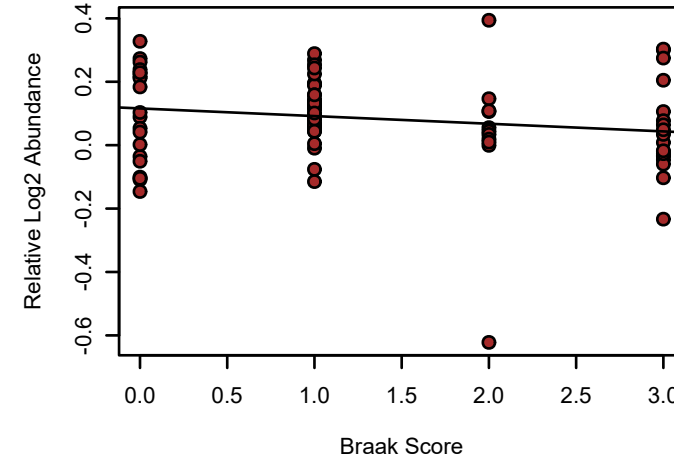
AUH UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.3



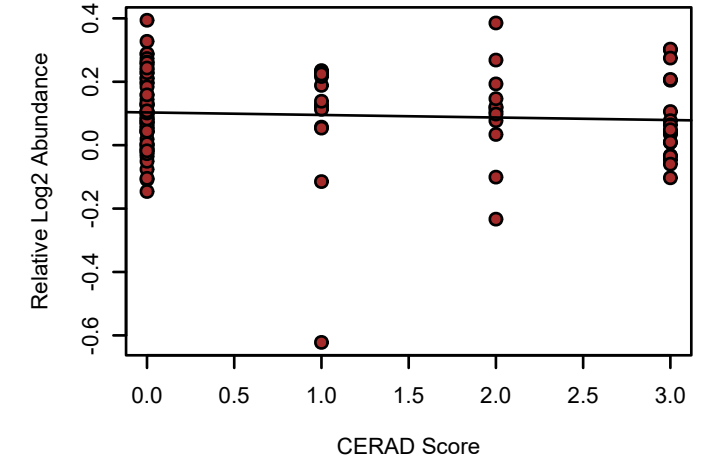
AUH UPenn Mixed PRM
K-W ANOVA p: 0.19



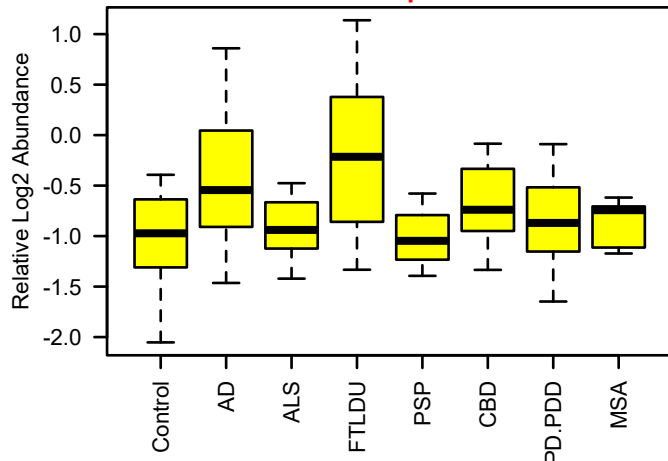
bicor=-0.16, p=0.14
cor=-0.18, p=0.1



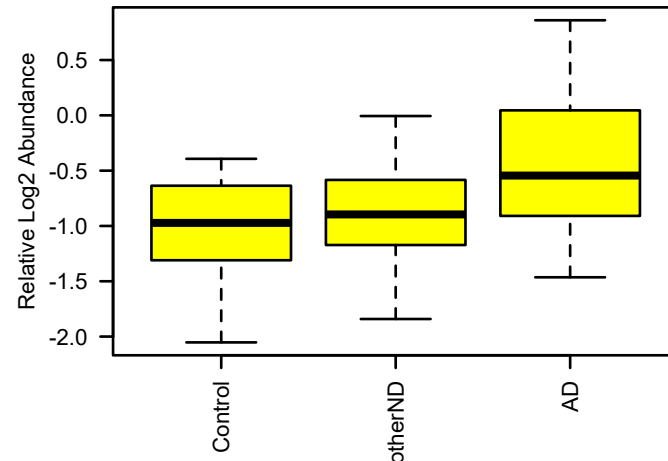
bicor=-0.074, p=0.46
cor=-0.067, p=0.51



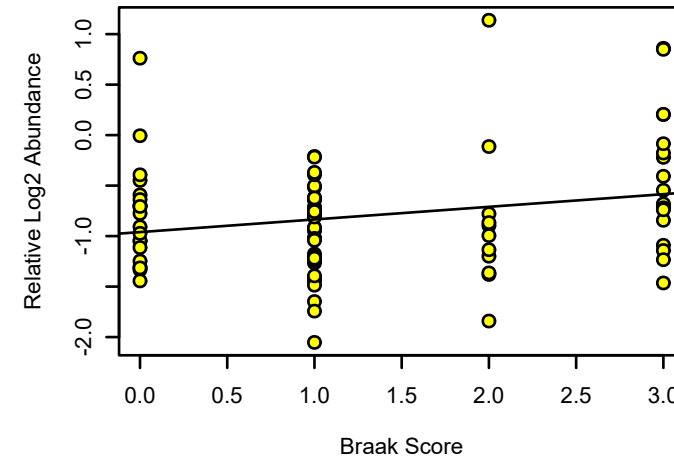
SNTB1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.00032



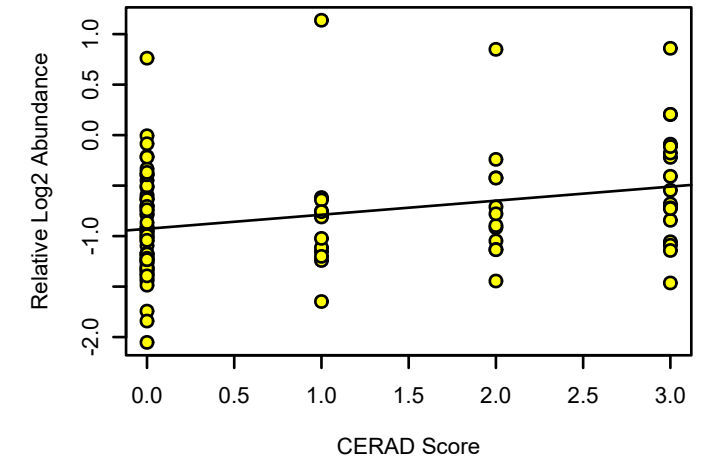
SNTB1 UPenn Mixed PRM
K-W ANOVA p: 0.0031



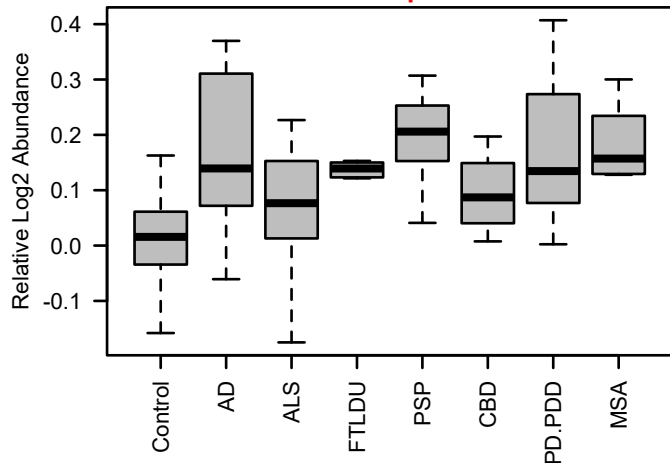
bicor=0.18, p=0.094
cor=0.23, p=0.035



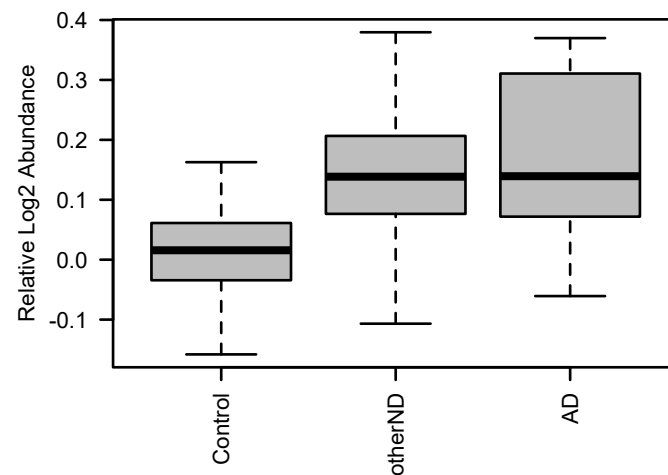
bicor=0.31, p=0.002
cor=0.3, p=0.0024



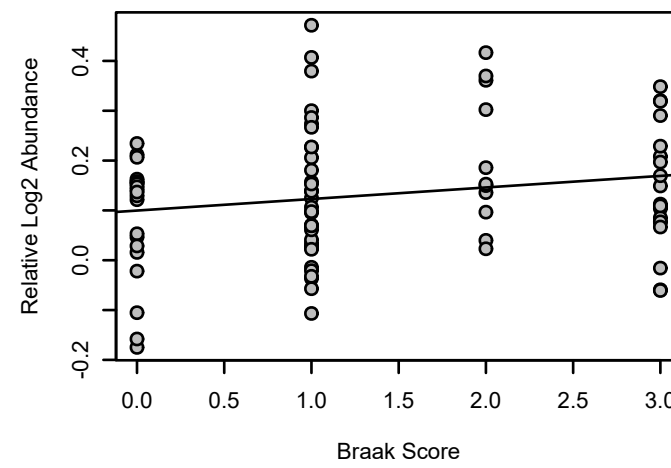
CKAP5 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.00023



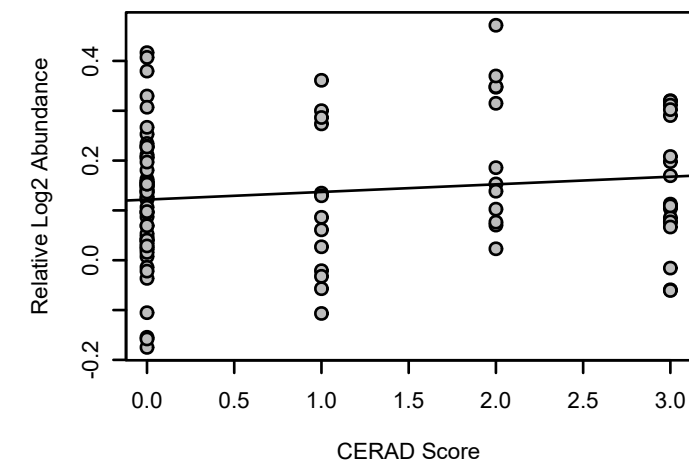
CKAP5 UPenn Mixed PRM
K-W ANOVA p: 0.001



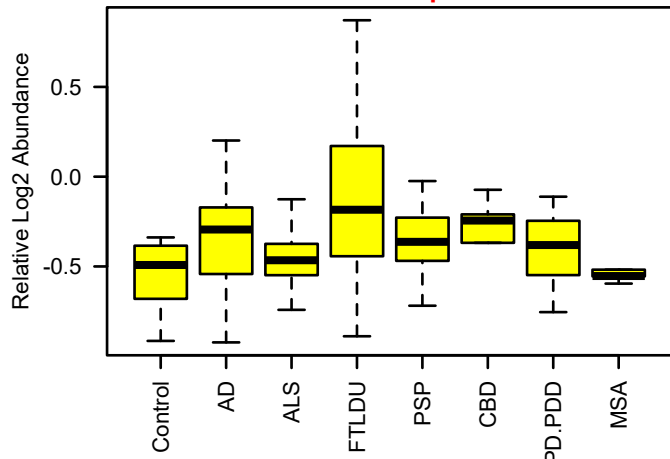
bicor=0.17, p=0.12
cor=0.19, p=0.083



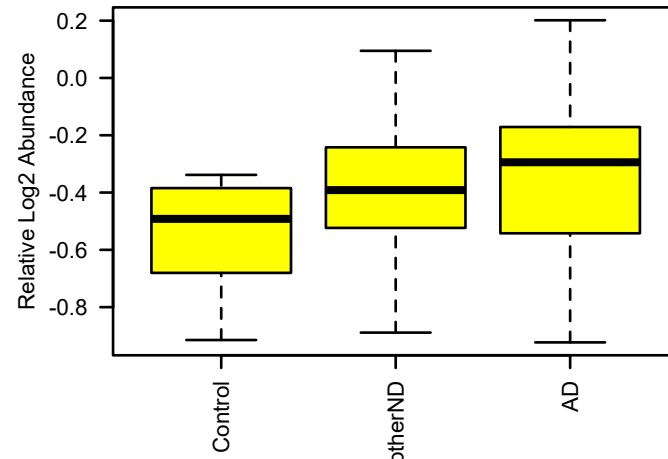
bicor=0.13, p=0.2
cor=0.14, p=0.16



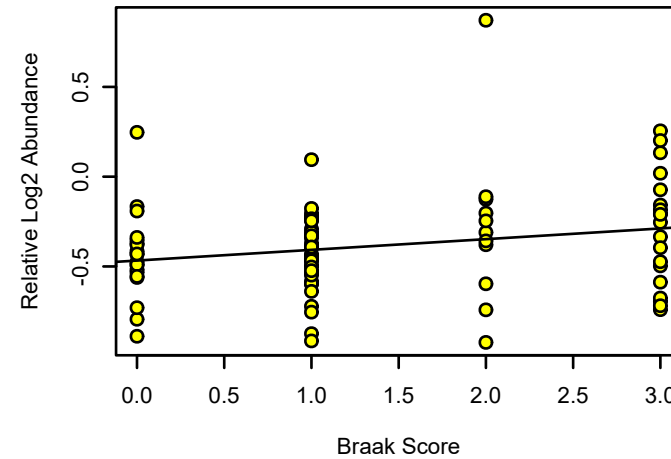
DPYSL3 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.02



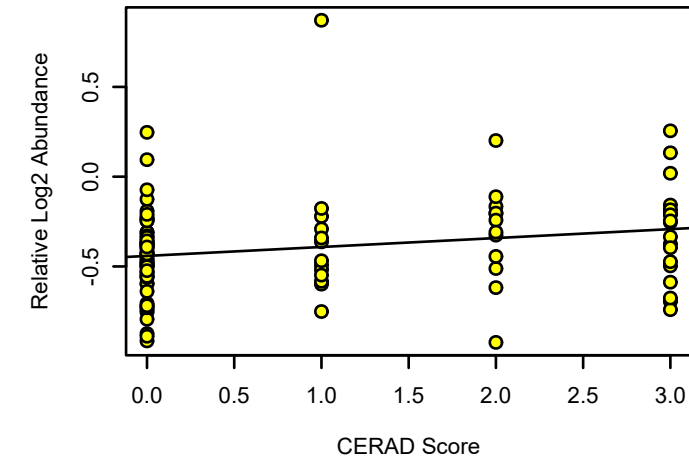
DPYSL3 UPenn Mixed PRM
K-W ANOVA p: 0.059



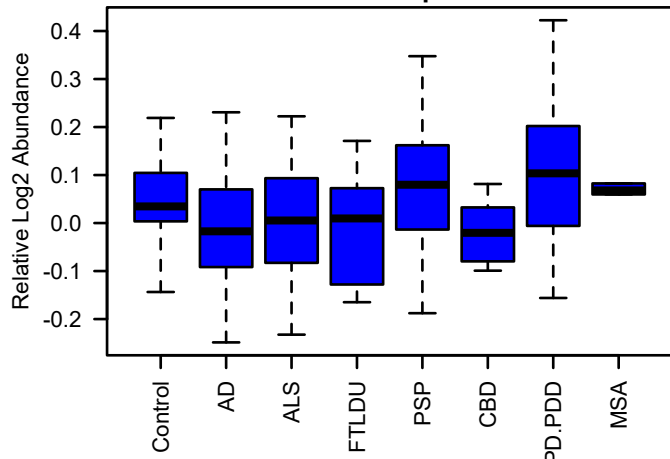
bicor=0.2, p=0.073
cor=0.22, p=0.044



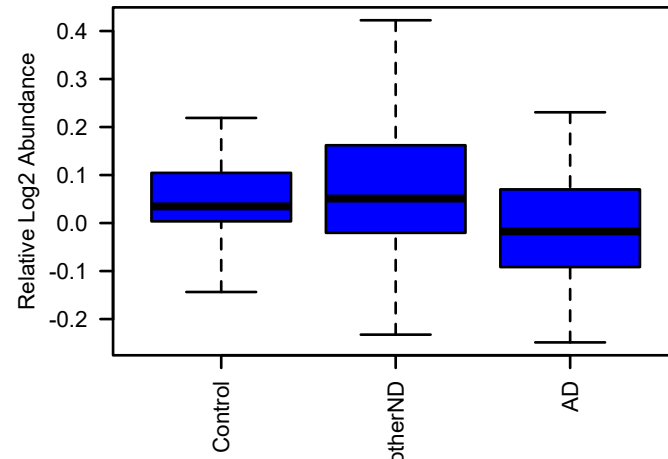
bicor=0.24, p=0.015
cor=0.22, p=0.028



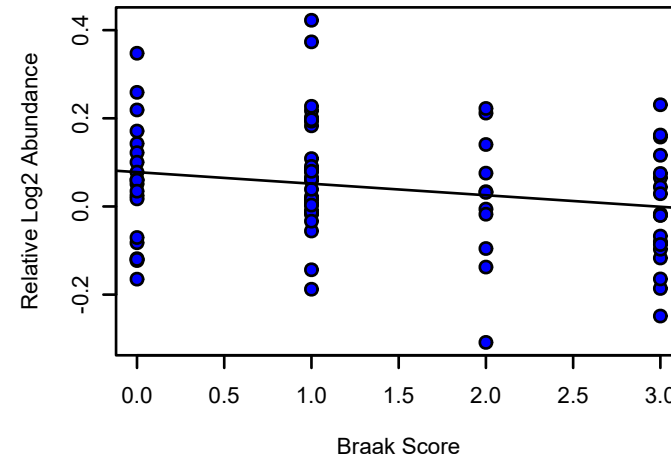
DCTN1 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.051



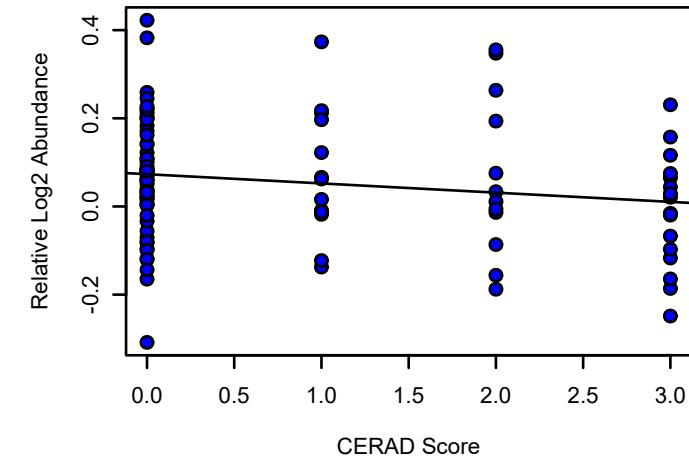
DCTN1 UPenn Mixed PRM
K-W ANOVA p: 0.18



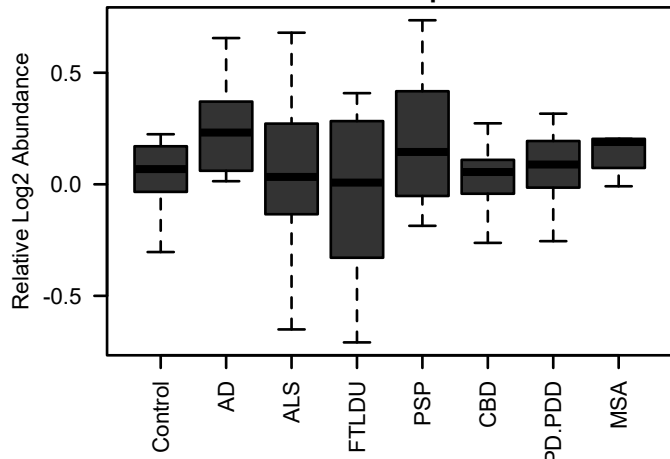
bicor=-0.18, p=0.11
cor=-0.21, p=0.055



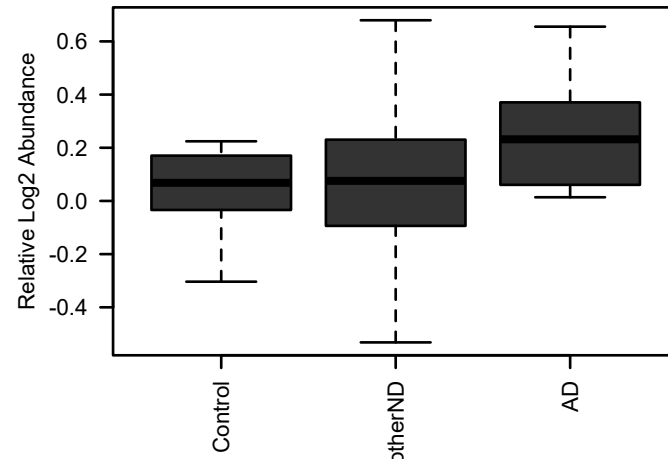
bicor=-0.19, p=0.053
cor=-0.18, p=0.073



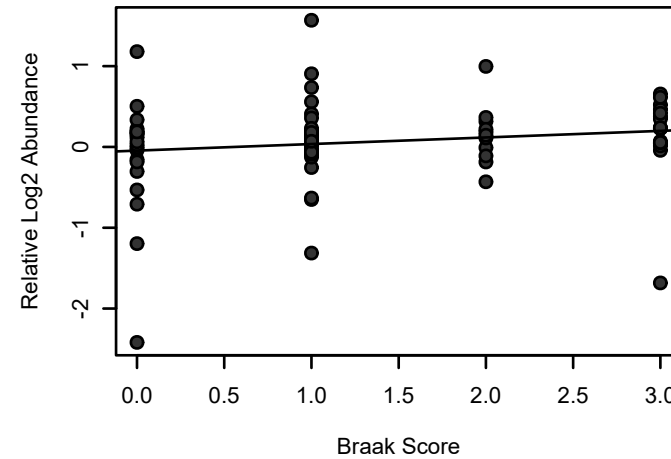
PCDH18 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.86



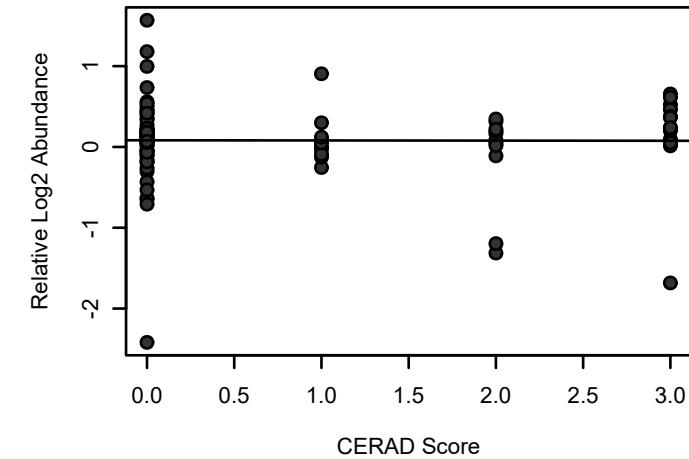
PCDH18 UPenn Mixed PRM
K-W ANOVA p: 0.26



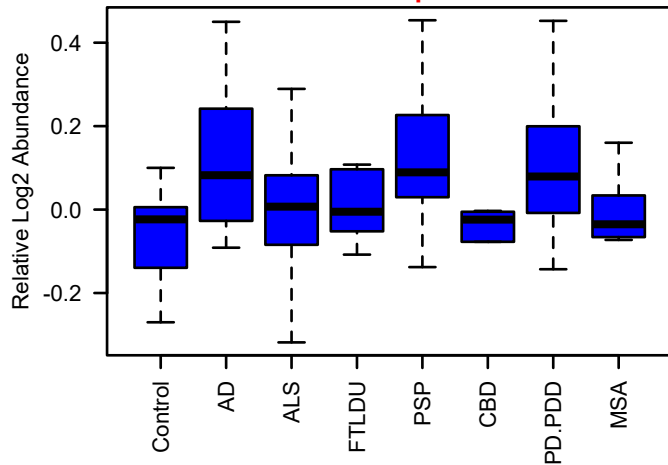
bicor=0.28, p=0.0087
cor=0.17, p=0.12



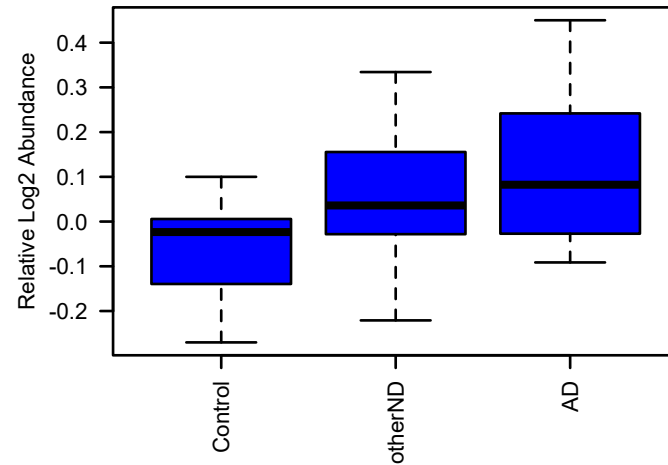
bicor=0.21, p=0.035
cor=-0.0049, p=0.96



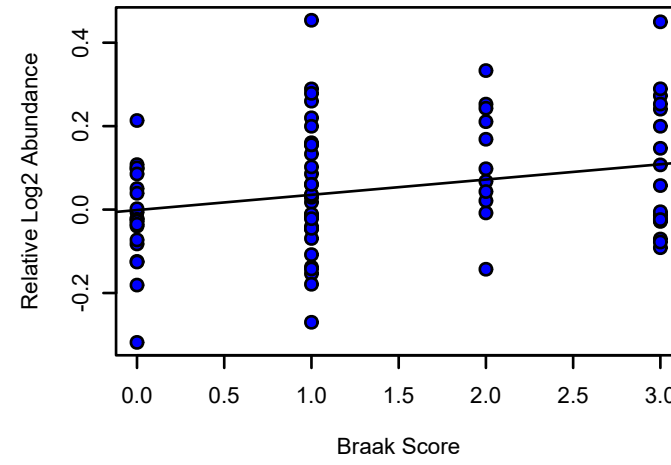
DYNC1H1 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.0035



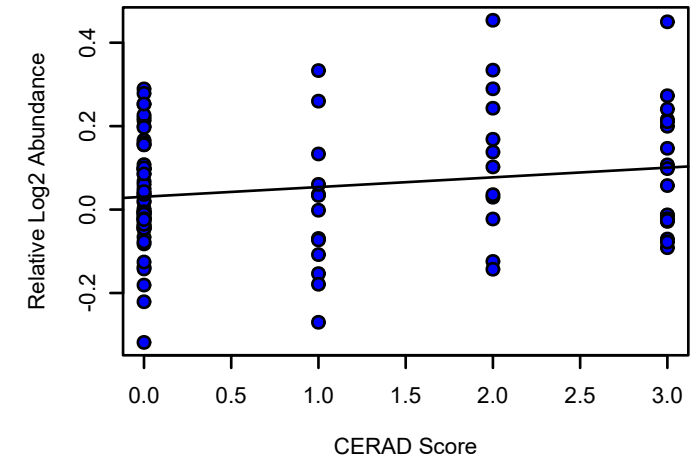
DYNC1H1 UPenn Mixed PRM
K-W ANOVA p: 0.009



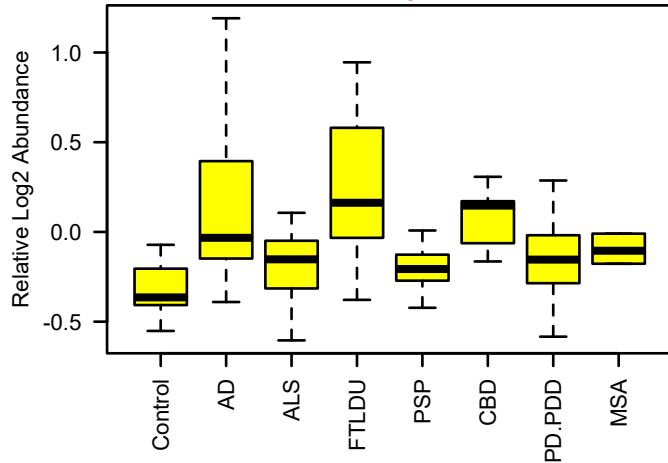
bicor=0.27, p=0.012
cor=0.27, p=0.013



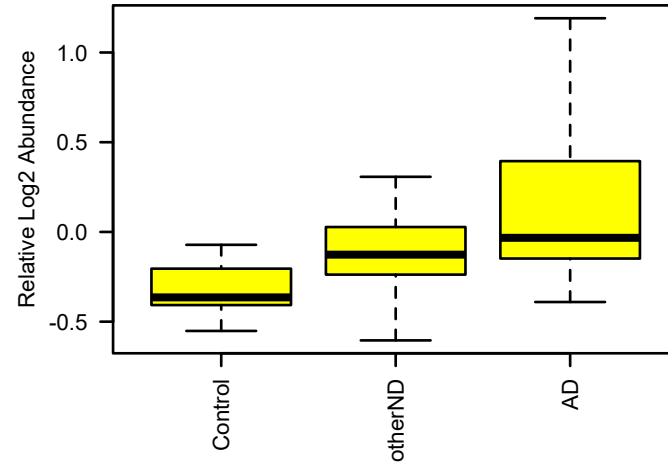
bicor=0.15, p=0.13
cor=0.19, p=0.058



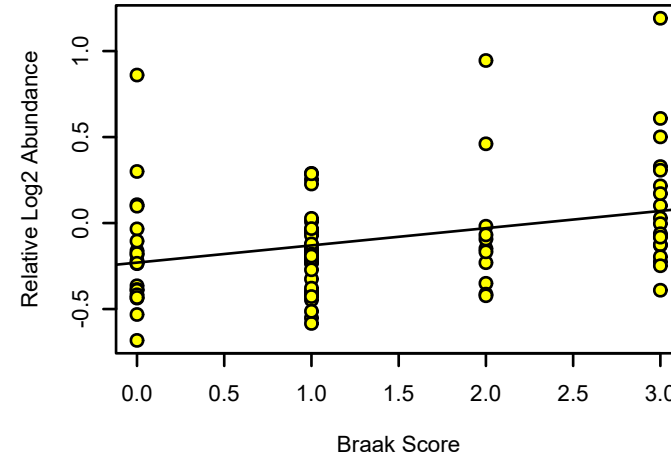
GNA13 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.00013



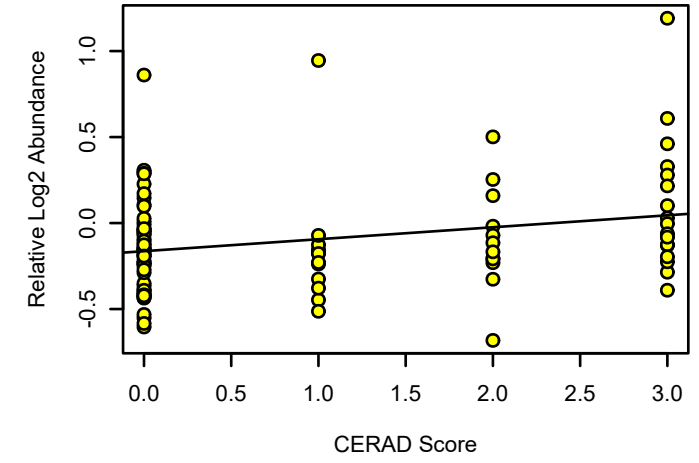
GNA13 UPenn Mixed PRM
K-W ANOVA p: 0.00052



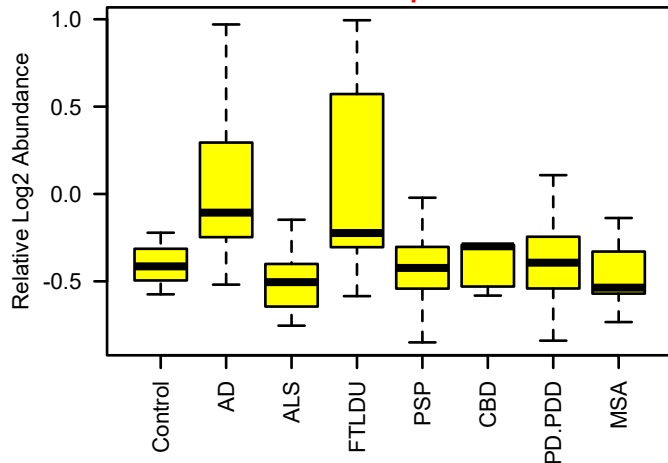
bicor=0.33, p=0.0026
cor=0.33, p=0.0022



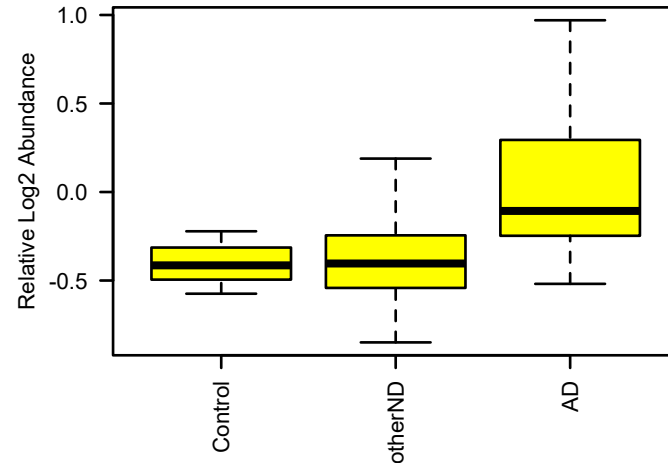
bicor=0.23, p=0.019
cor=0.26, p=0.009



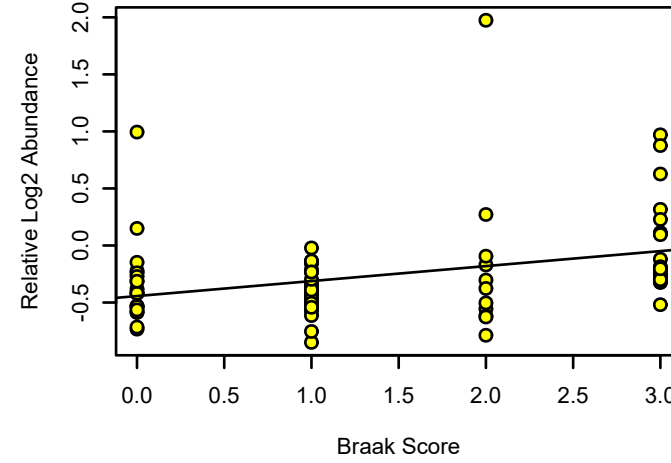
PLEC UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 2.7e-06



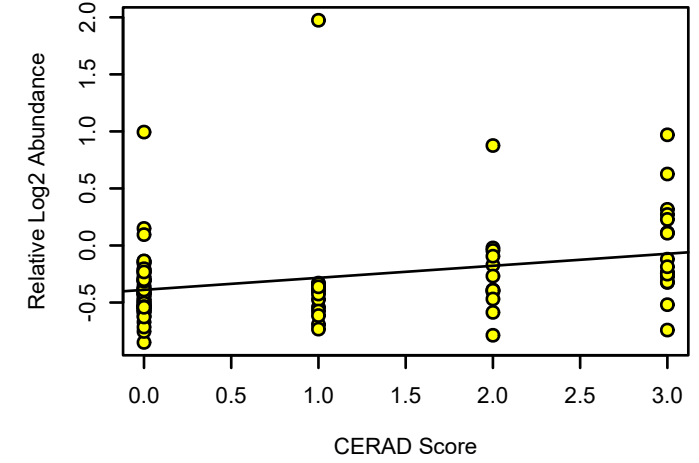
PLEC UPenn Mixed PRM
K-W ANOVA p: 2e-04



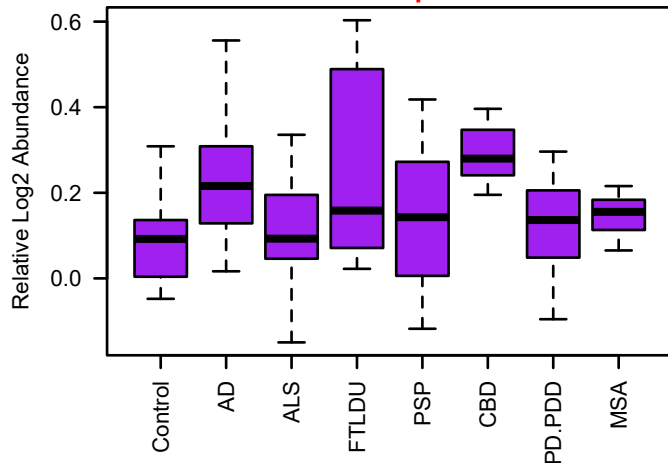
bicor=0.35, p=0.00093
cor=0.33, p=0.0022



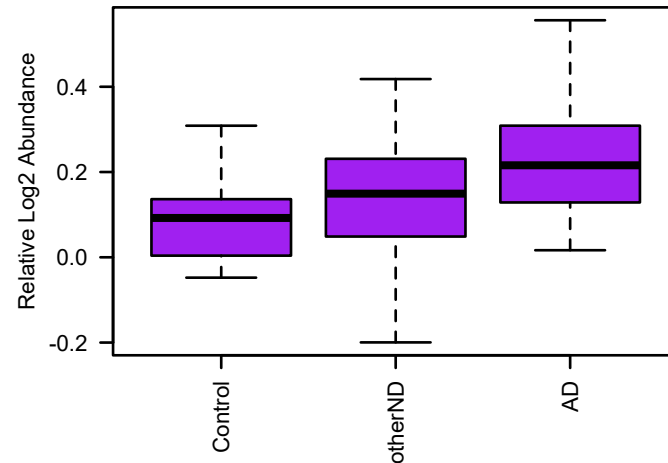
bicor=0.36, p=0.00029
cor=0.31, p=0.0017



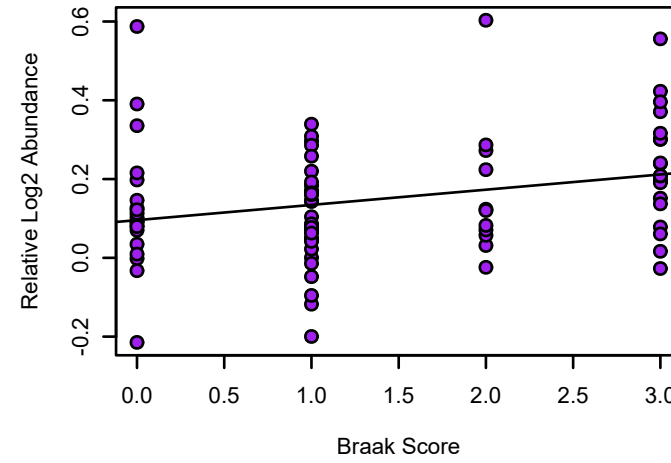
NONO UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.0041



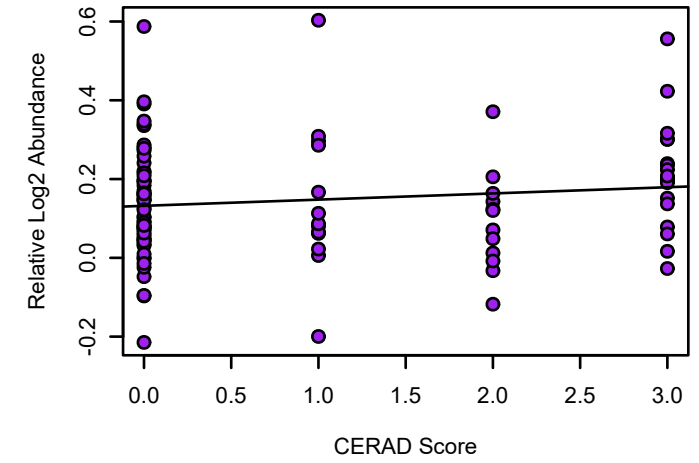
NONO UPenn Mixed PRM
K-W ANOVA p: 0.016



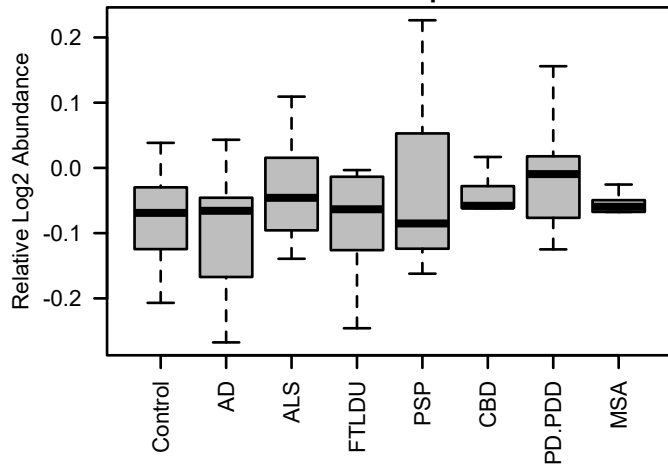
bicor=0.31, p=0.0042
cor=0.27, p=0.013



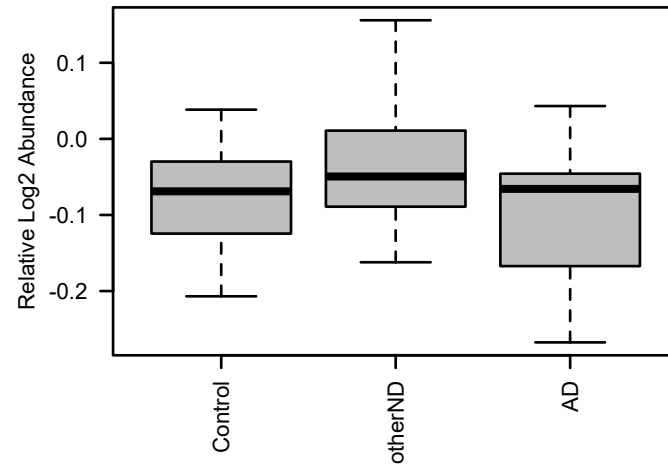
bicor=0.13, p=0.19
cor=0.13, p=0.2



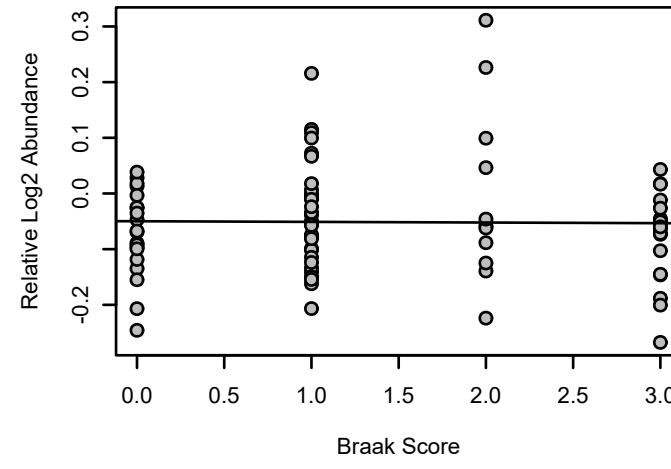
PPP1R7 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.21



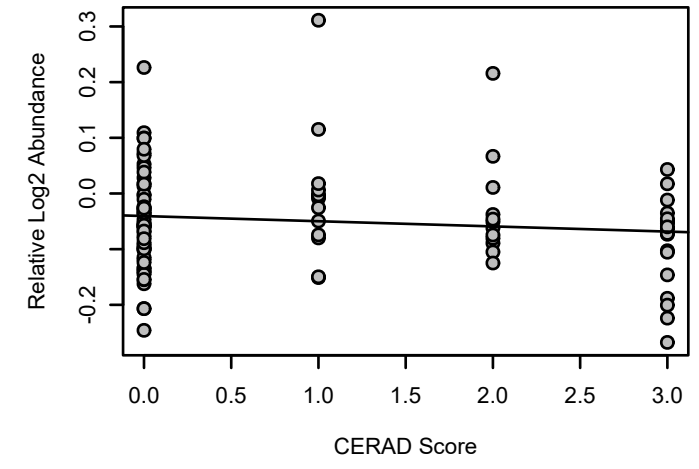
PPP1R7 UPenn Mixed PRM
K-W ANOVA p: 0.024



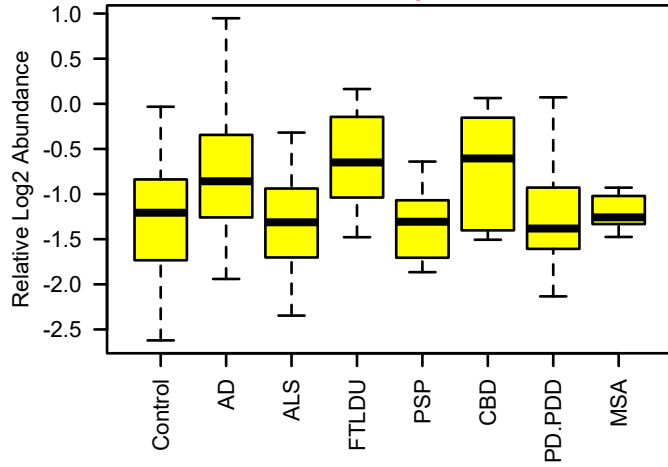
bicor=-0.039, p=0.72
cor=-0.013, p=0.91



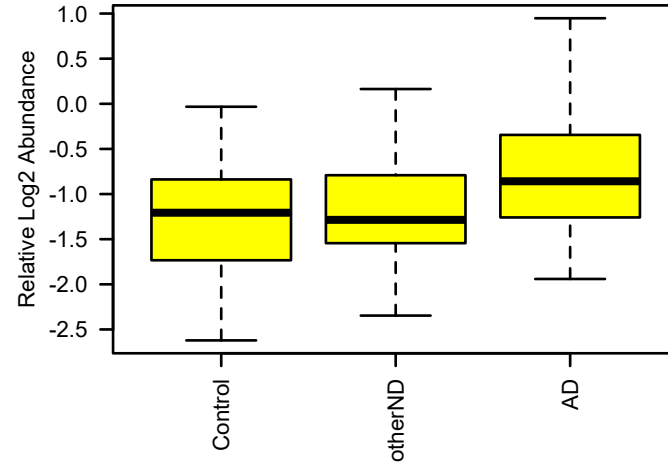
bicor=-0.12, p=0.22
cor=-0.12, p=0.23



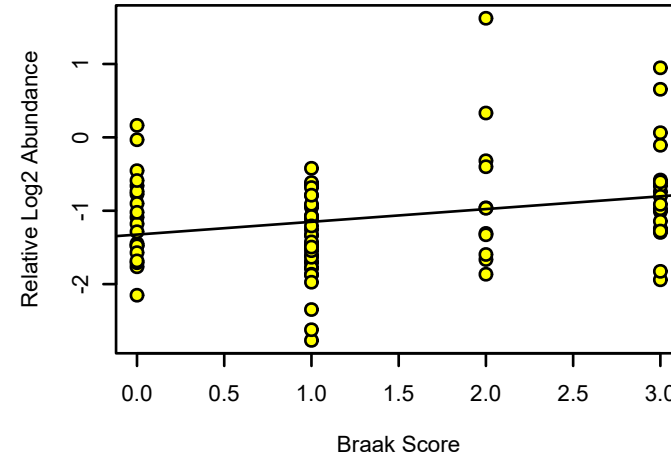
ADIRF UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.0041



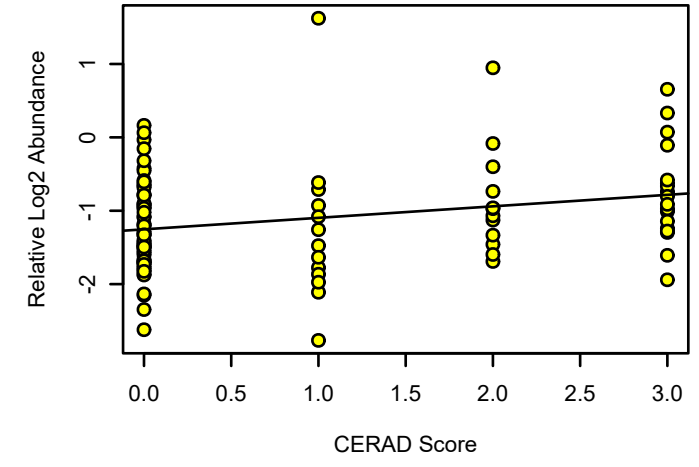
ADIRF UPenn Mixed PRM
K-W ANOVA p: 0.031



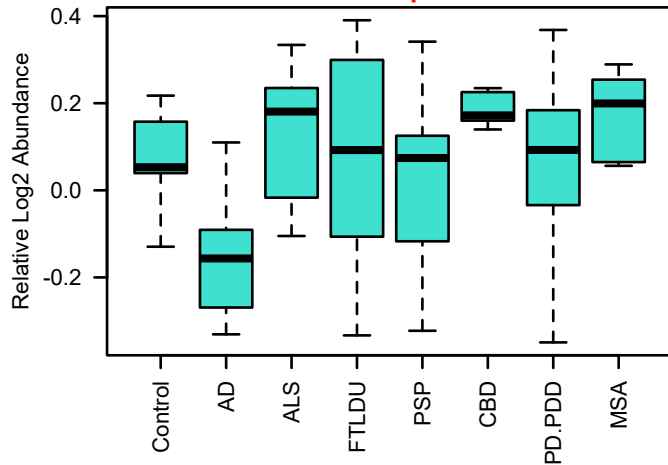
bicor=0.23, p=0.035
cor=0.26, p=0.017



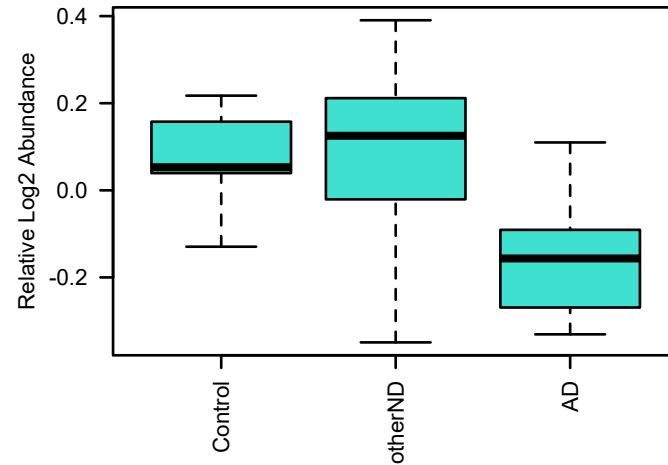
bicor=0.27, p=0.0076
cor=0.26, p=0.009



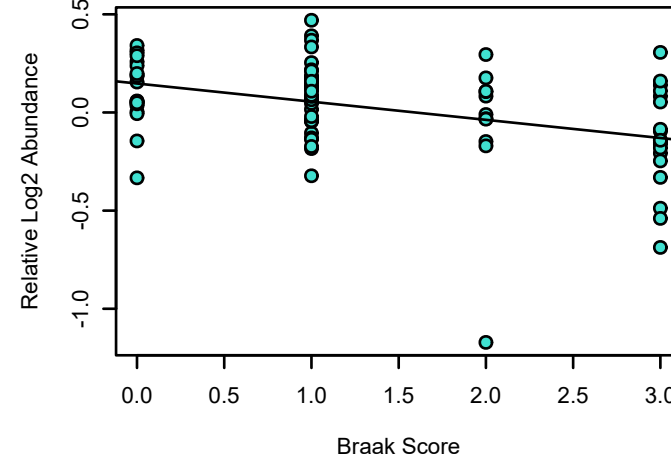
STX1A UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 2.2e-05



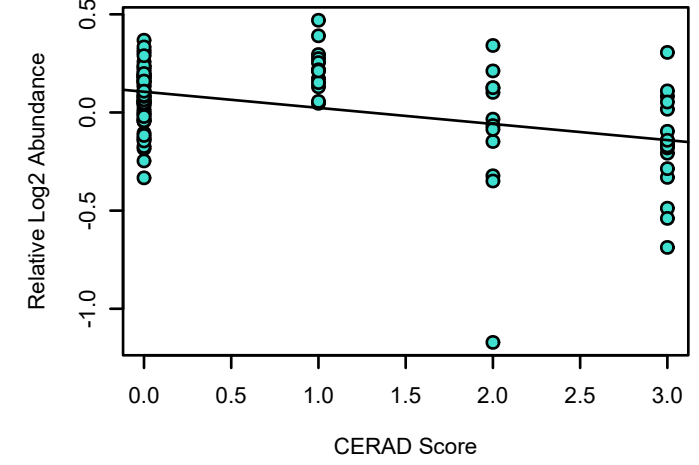
STX1A UPenn Mixed PRM
K-W ANOVA p: 4.3e-07



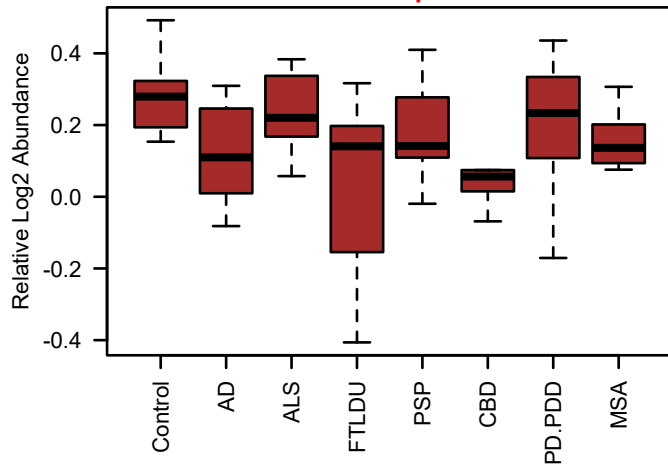
bicor=-0.41, p=0.00013
cor=-0.4, p=0.00016



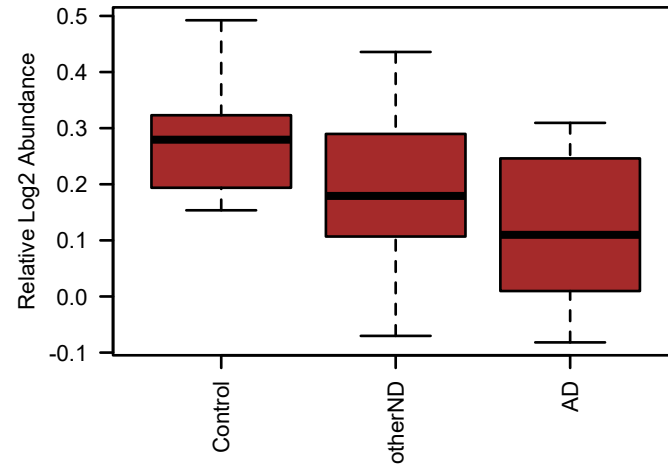
bicor=-0.38, p=9.4e-05
cor=-0.41, p=2.3e-05



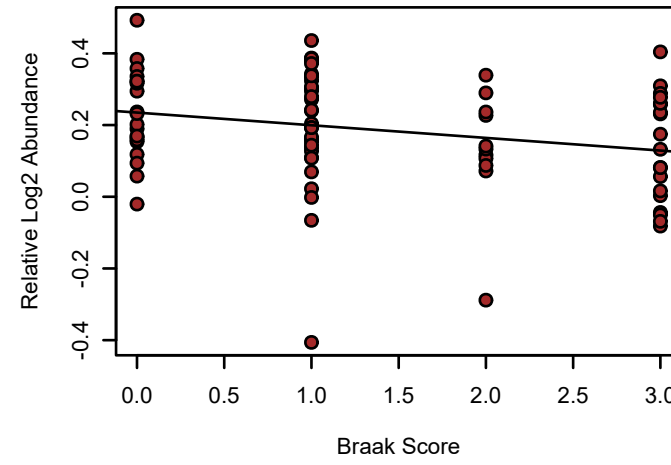
NDUFA9 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0019



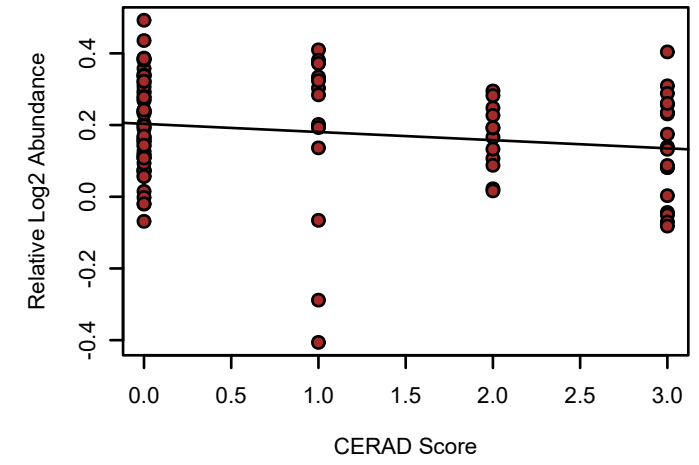
NDUFA9 UPenn Mixed PRM
K-W ANOVA p: 0.013



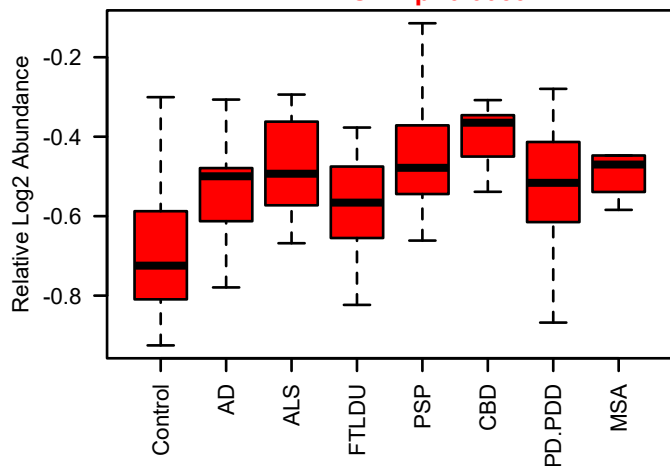
bicor=-0.26, p=0.018
cor=-0.25, p=0.022



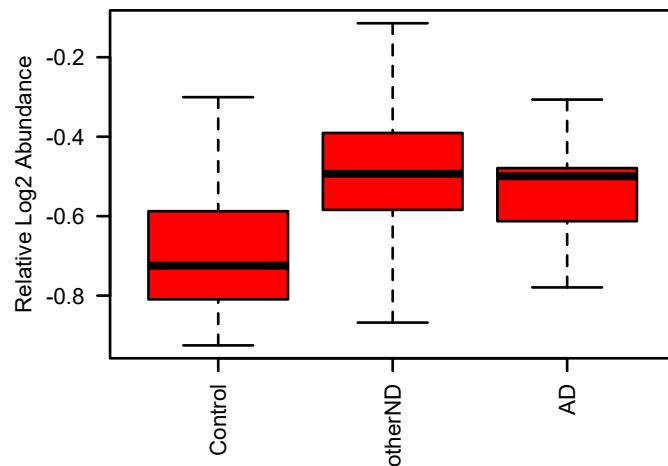
bicor=-0.19, p=0.059
cor=-0.18, p=0.073



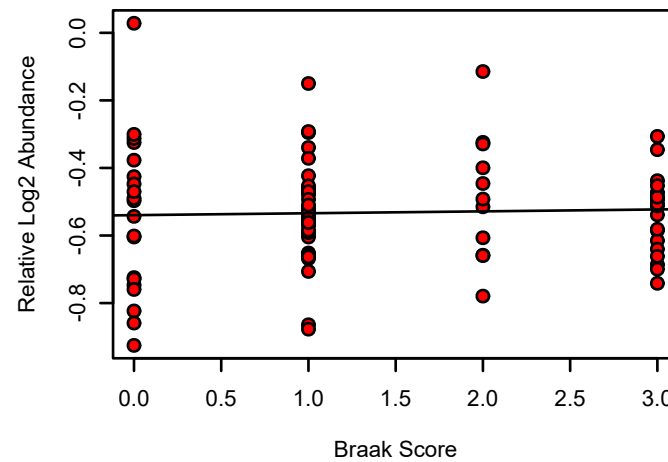
RTN1 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.0039



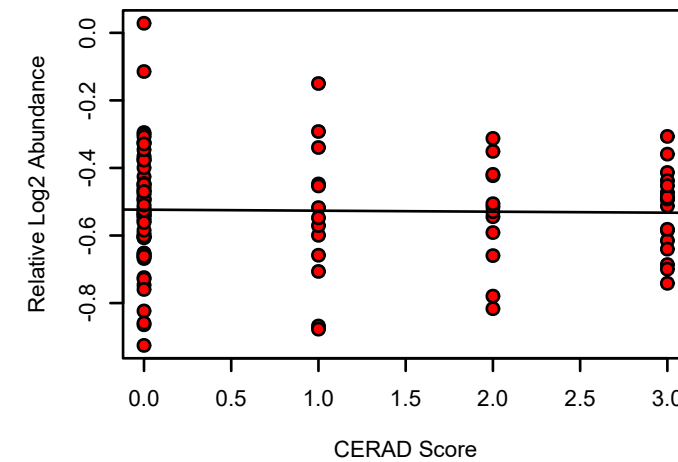
RTN1 UPenn Mixed PRM
K-W ANOVA p: 0.00056



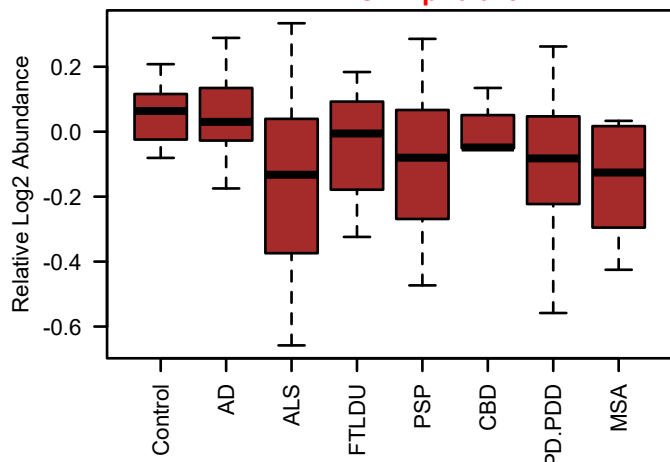
bicor=0.021, p=0.85
cor=0.036, p=0.75



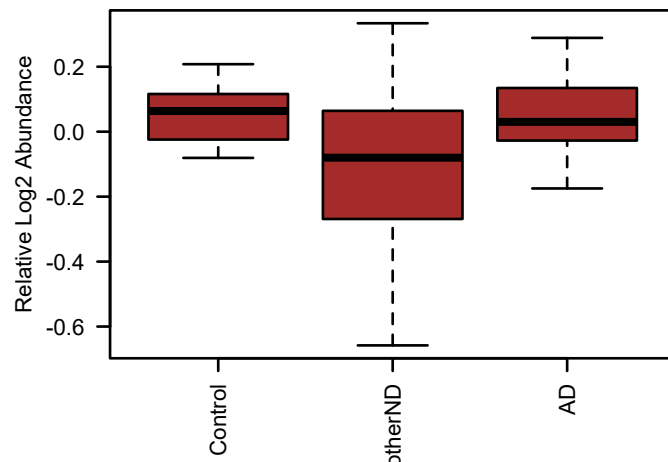
bicor=-0.011, p=0.91
cor=-0.021, p=0.84



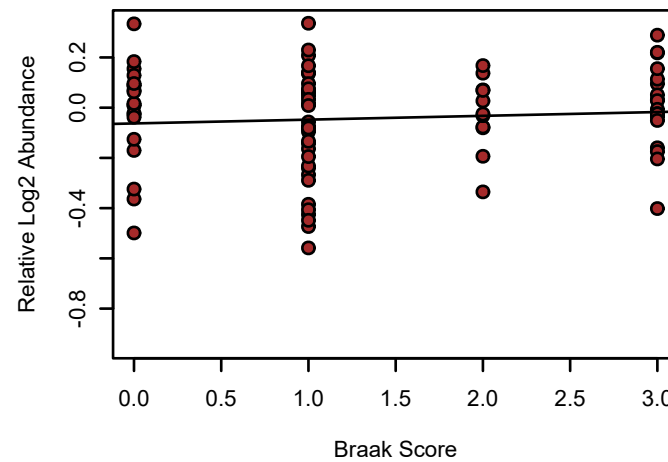
IMMT UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.029



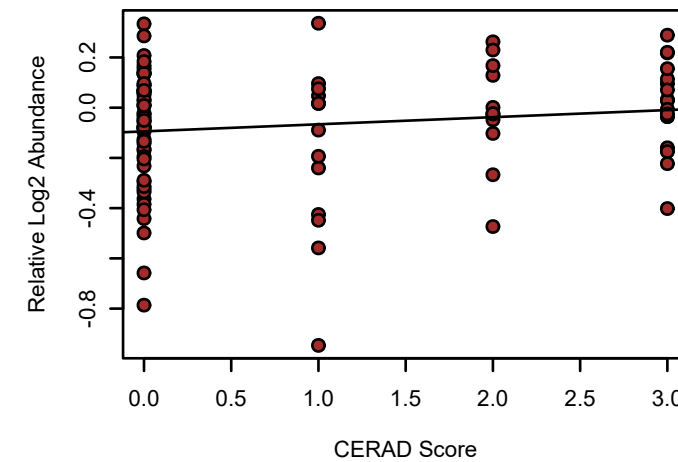
IMMT UPenn Mixed PRM
K-W ANOVA p: 0.0015



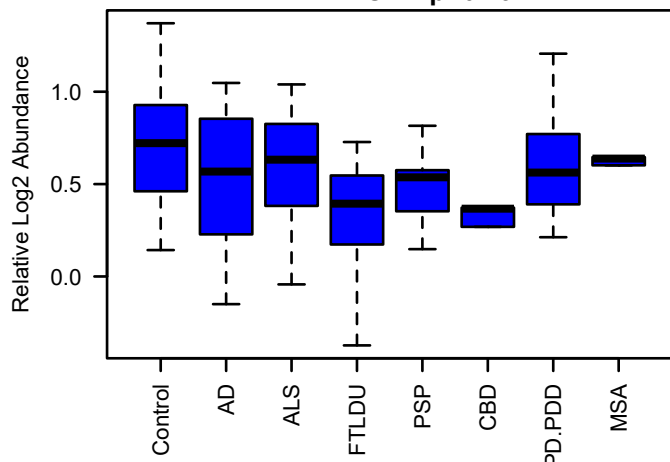
bicor=0.032, p=0.77
cor=0.083, p=0.45



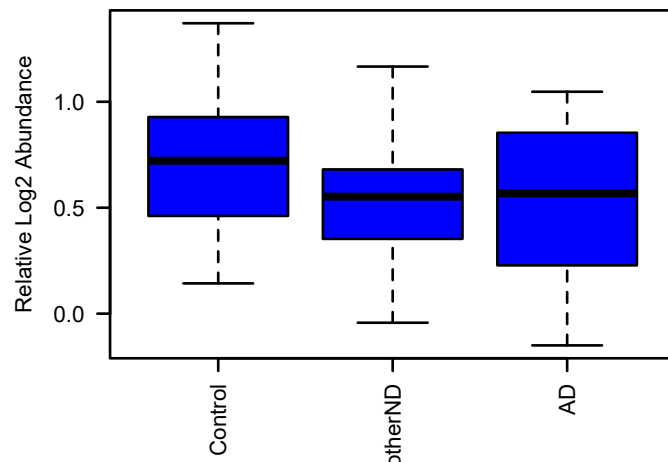
bicor=0.15, p=0.15
cor=0.14, p=0.16



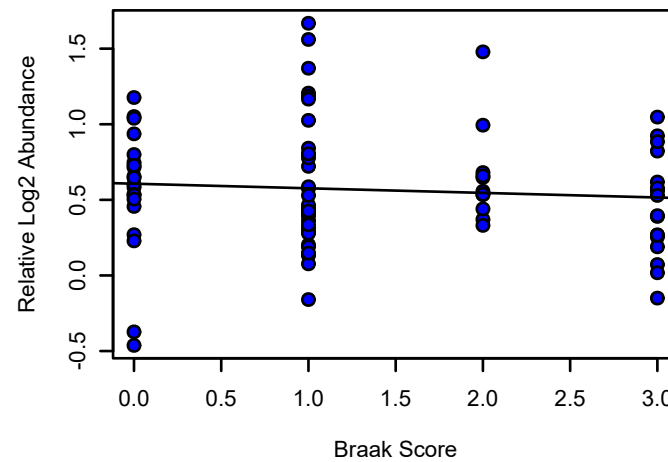
INF2 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.29



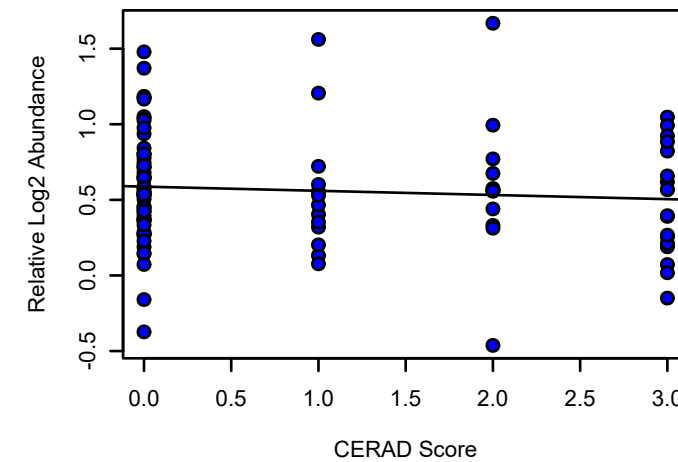
INF2 UPenn Mixed PRM
K-W ANOVA p: 0.35



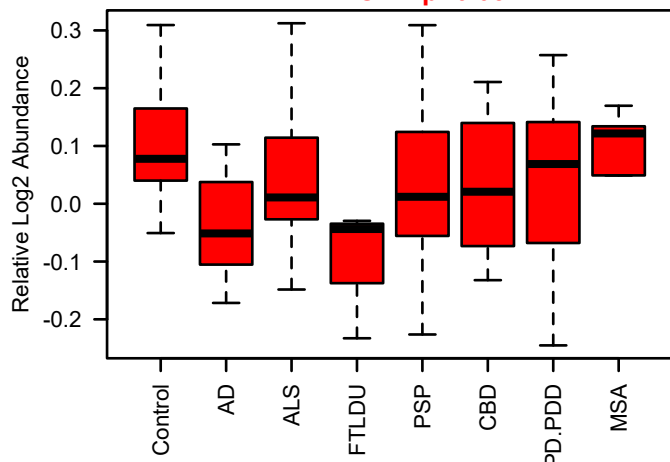
bicor=-0.087, p=0.43
cor=-0.083, p=0.45



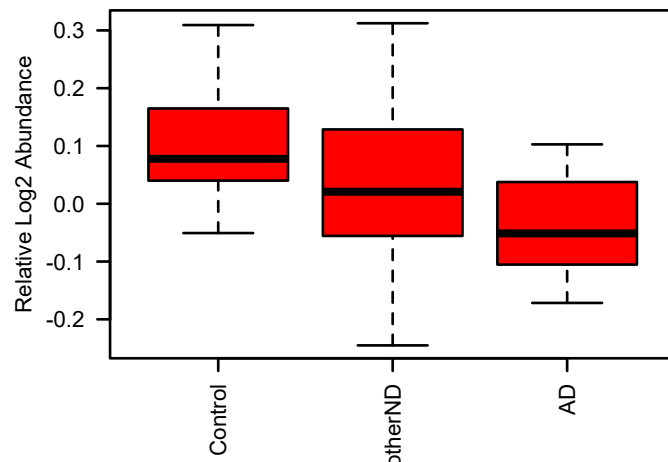
bicor=-0.093, p=0.36
cor=-0.087, p=0.39



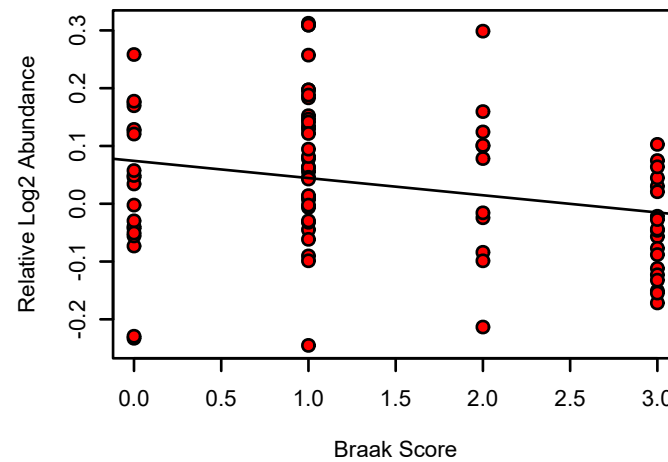
AAK1 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.037



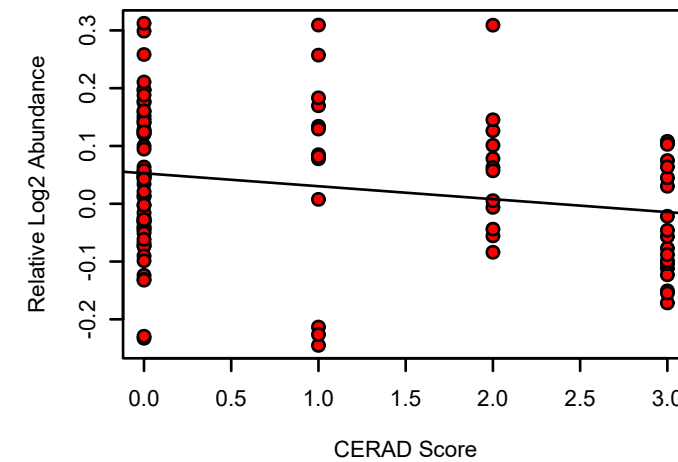
AAK1 UPenn Mixed PRM
K-W ANOVA p: 0.019



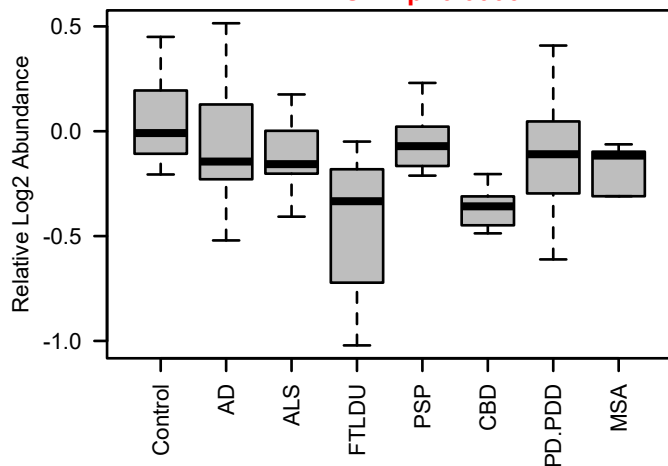
bicor=-0.26, p=0.016
cor=-0.25, p=0.022



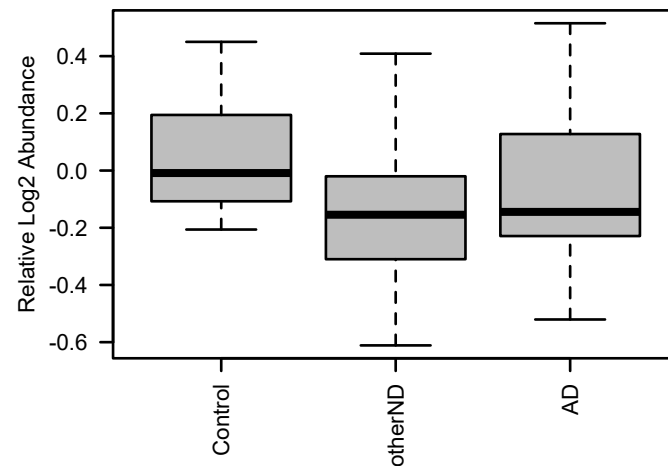
bicor=-0.22, p=0.029
cor=-0.21, p=0.036



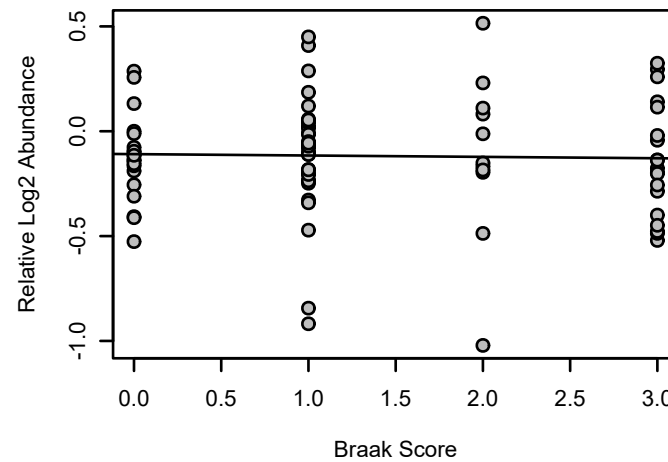
PREPL UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.00062



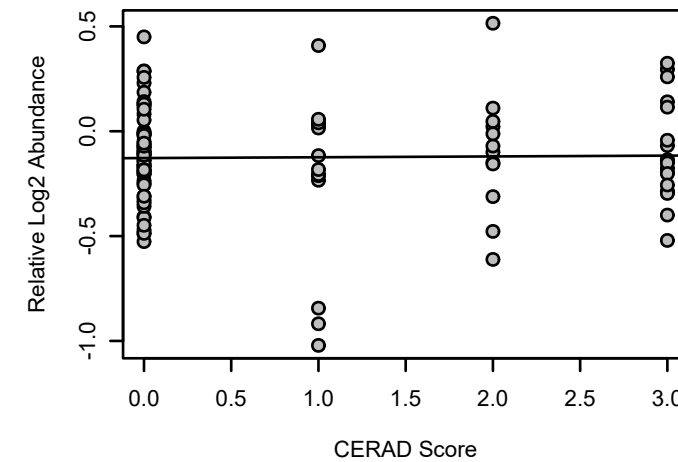
PREPL UPenn Mixed PRM
K-W ANOVA p: 0.0089



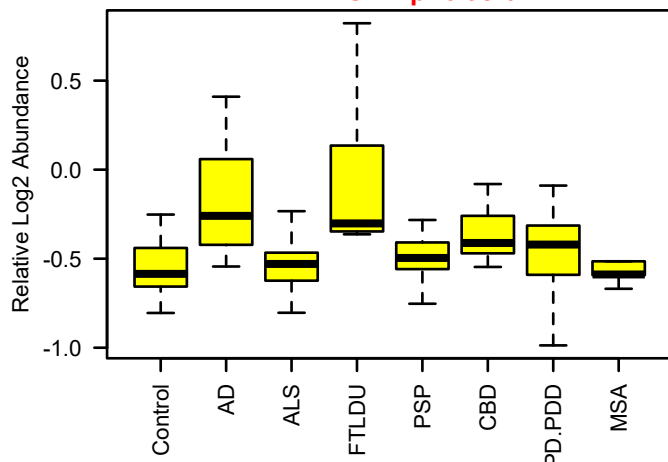
bicor=-0.015, p=0.89
cor=-0.026, p=0.81



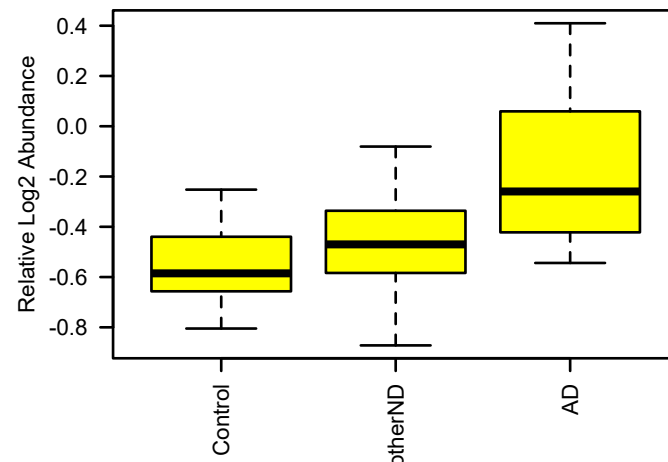
bicor=0.016, p=0.87
cor=0.017, p=0.87



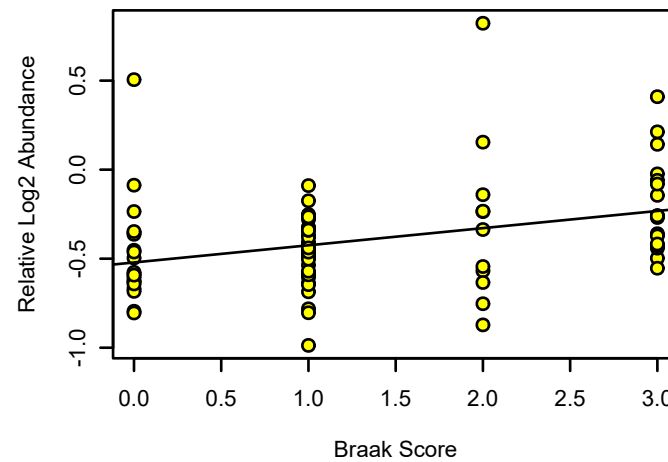
FHL1 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 6.9e-07



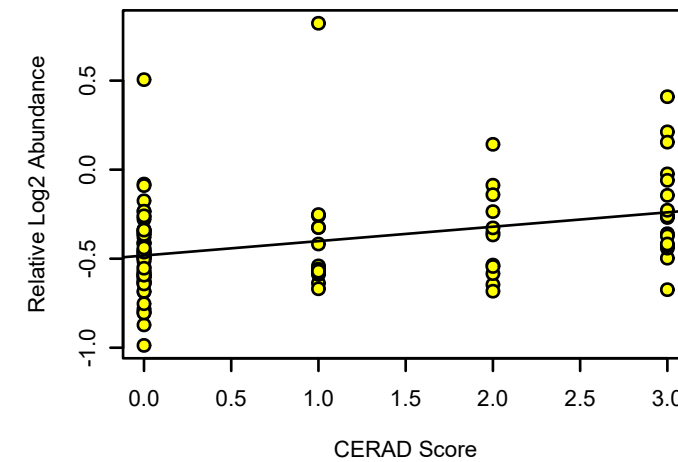
FHL1 UPenn Mixed PRM
K-W ANOVA p: 0.00011



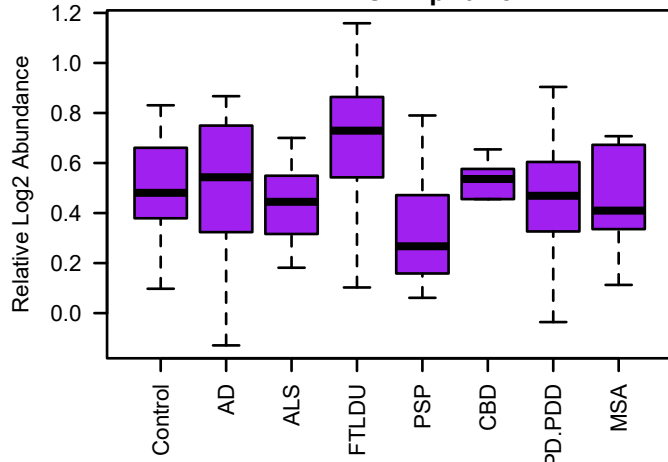
bicor=0.39, p=2e-04
cor=0.35, p=0.0011



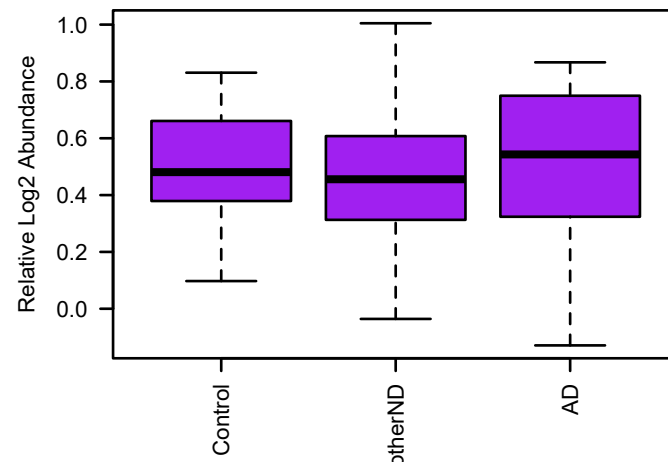
bicor=0.4, p=4.4e-05
cor=0.34, p=0.00054



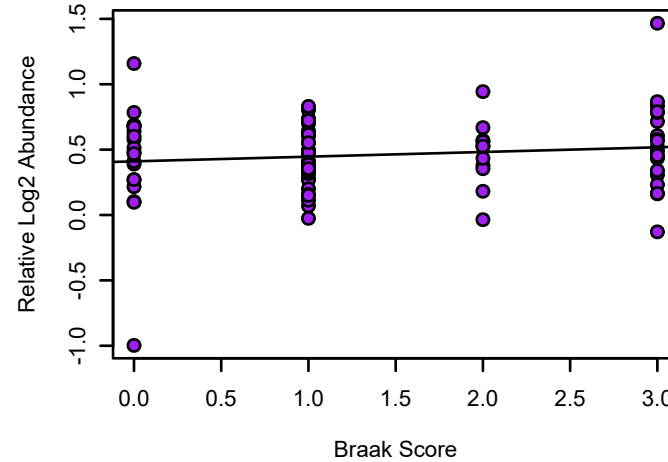
HMGB1 UPenn Mixed PRM
M10 purple MEGA module member
K-W ANOVA p: 0.18



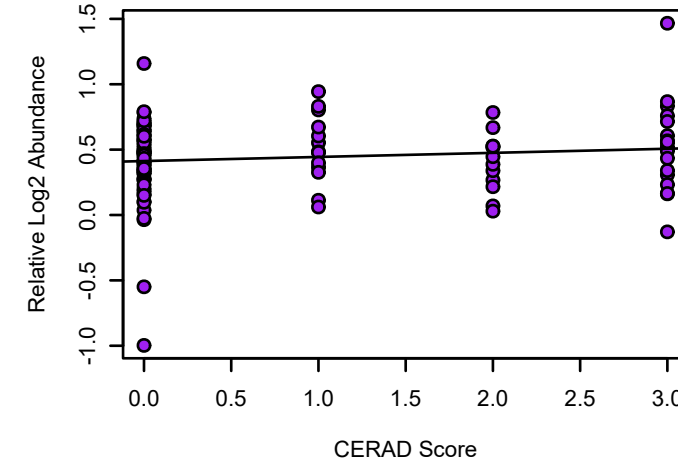
HMGB1 UPenn Mixed PRM
K-W ANOVA p: 0.28



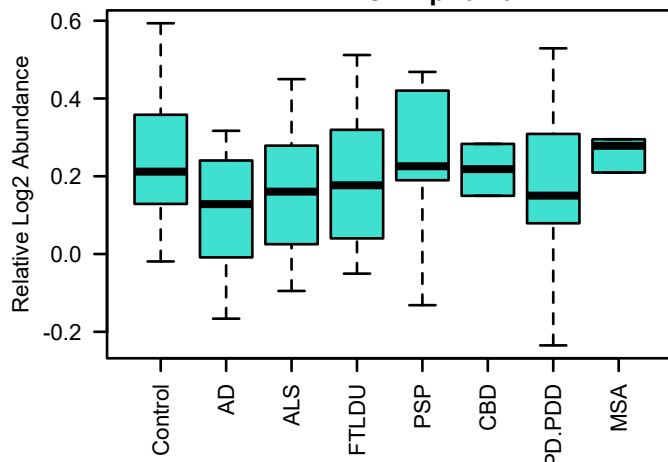
bicor=0.025, p=0.82
cor=0.13, p=0.24



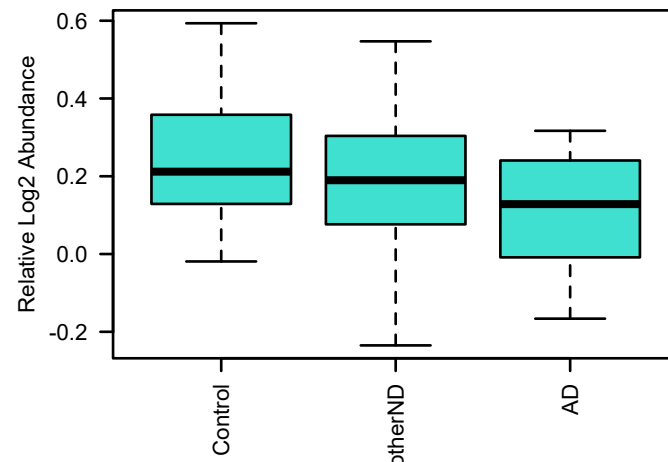
bicor=0.048, p=0.63
cor=0.12, p=0.23



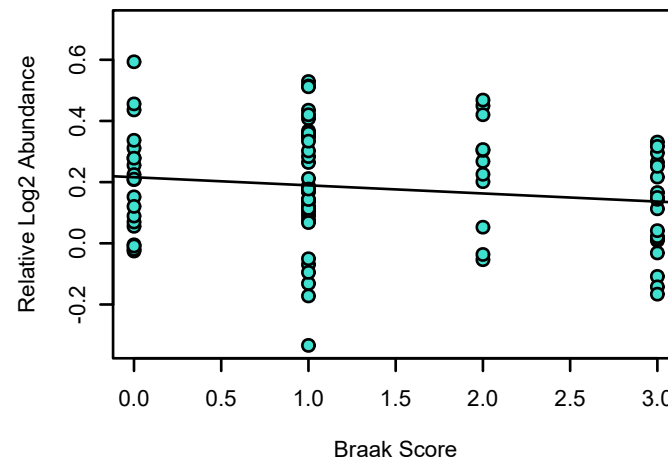
PGM2L1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.46



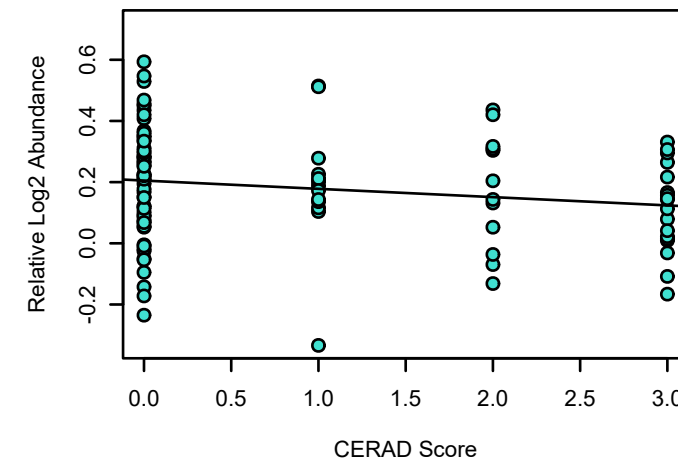
PGM2L1 UPenn Mixed PRM
K-W ANOVA p: 0.097



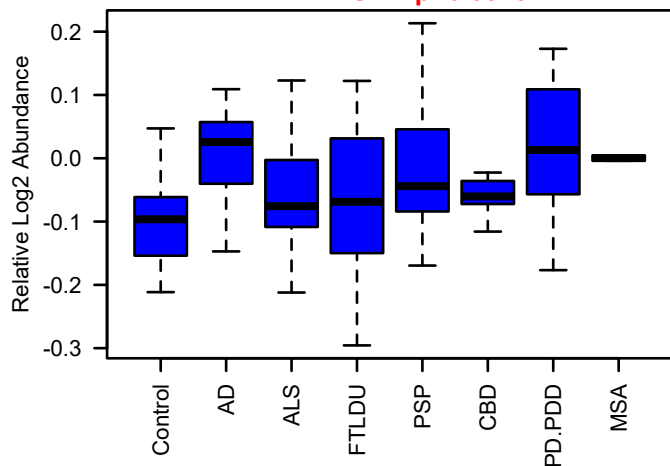
bicor=-0.13, p=0.24
cor=-0.15, p=0.17



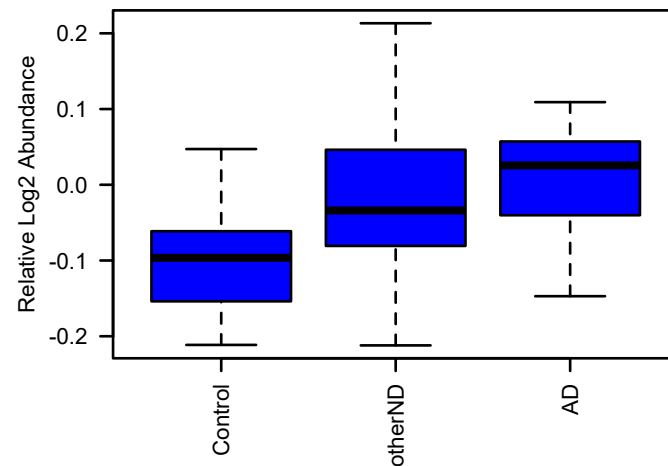
bicor=-0.18, p=0.068
cor=-0.18, p=0.073



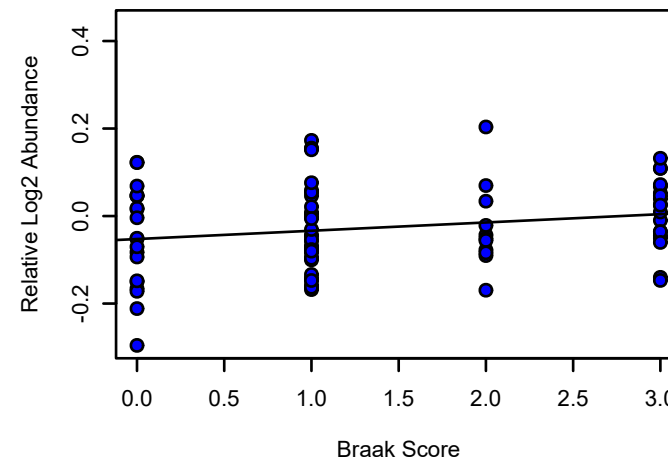
RUFY3 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.0043



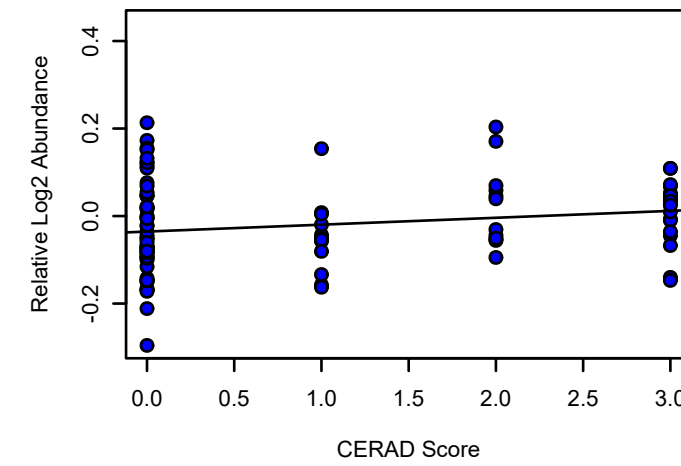
RUFY3 UPenn Mixed PRM
K-W ANOVA p: 0.01



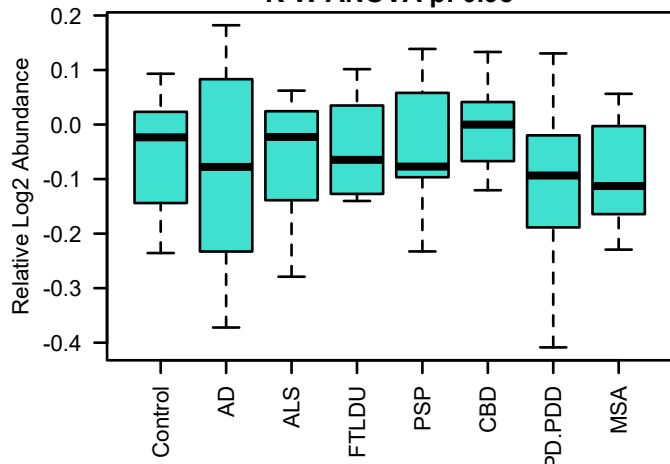
bicor=0.24, p=0.027
cor=0.21, p=0.055



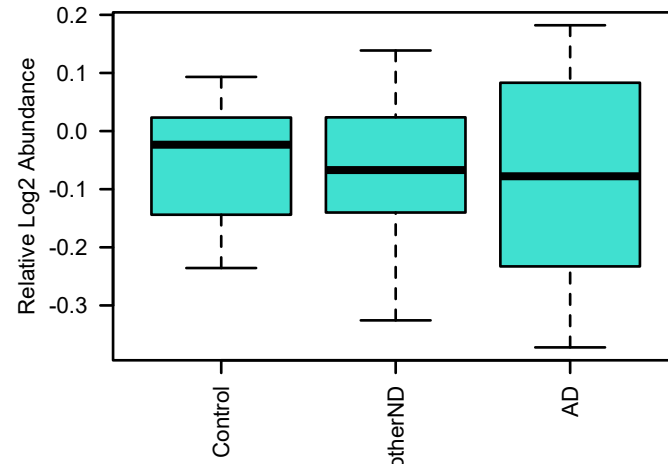
bicor=0.21, p=0.036
cor=0.19, p=0.058



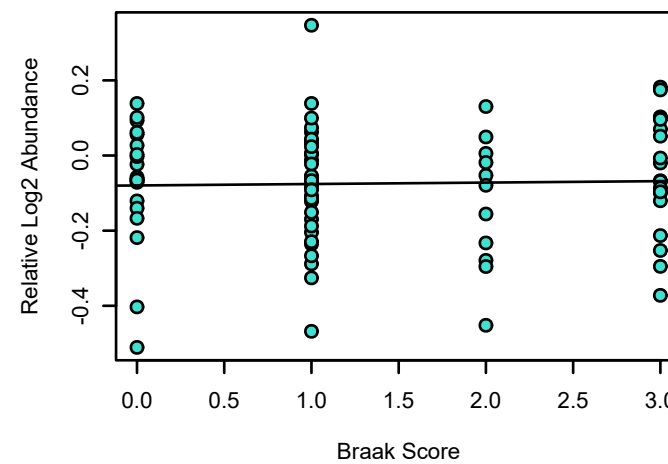
SV2A UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.98



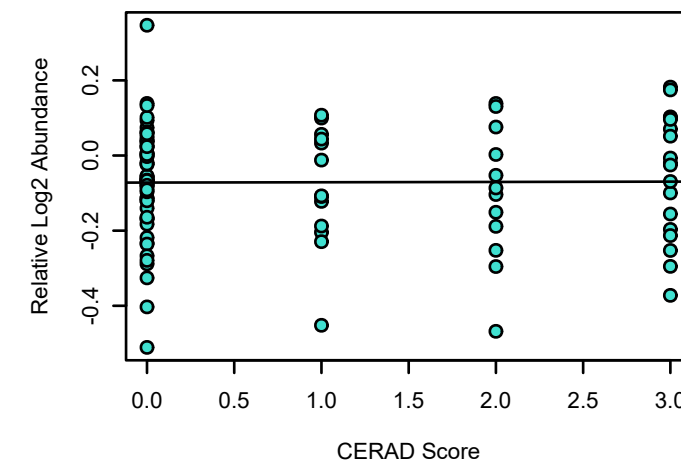
SV2A UPenn Mixed PRM
K-W ANOVA p: 1



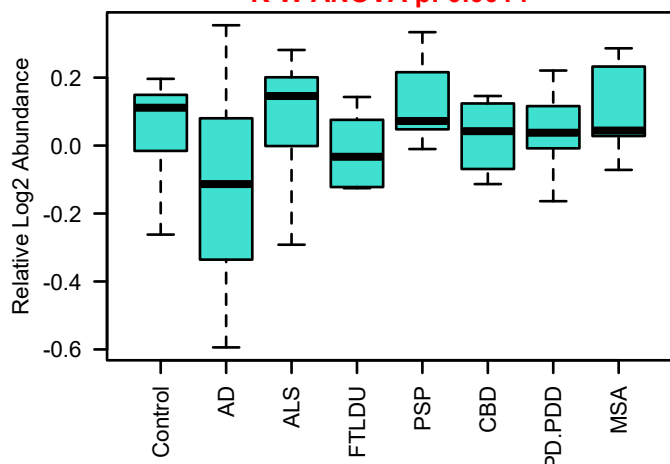
bicor=-0.00018, p=1
cor=0.026, p=0.81



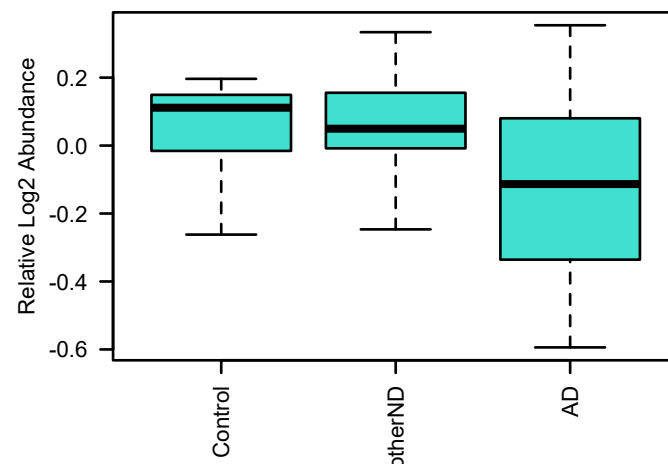
bicor=0.01, p=0.92
cor=0.0065, p=0.95



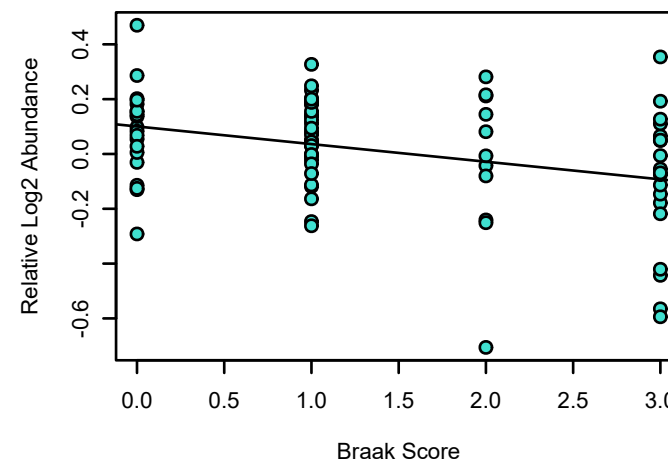
SV2B UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0014



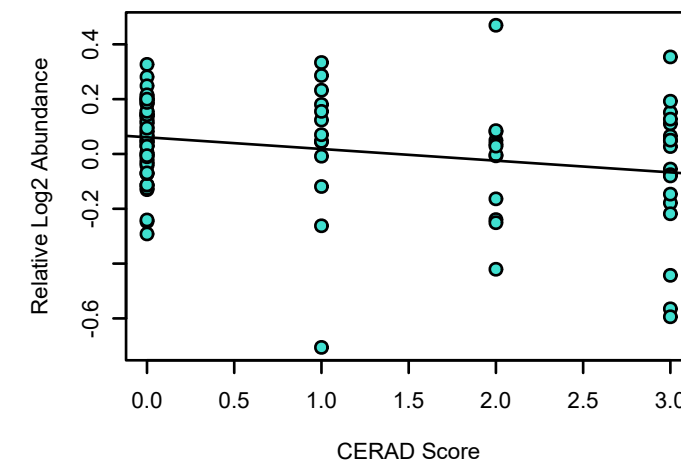
SV2B UPenn Mixed PRM
K-W ANOVA p: 0.0014



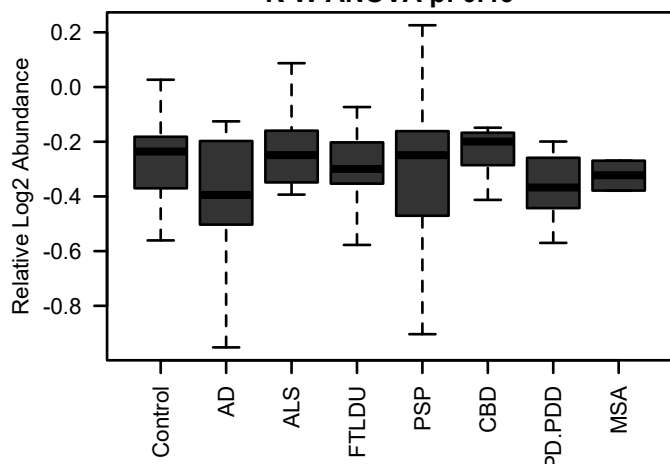
bicor=-0.3, p=0.0056
cor=-0.34, p=0.0016



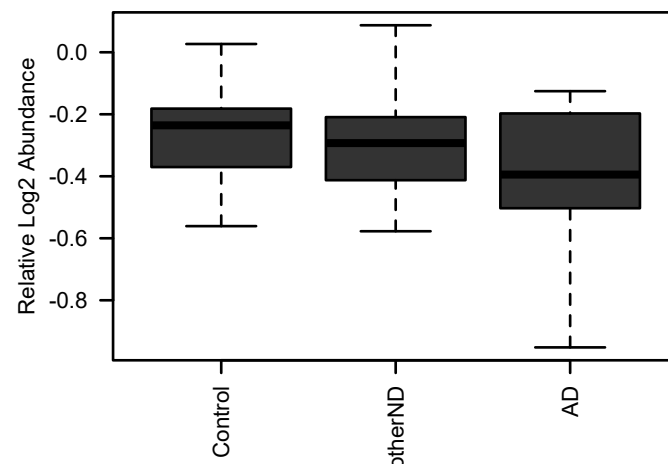
bicor=-0.22, p=0.03
cor=-0.26, p=0.009



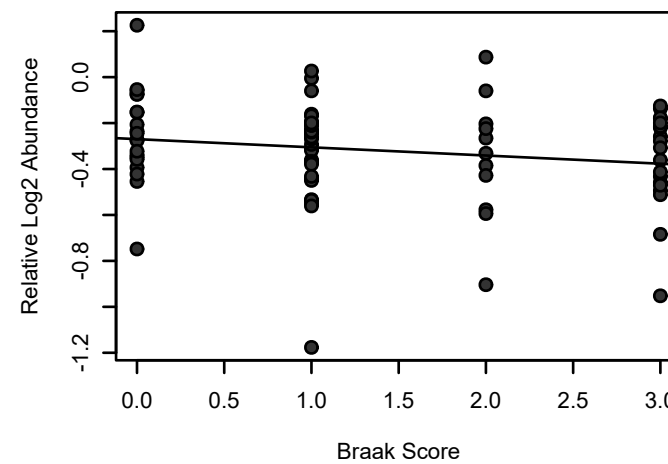
SV2C UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.46



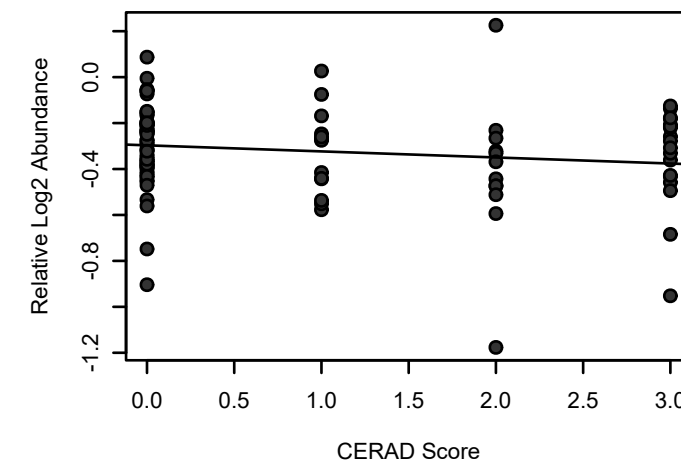
SV2C UPenn Mixed PRM
K-W ANOVA p: 0.24



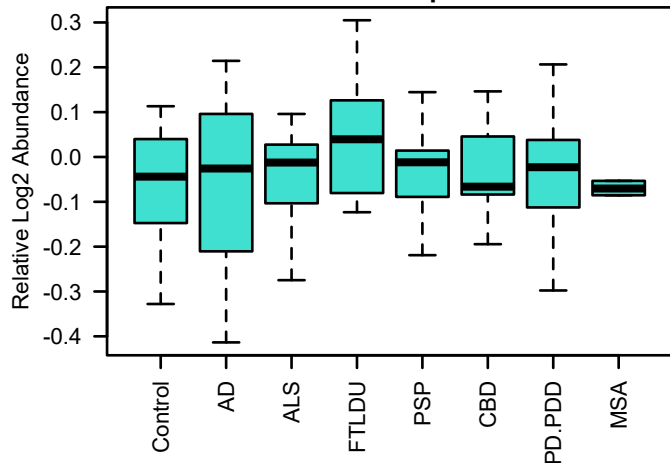
bicor=-0.2, p=0.066
cor=-0.18, p=0.1



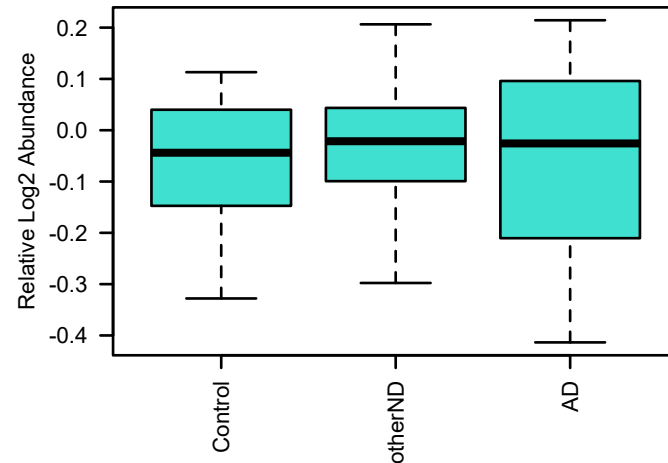
bicor=-0.13, p=0.21
cor=-0.16, p=0.11



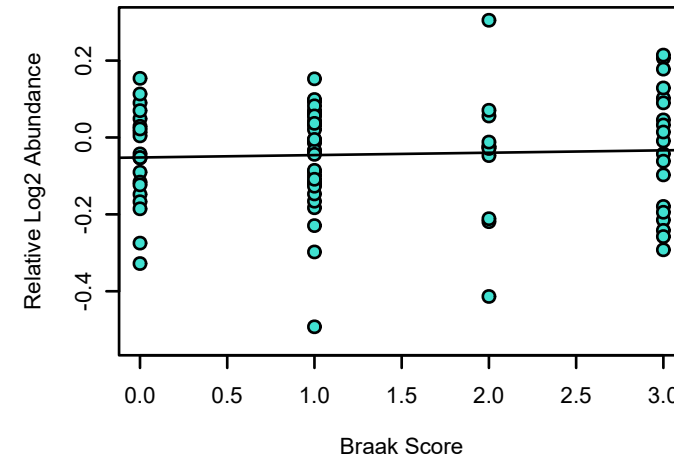
ATCAY UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.77



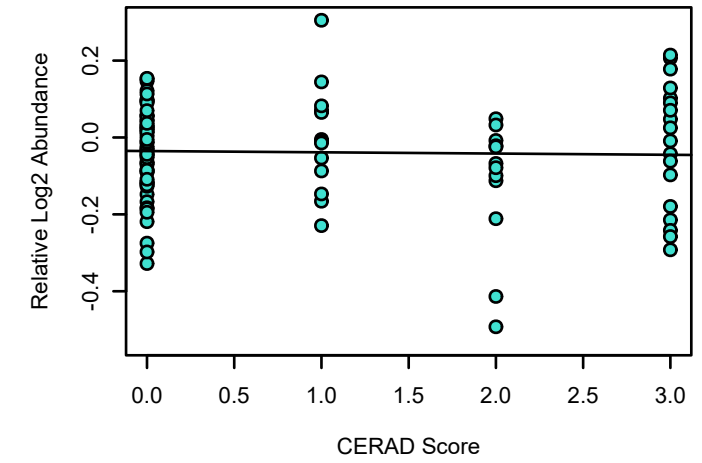
ATCAY UPenn Mixed PRM
K-W ANOVA p: 0.86



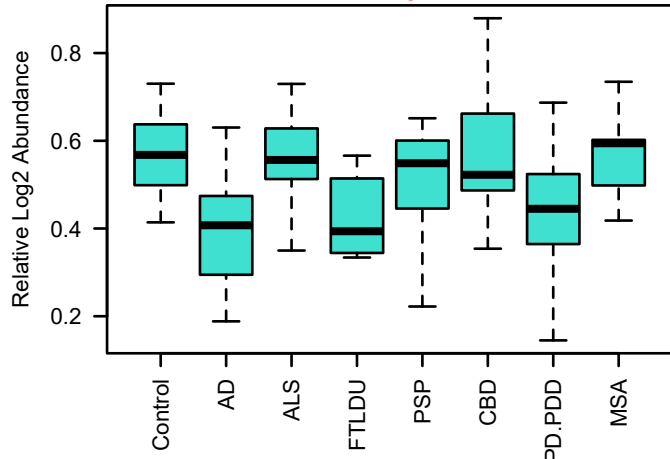
bicor=0.01, p=0.93
cor=0.047, p=0.67



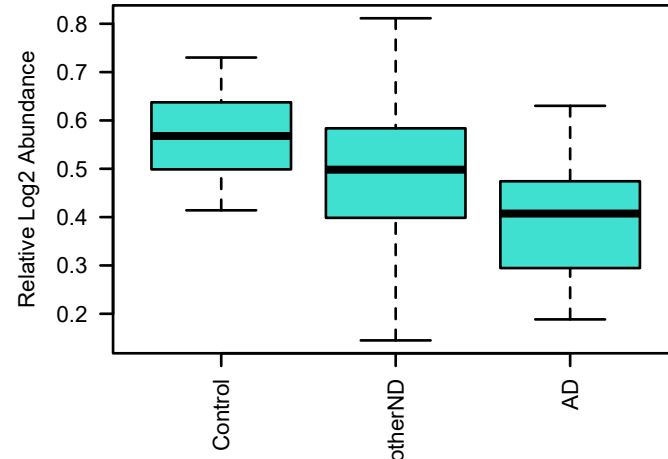
bicor=-0.0011, p=0.99
cor=-0.028, p=0.78



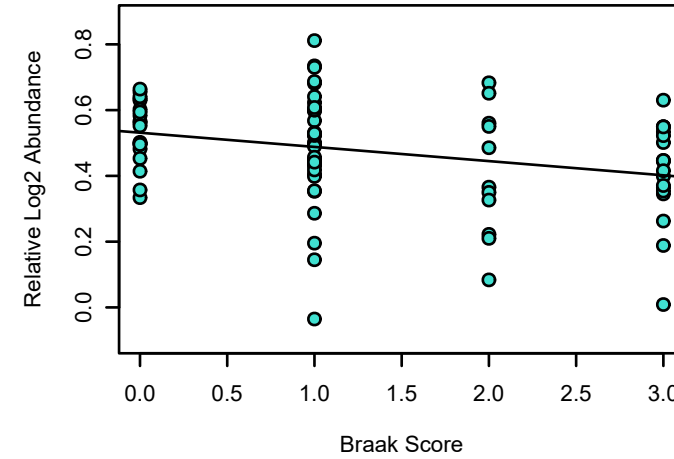
HOMER1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00019



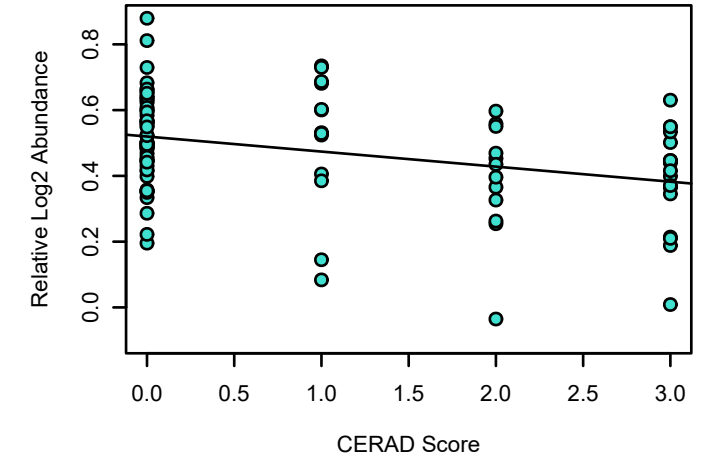
HOMER1 UPenn Mixed PRM
K-W ANOVA p: 0.0038



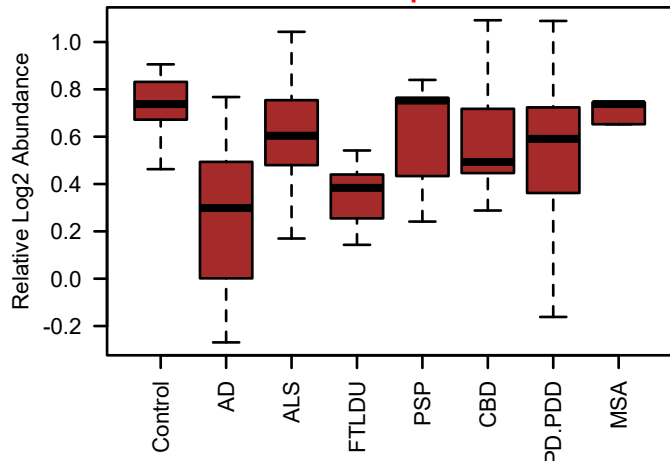
bicor=-0.32, p=0.0026
cor=-0.29, p=0.0075



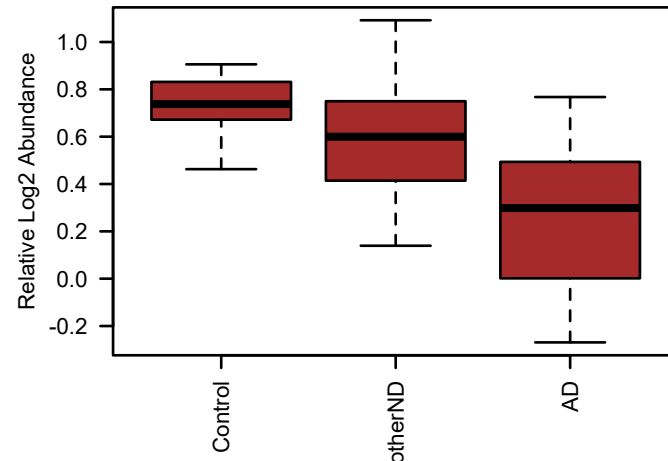
bicor=-0.33, p=0.00082
cor=-0.34, p=0.00054



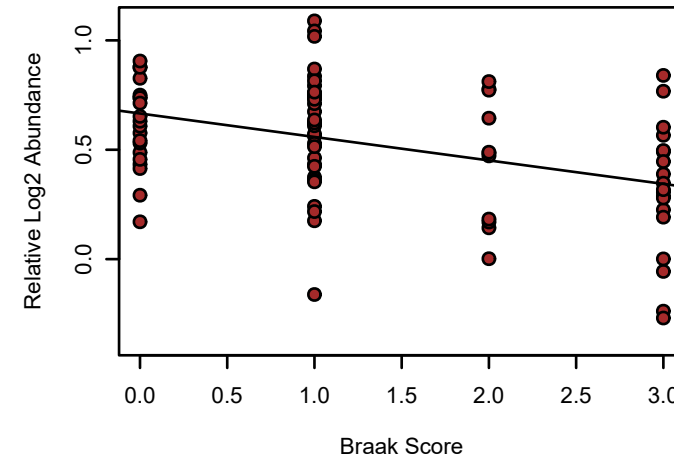
SYT12 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 6.5e-05



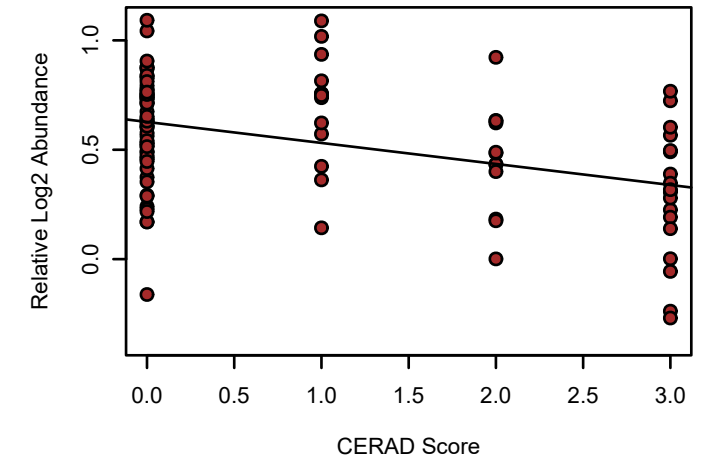
SYT12 UPenn Mixed PRM
K-W ANOVA p: 7.5e-06



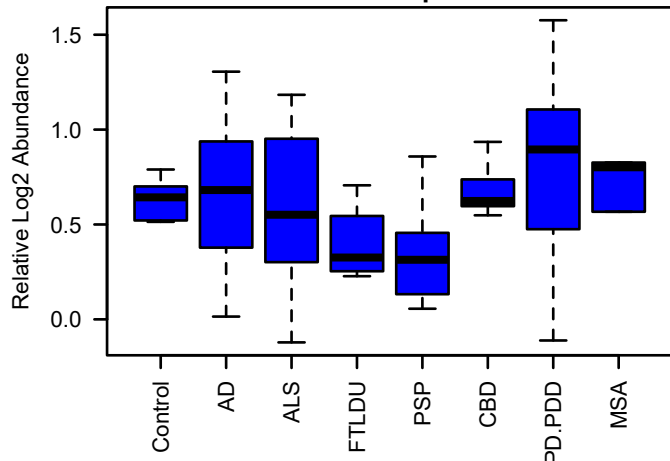
bicor=-0.4, p=0.00016
cor=-0.41, p=0.00011



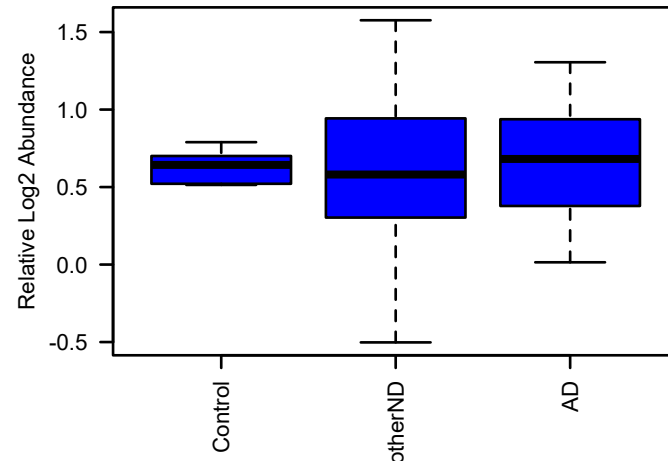
bicor=-0.39, p=5.2e-05
cor=-0.41, p=2.3e-05



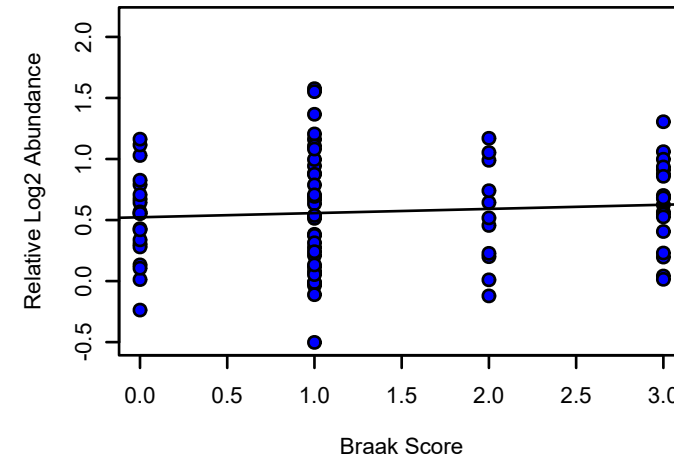
SIRT2 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.093



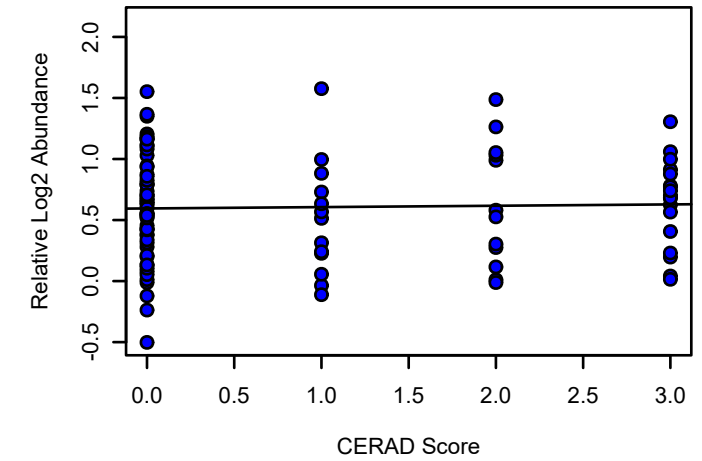
SIRT2 UPenn Mixed PRM
K-W ANOVA p: 0.98



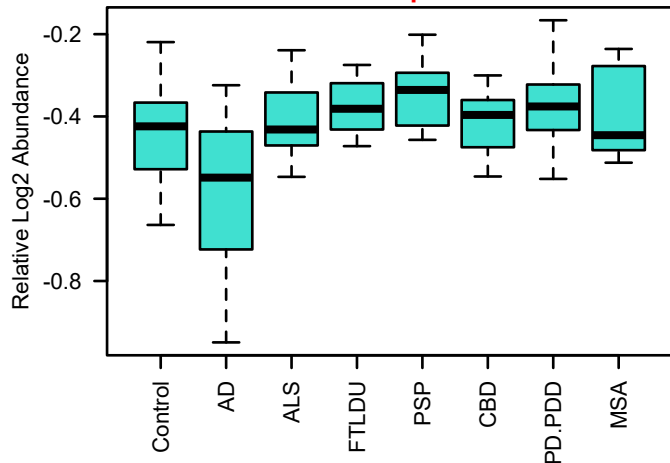
bicor=0.091, p=0.41
cor=0.086, p=0.44



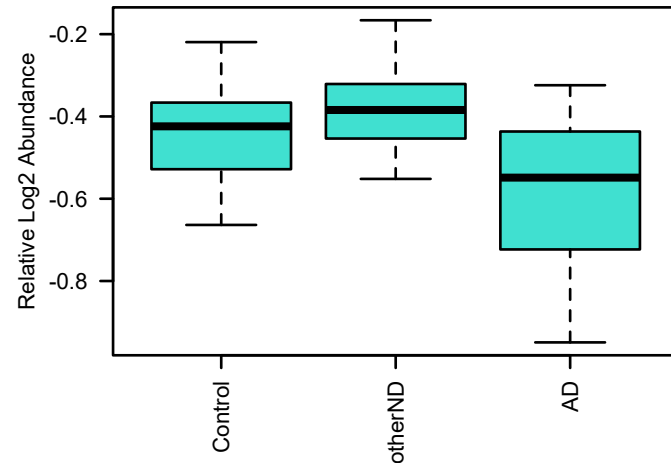
bicor=0.028, p=0.78
cor=0.03, p=0.77



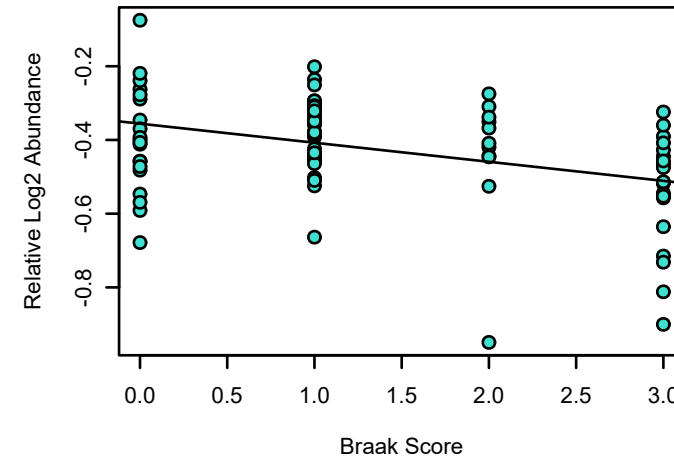
CADM3 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 2.7e-05



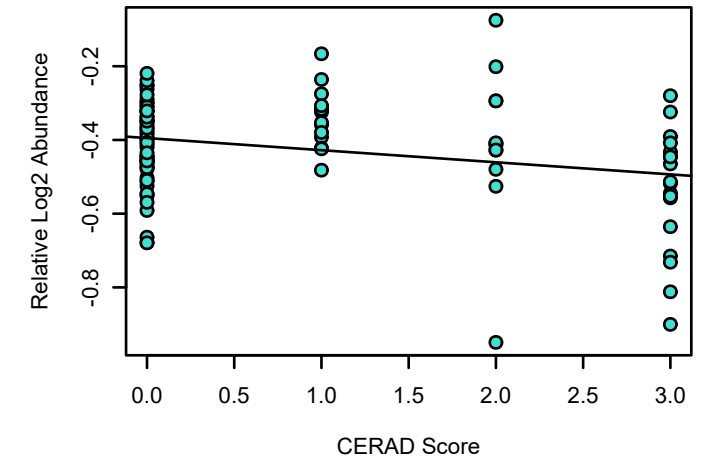
CADM3 UPenn Mixed PRM
K-W ANOVA p: 1.9e-07



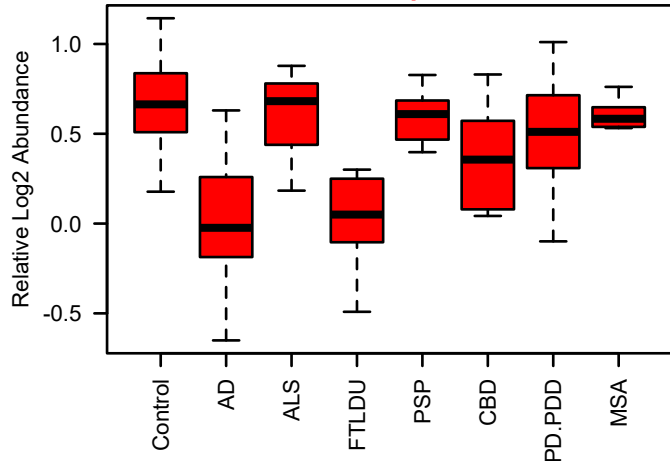
bicor=-0.34, p=0.0014
cor=-0.38, p=0.00036



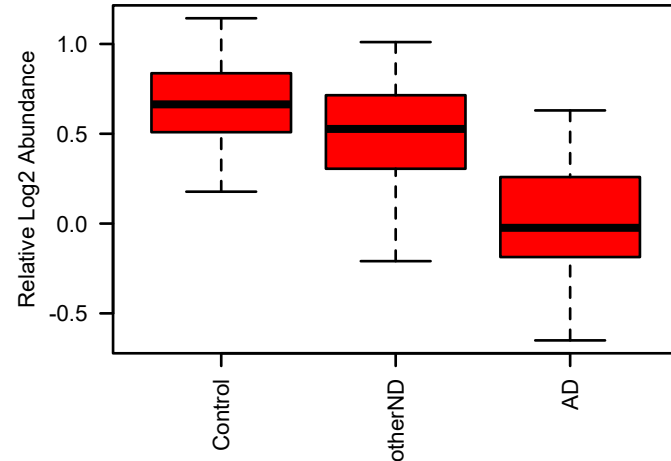
bicor=-0.23, p=0.021
cor=-0.27, p=0.0066



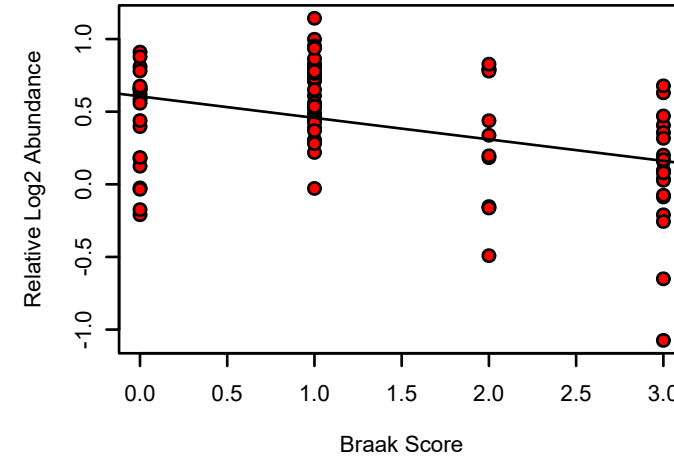
SYNPO UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 2.7e-09



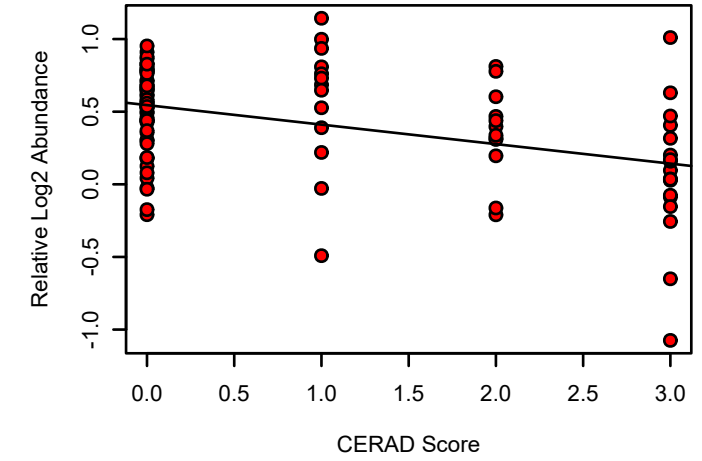
SYNPO UPenn Mixed PRM
K-W ANOVA p: 5.9e-08



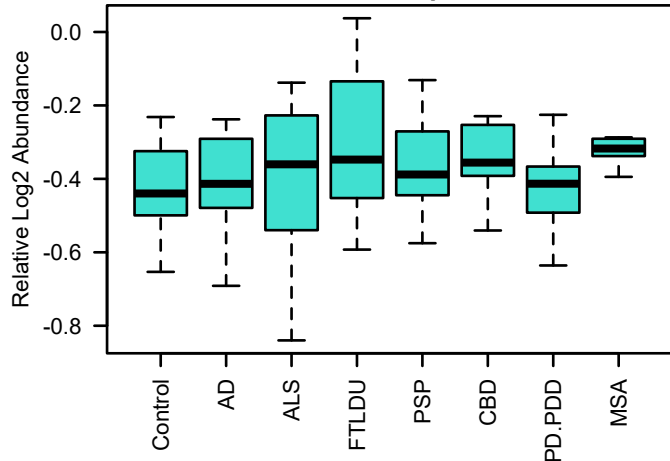
bicor=-0.39, p=0.00027
cor=-0.4, p=0.00016



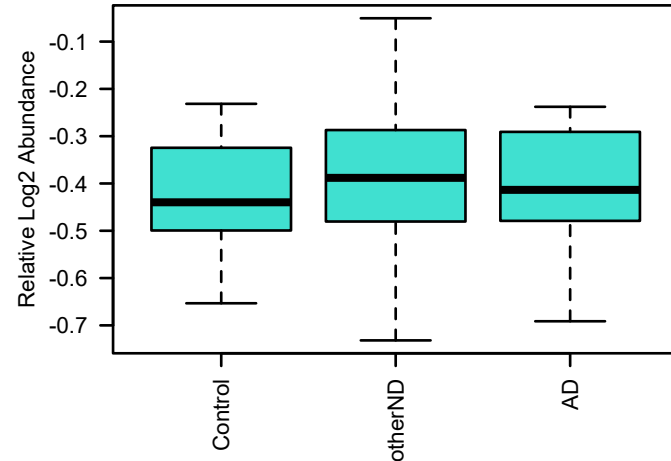
bicor=-0.4, p=3.9e-05
cor=-0.42, p=1.4e-05



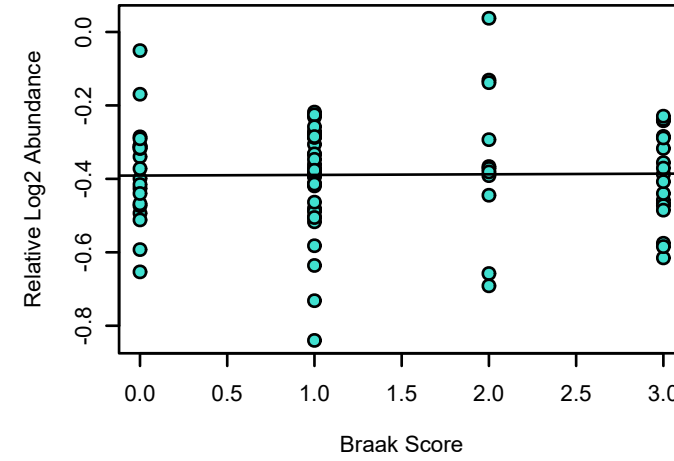
DPP10 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.46



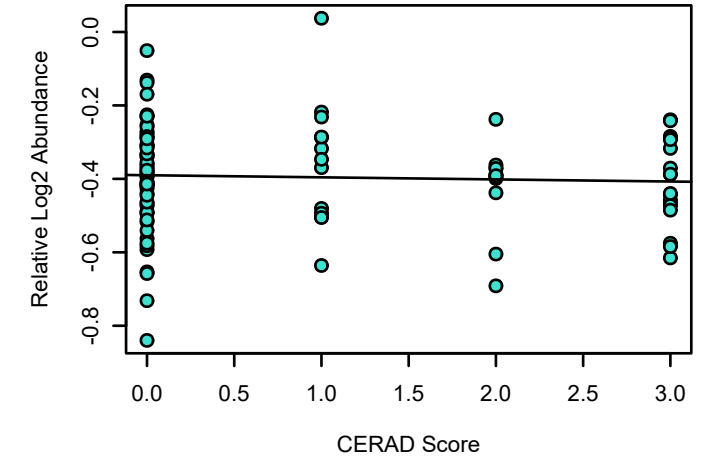
DPP10 UPenn Mixed PRM
K-W ANOVA p: 0.62



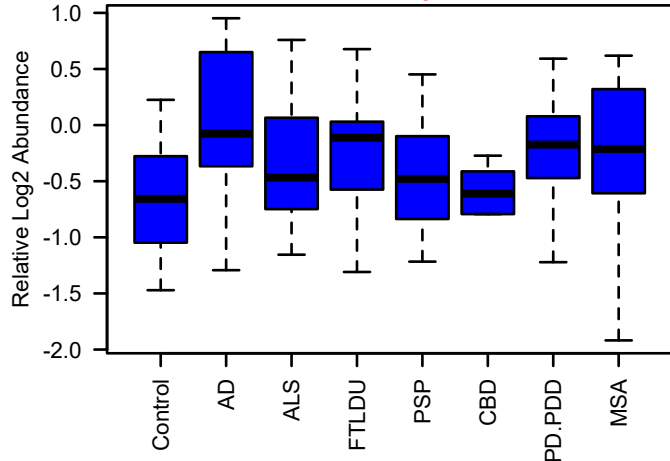
bicor=-8.1e-05, p=1
cor=0.013, p=0.91



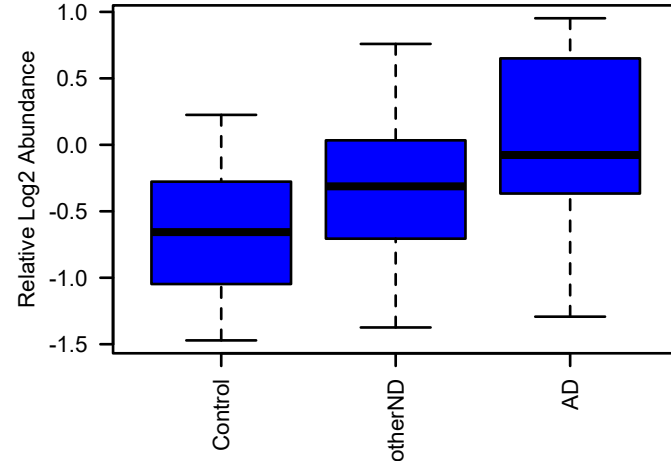
bicor=-0.063, p=0.53
cor=-0.048, p=0.64



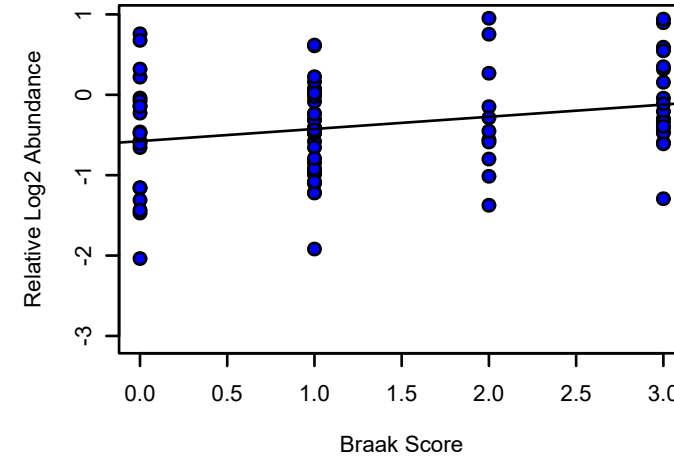
ERMN UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 0.025



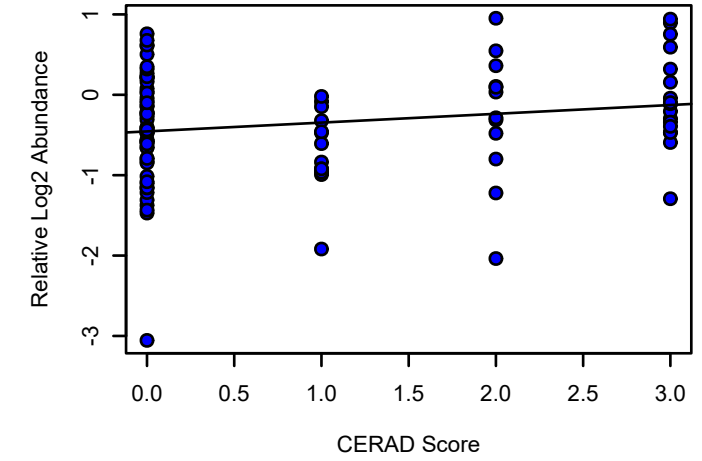
ERMN UPenn Mixed PRM
K-W ANOVA p: 0.0098



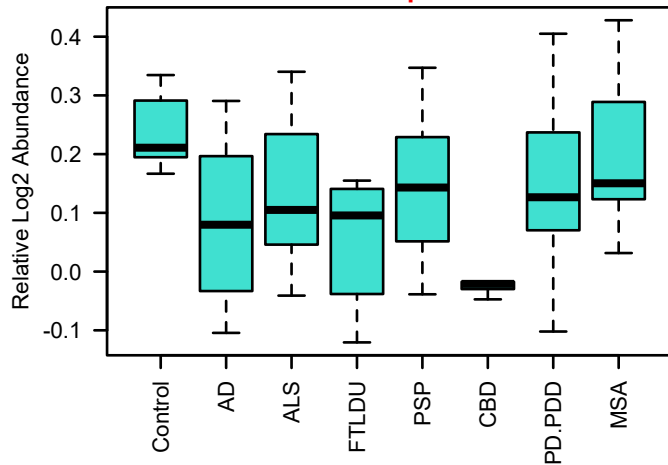
bicor=0.25, p=0.024
cor=0.26, p=0.017



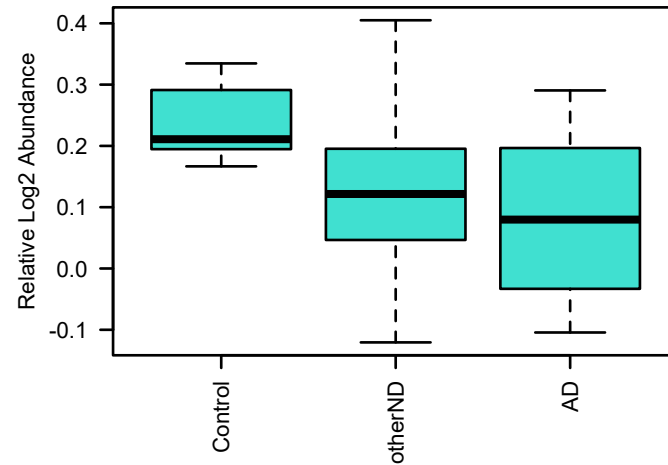
bicor=0.19, p=0.057
cor=0.19, p=0.058



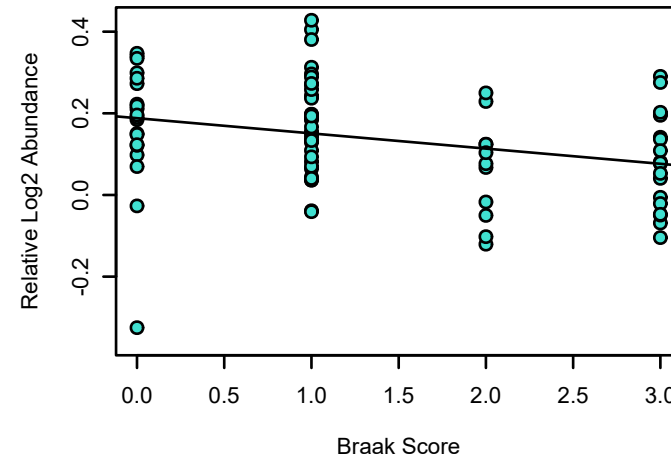
DMXL2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00099



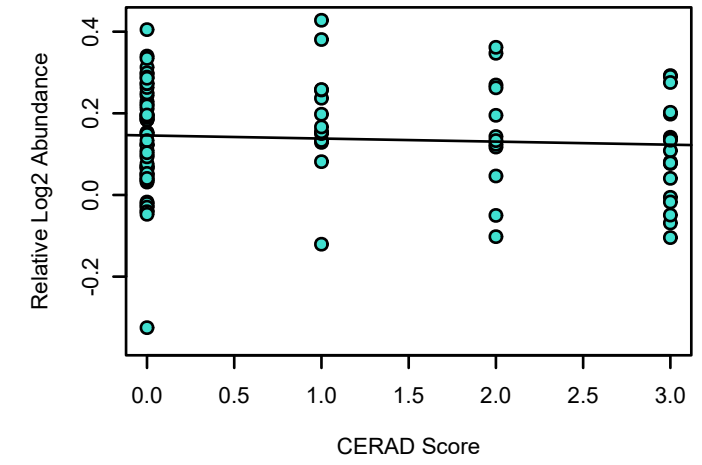
DMXL2 UPenn Mixed PRM
K-W ANOVA p: 0.0023



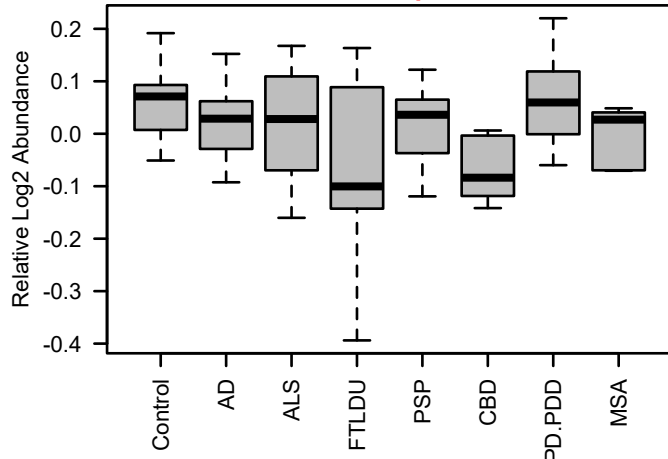
bicor=-0.34, p=0.0017
cor=-0.3, p=0.0056



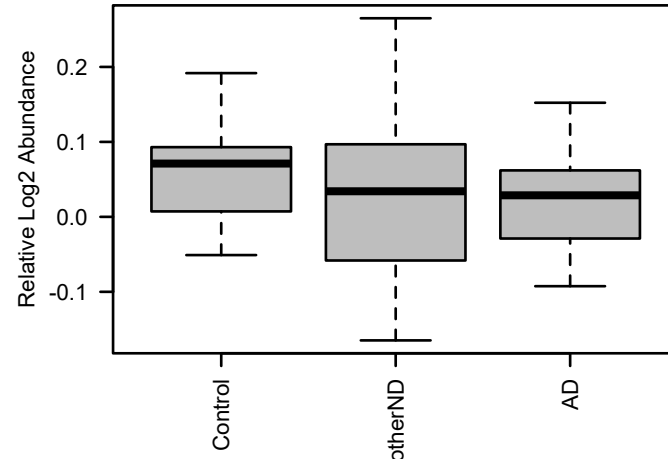
bicor=-0.083, p=0.41
cor=-0.069, p=0.5



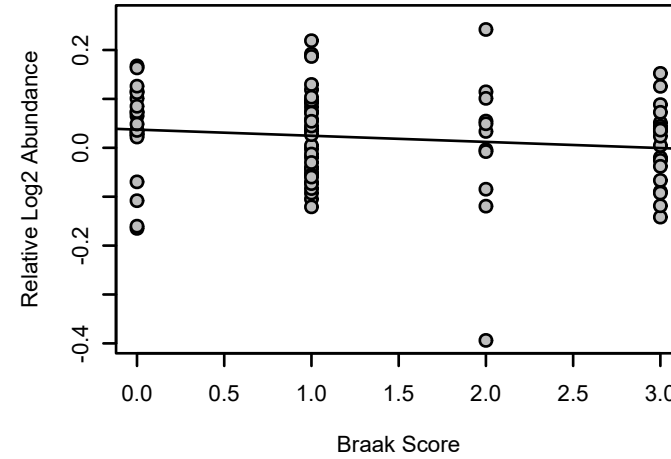
PDCD6IP UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.0078



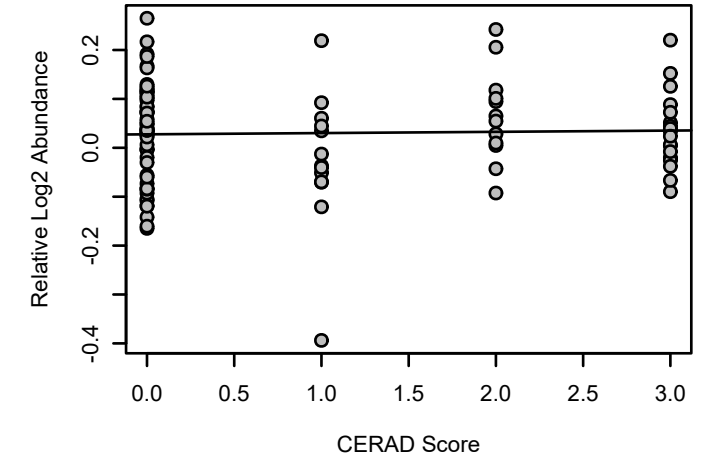
PDCD6IP UPenn Mixed PRM
K-W ANOVA p: 0.6



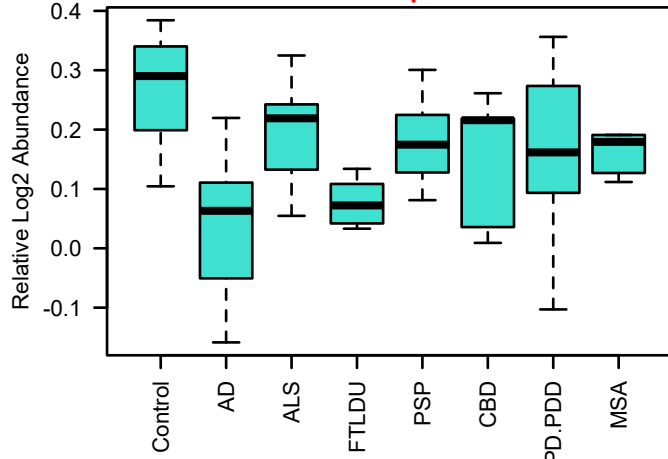
bicor=-0.16, p=0.14
cor=-0.14, p=0.2



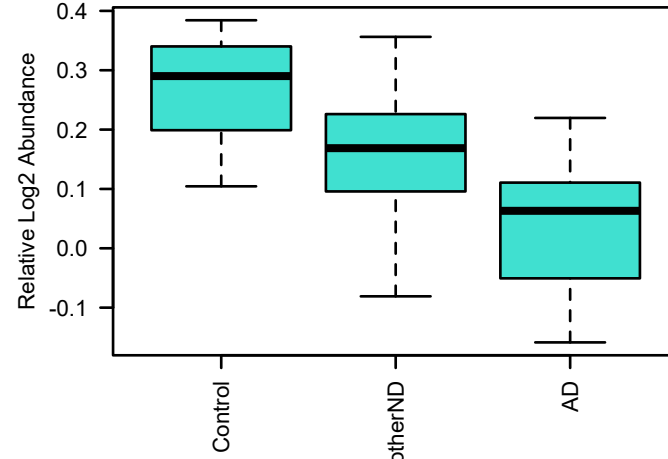
bicor=0.022, p=0.83
cor=0.029, p=0.77



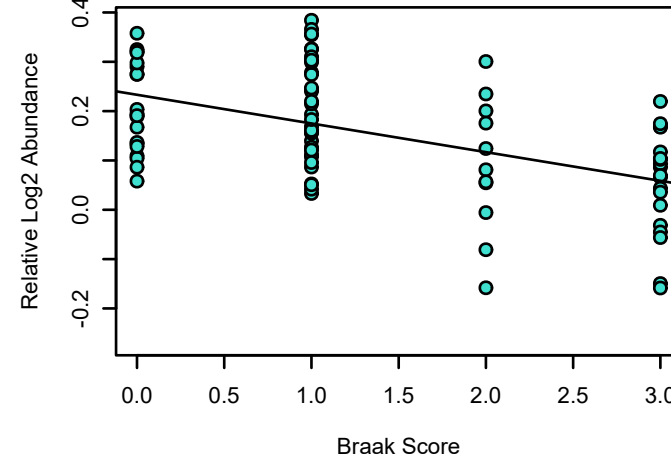
CASKIN1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 2.9e-06



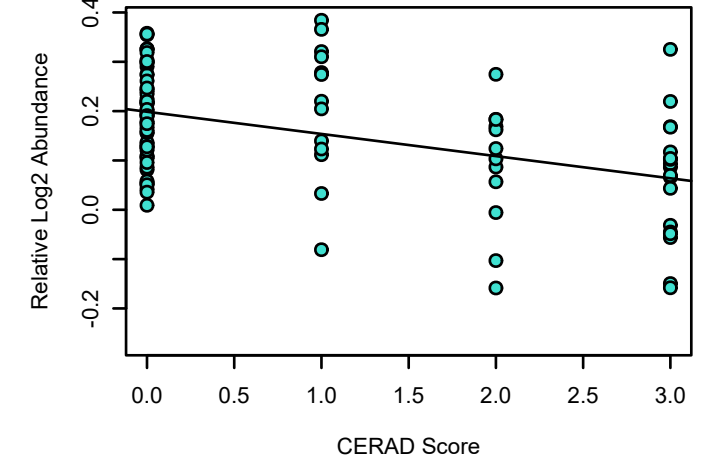
CASKIN1 UPenn Mixed PRM
K-W ANOVA p: 3.1e-07



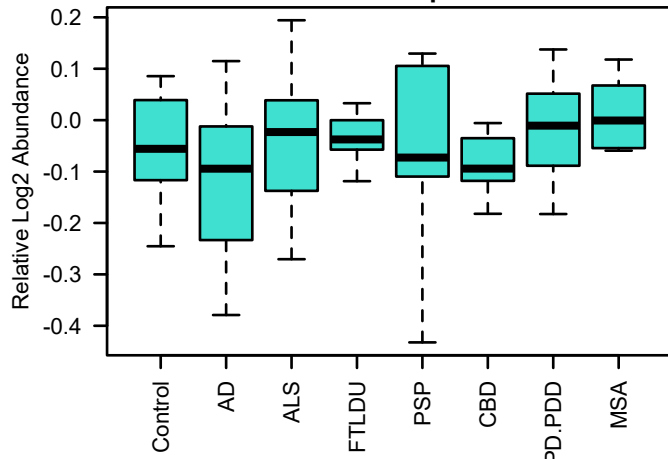
bicor=-0.48, p=4e-06
cor=-0.51, p=7.2e-07



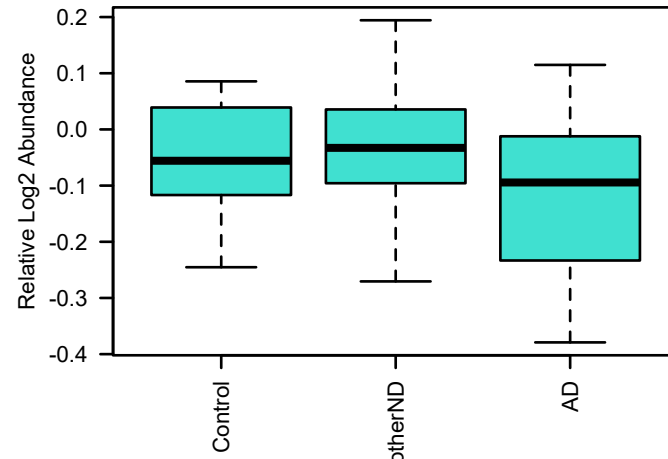
bicor=-0.42, p=1.1e-05
cor=-0.44, p=4.6e-06



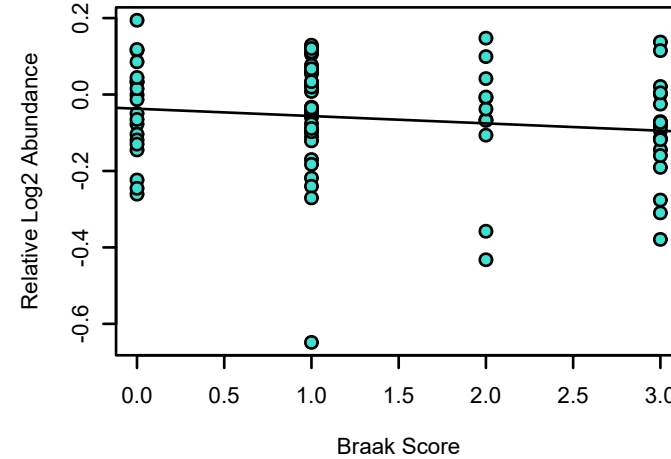
ATL1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.16



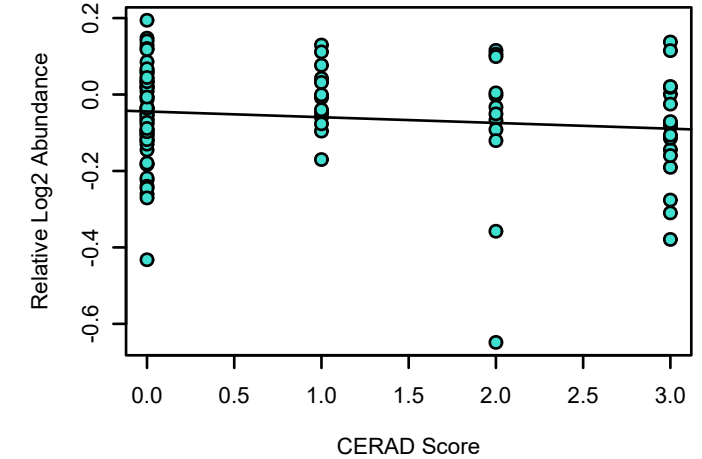
ATL1 UPenn Mixed PRM
K-W ANOVA p: 0.049



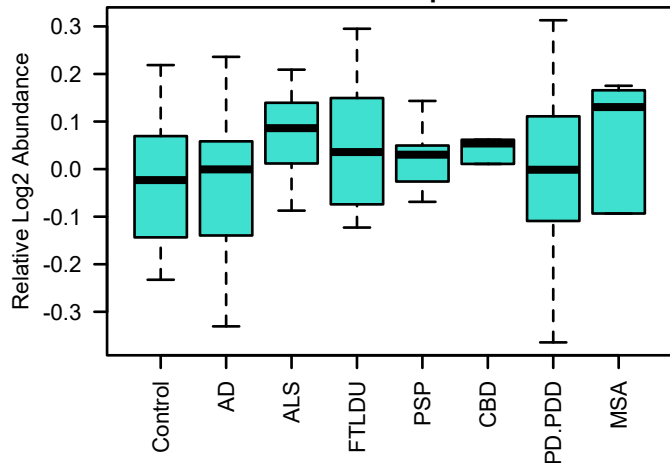
bicor=-0.15, p=0.18
cor=-0.15, p=0.17



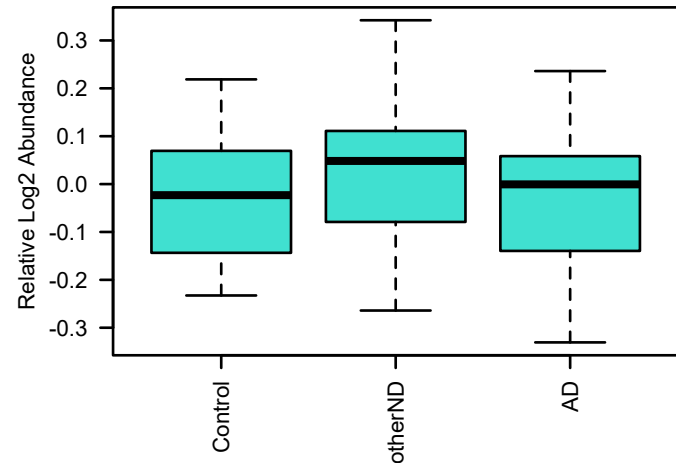
bicor=-0.092, p=0.36
cor=-0.13, p=0.2



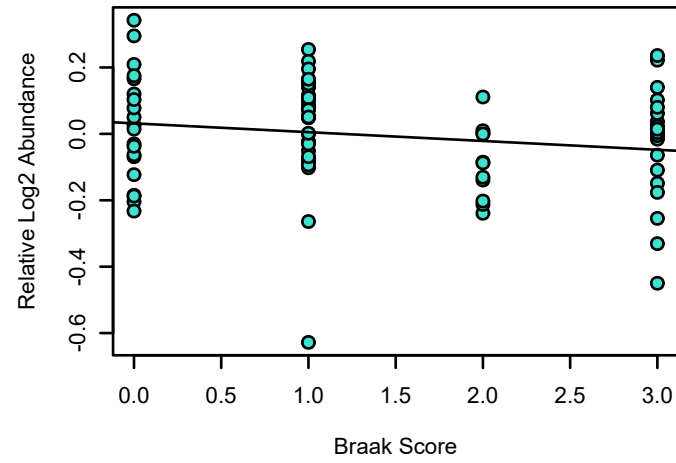
MADD UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.53



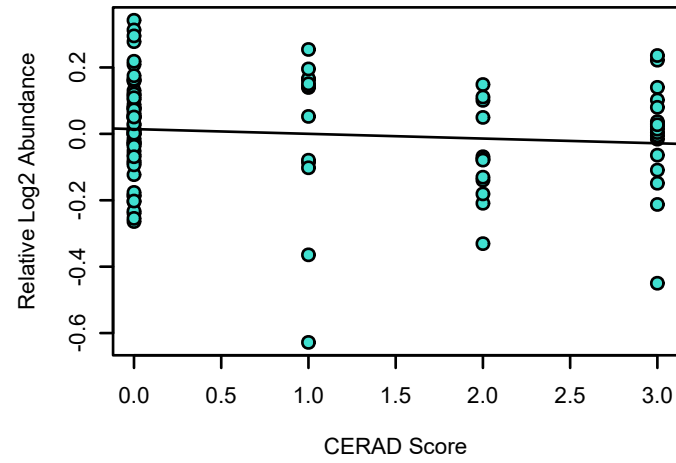
MADD UPenn Mixed PRM
K-W ANOVA p: 0.38



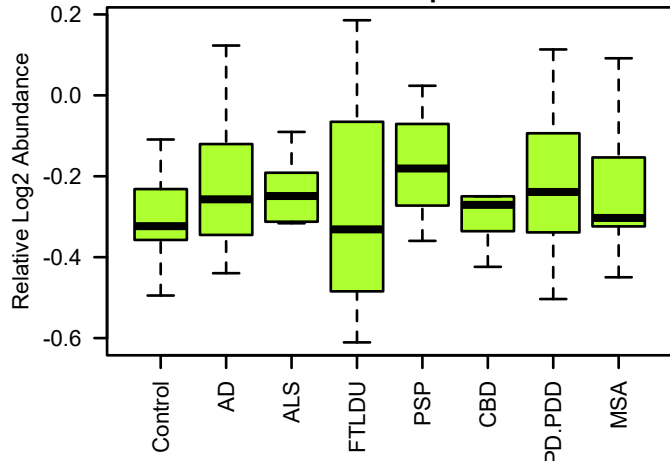
bicor=-0.18, p=0.11
cor=-0.18, p=0.1



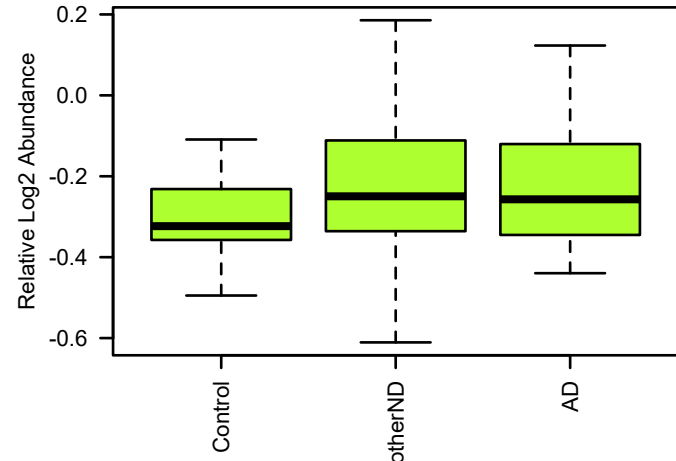
bicor=-0.086, p=0.39
cor=-0.1, p=0.32



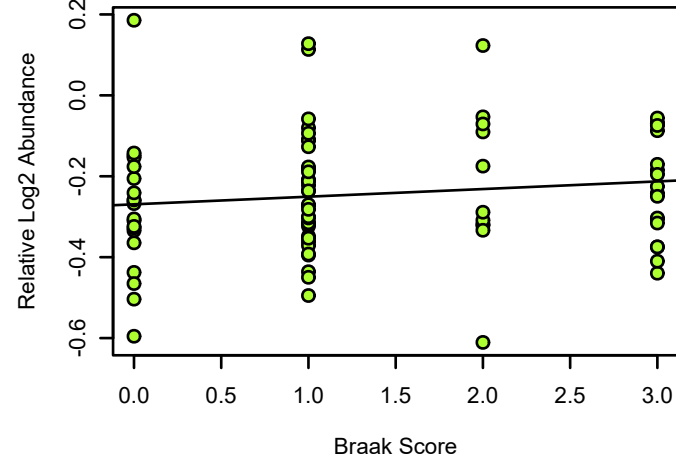
HSPH1 UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.58



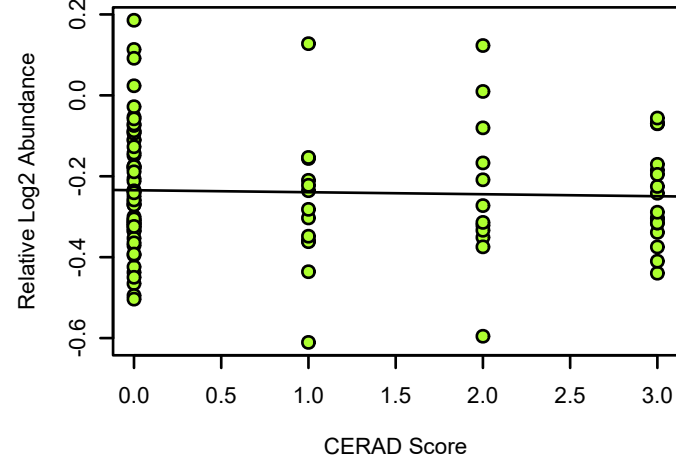
HSPH1 UPenn Mixed PRM
K-W ANOVA p: 0.37



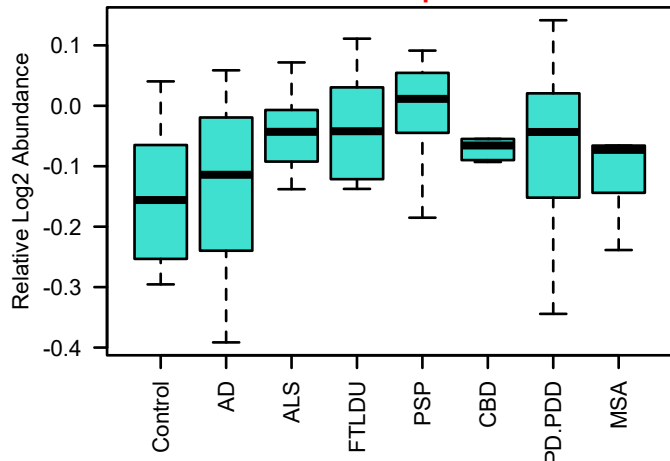
bicor=0.18, p=0.093
cor=0.13, p=0.24



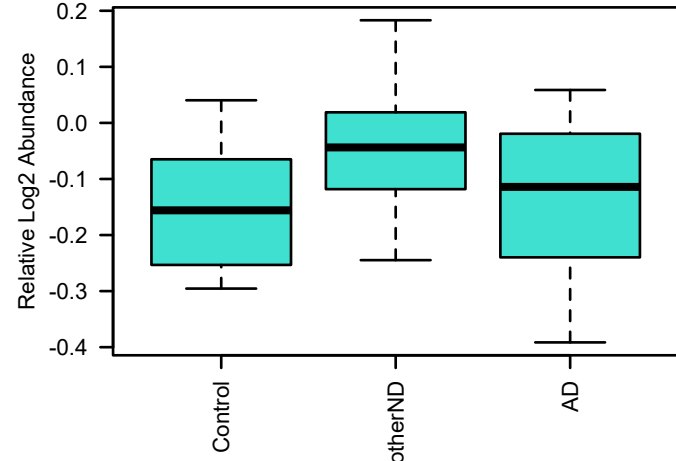
bicor=-0.028, p=0.78
cor=-0.039, p=0.7



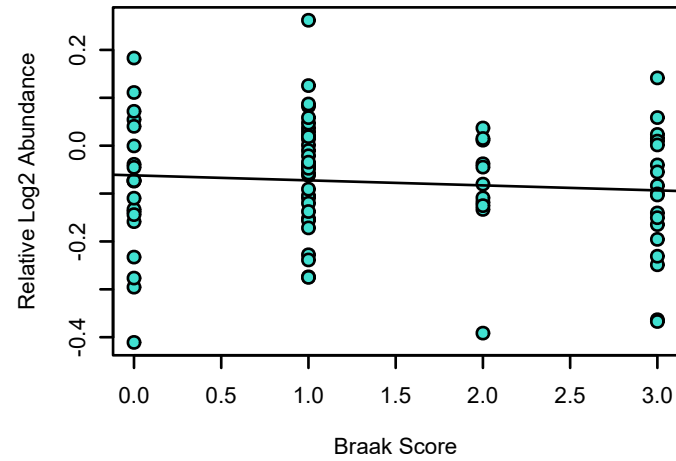
ATP6V0A1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.033



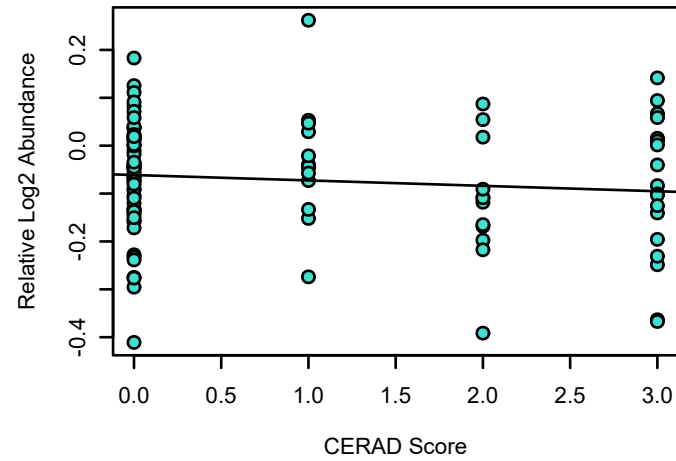
ATP6V0A1 UPenn Mixed PRM
K-W ANOVA p: 0.0012



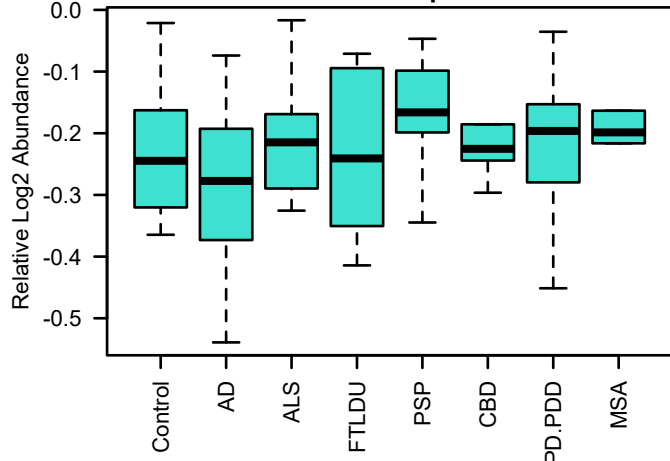
bicor=-0.11, p=0.33
cor=-0.088, p=0.43



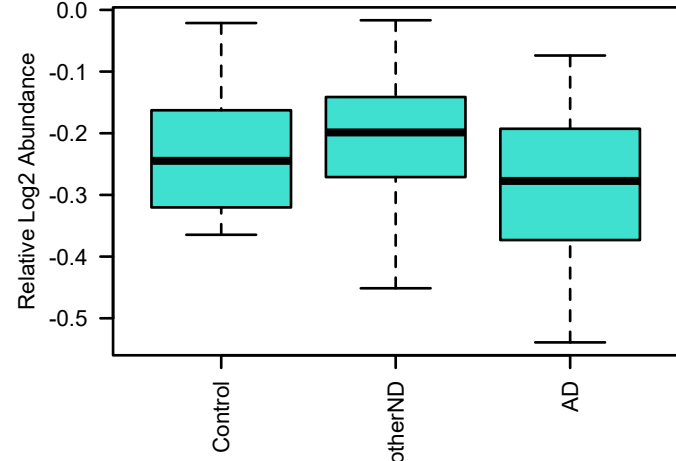
bicor=-0.099, p=0.33
cor=-0.11, p=0.28



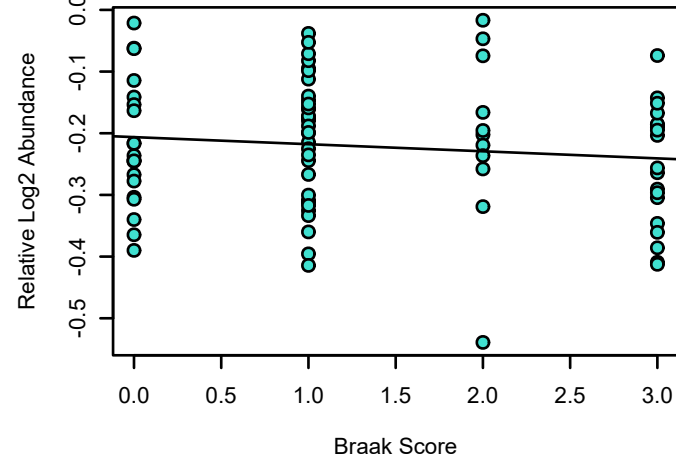
PDXP UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.14



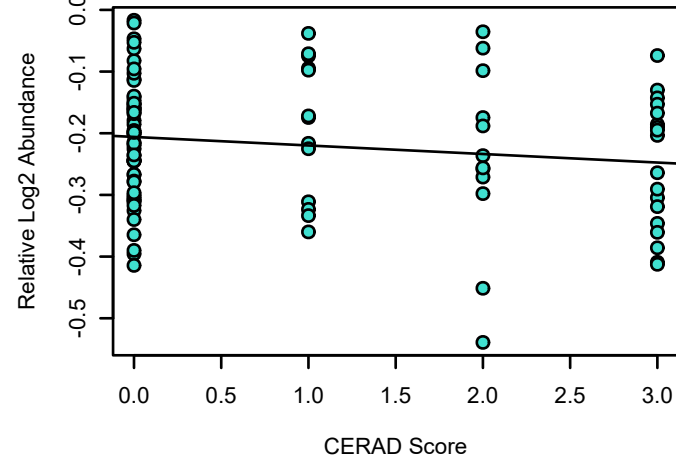
PDXP UPenn Mixed PRM
K-W ANOVA p: 0.021



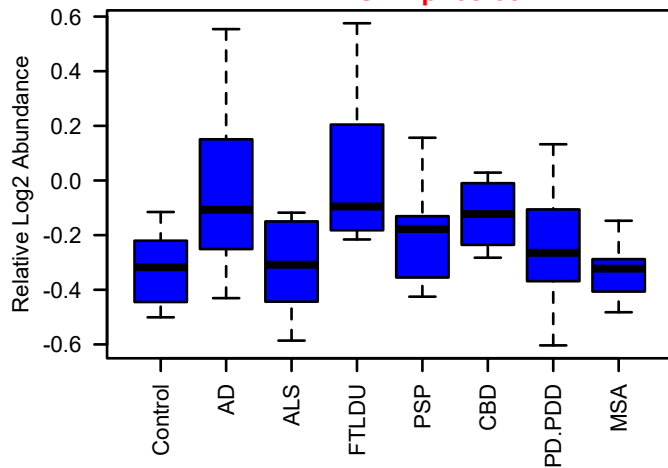
bicor=-0.11, p=0.32
cor=-0.12, p=0.28



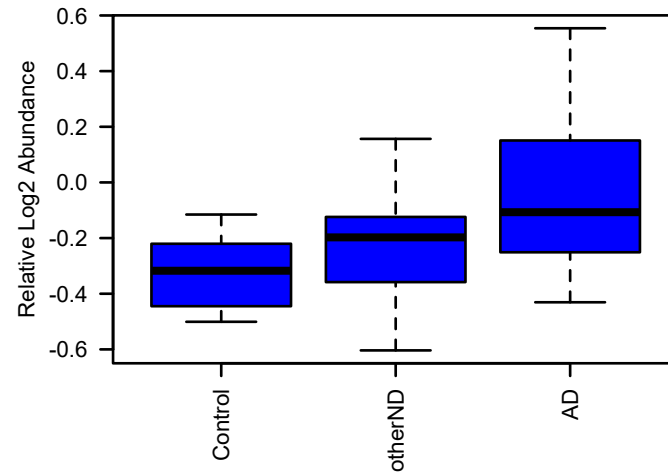
bicor=-0.14, p=0.17
cor=-0.16, p=0.11



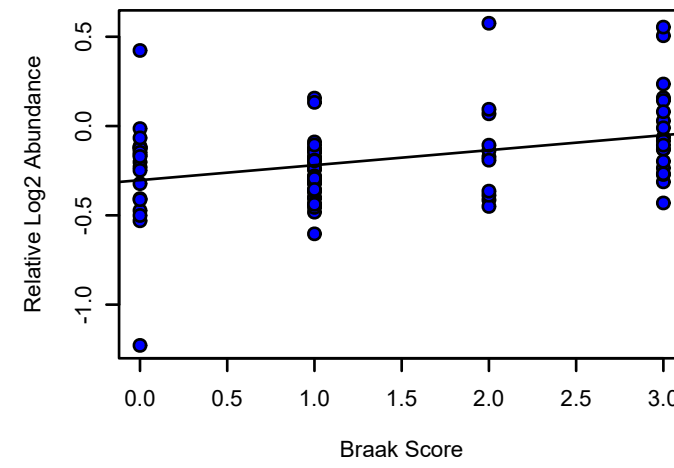
CNDP2 UPenn Mixed PRM
M2 blue MEGA module member
K-W ANOVA p: 8e-05



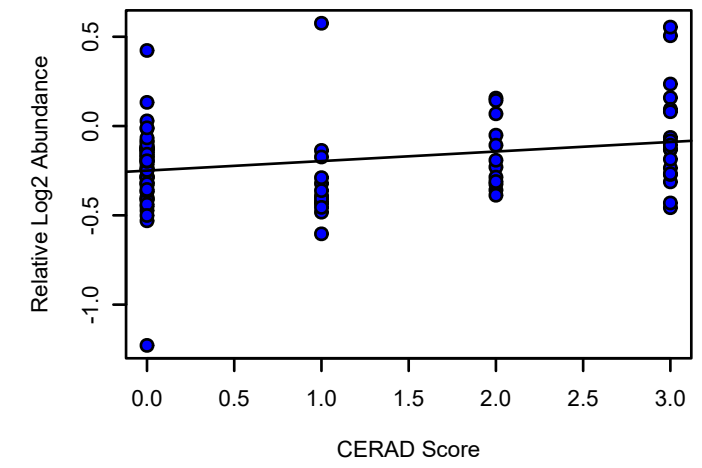
CNDP2 UPenn Mixed PRM
K-W ANOVA p: 0.00022



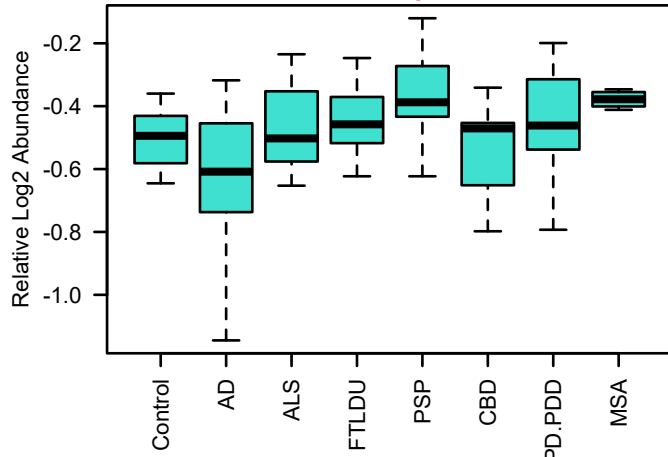
bicor=0.28, p=0.011
cor=0.35, p=0.0011



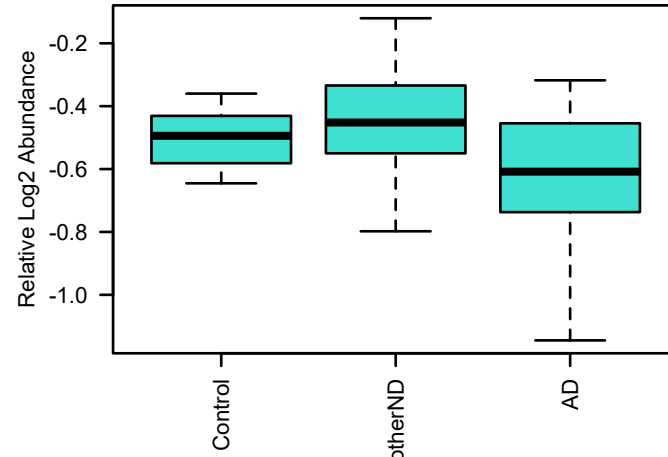
bicor=0.21, p=0.034
cor=0.26, p=0.009



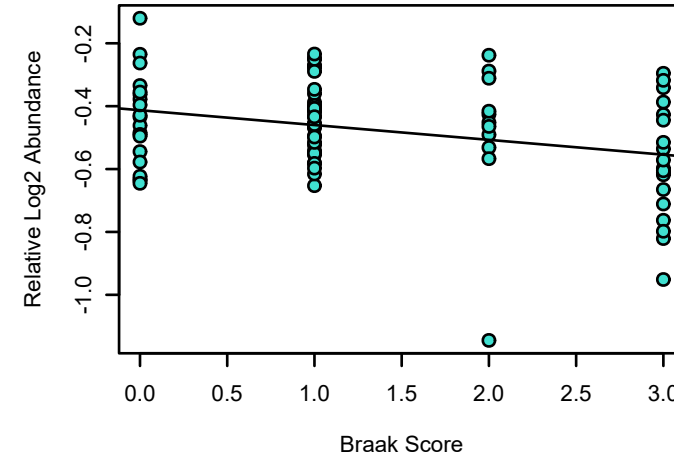
SCN2A UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0014



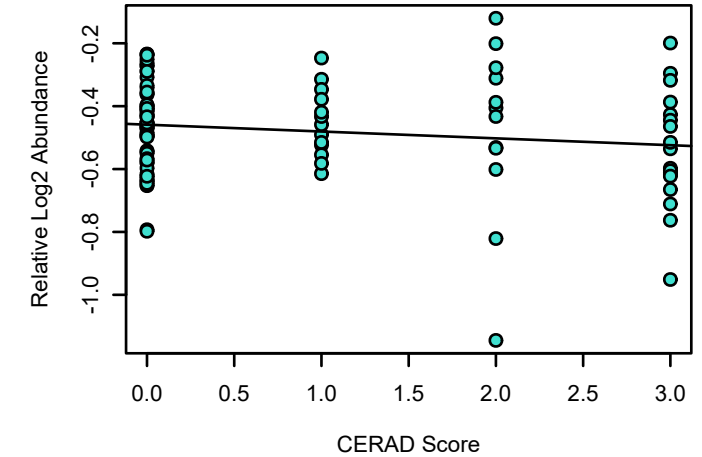
SCN2A UPenn Mixed PRM
K-W ANOVA p: 0.00014



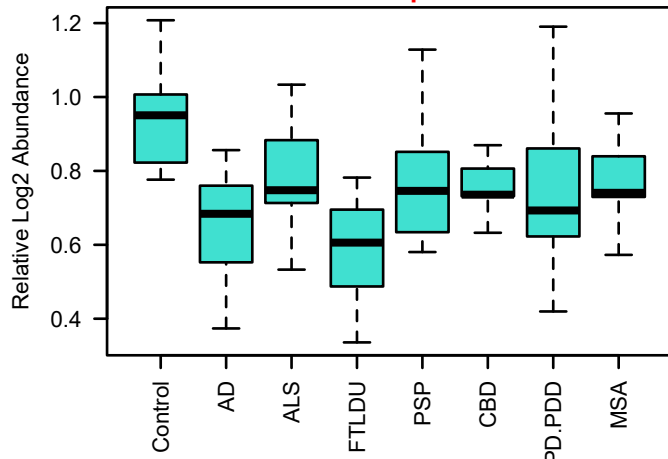
bicor=-0.27, p=0.012
cor=-0.31, p=0.0041



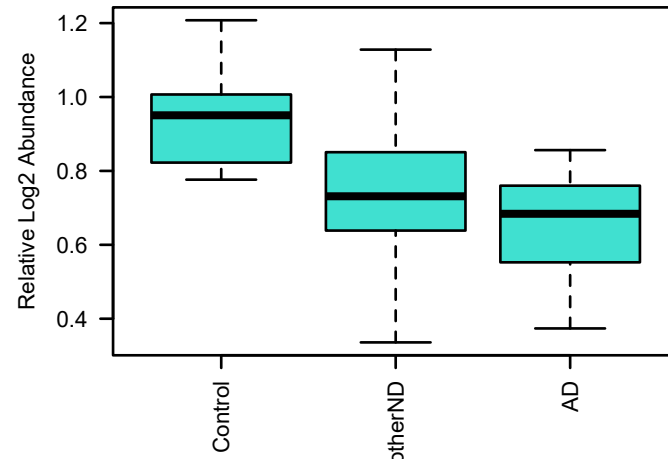
bicor=-0.13, p=0.2
cor=-0.16, p=0.11



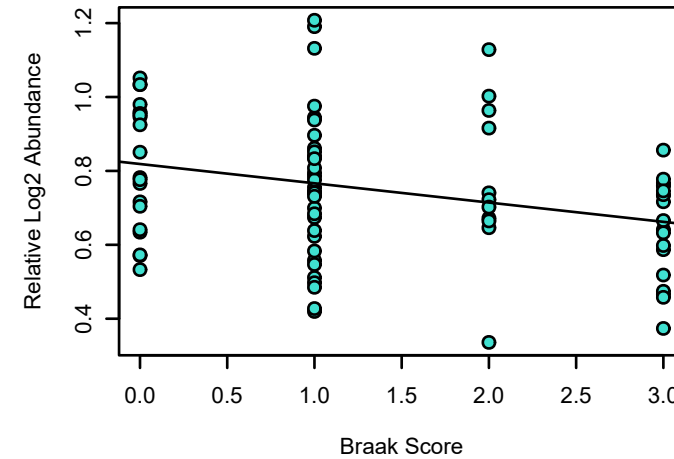
MGLL UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 5.4e-05



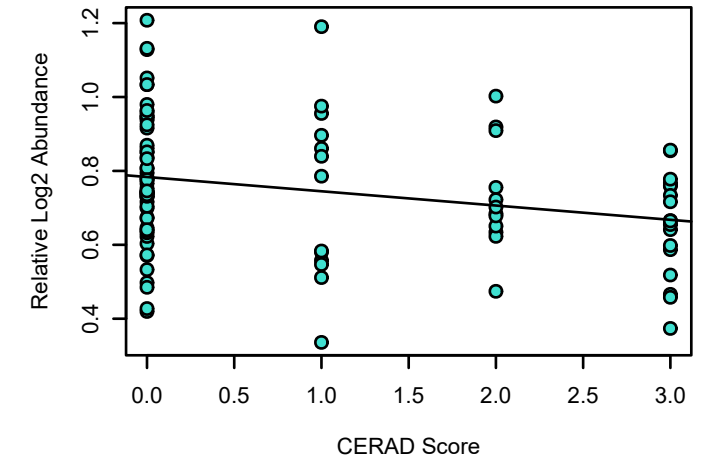
MGLL UPenn Mixed PRM
K-W ANOVA p: 1.7e-05



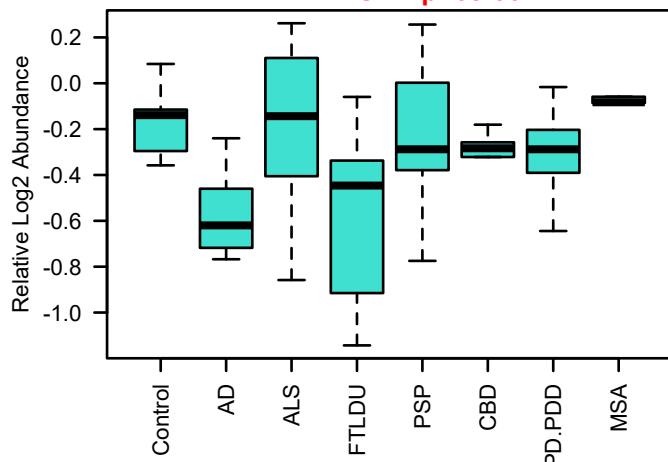
bicor=-0.28, p=0.0091
cor=-0.3, p=0.0056



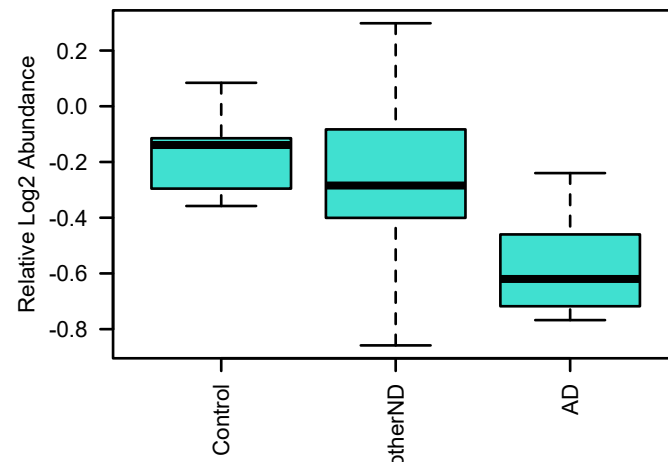
bicor=-0.26, p=0.0092
cor=-0.26, p=0.009



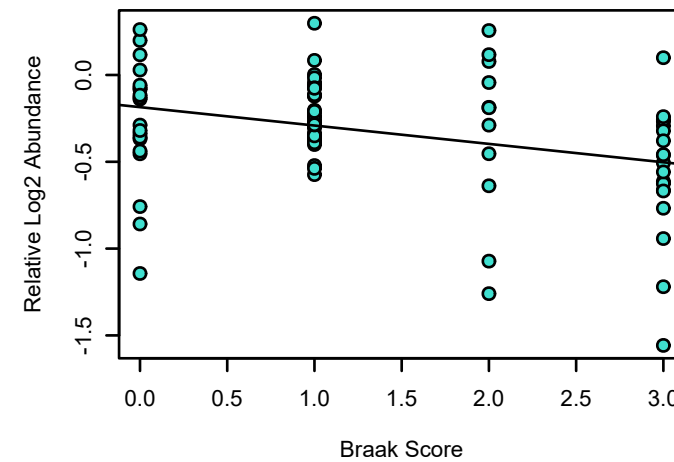
SLC30A3 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 6e-06



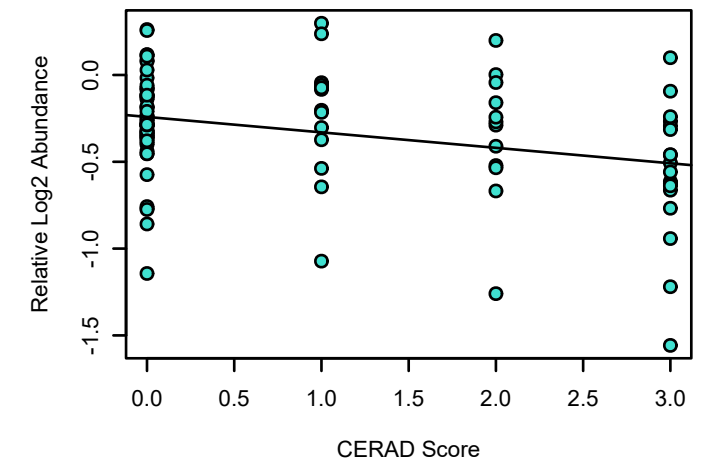
SLC30A3 UPenn Mixed PRM
K-W ANOVA p: 1.7e-05



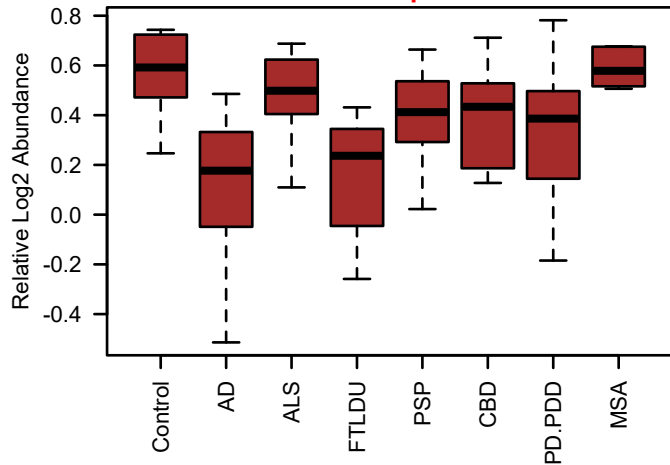
bicor=-0.31, p=0.0047
cor=-0.33, p=0.0022



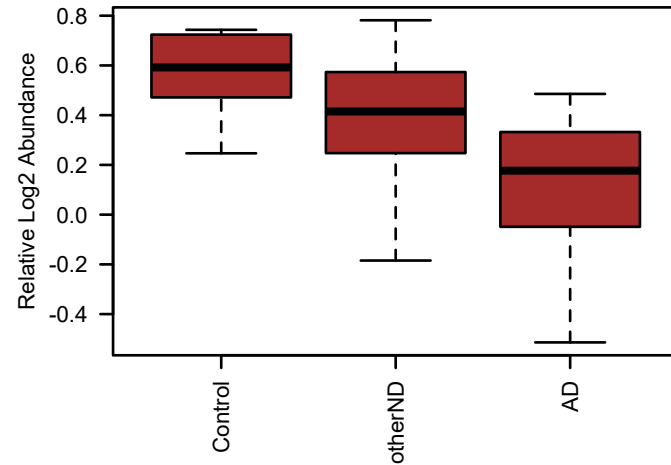
bicor=-0.28, p=0.0042
cor=-0.32, p=0.0012



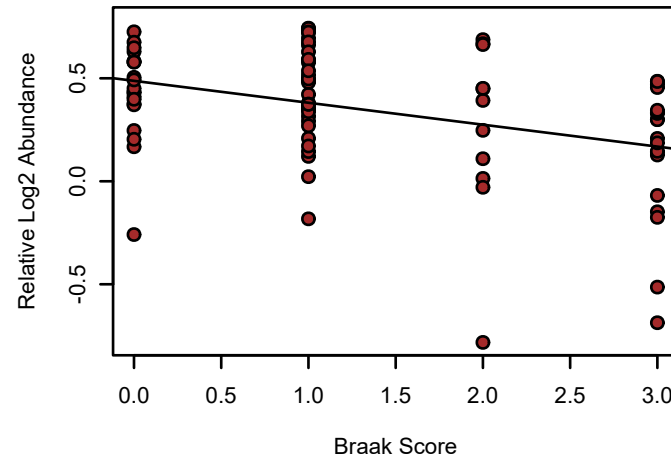
OLFM1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 2.2e-06



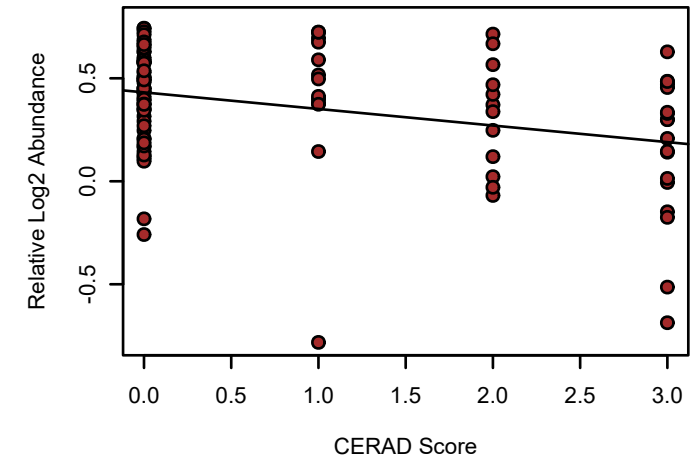
OLFM1 UPenn Mixed PRM
K-W ANOVA p: 1.3e-05



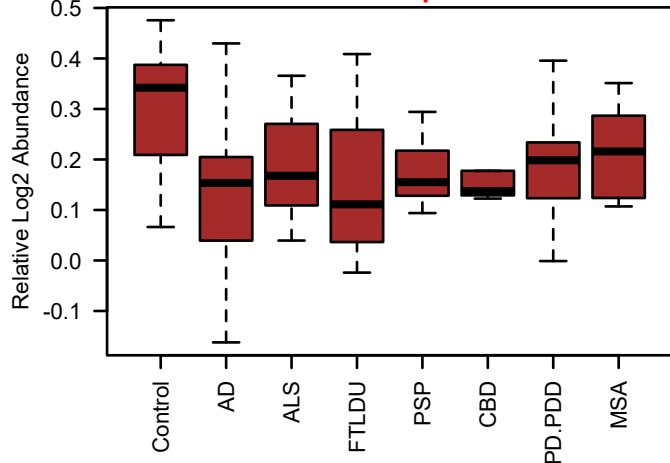
bicor=-0.37, p=0.00053
cor=-0.38, p=0.00036



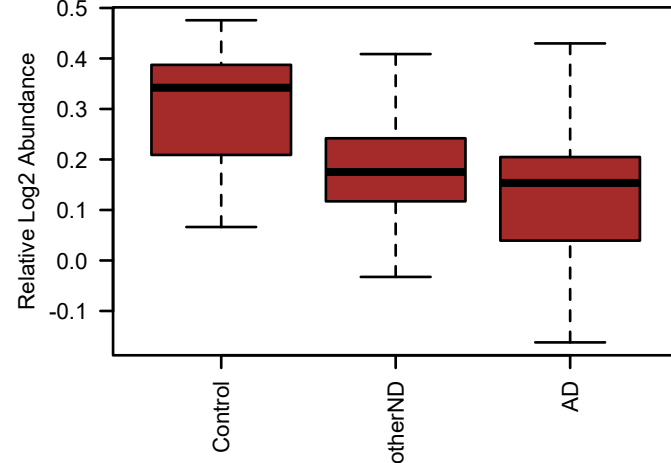
bicor=-0.3, p=0.0021
cor=-0.33, p=8e-04



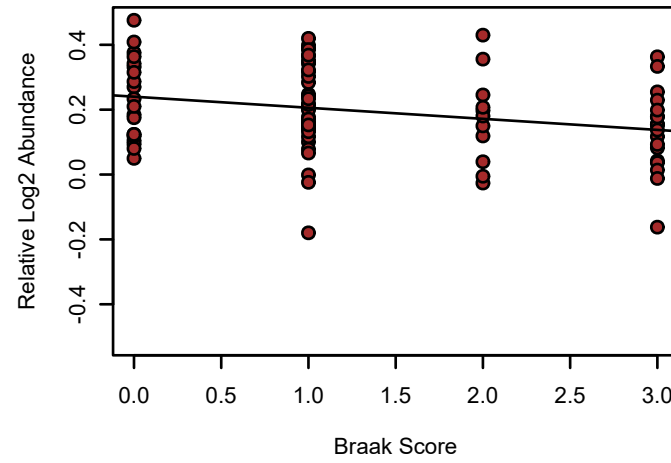
ACO2 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.032



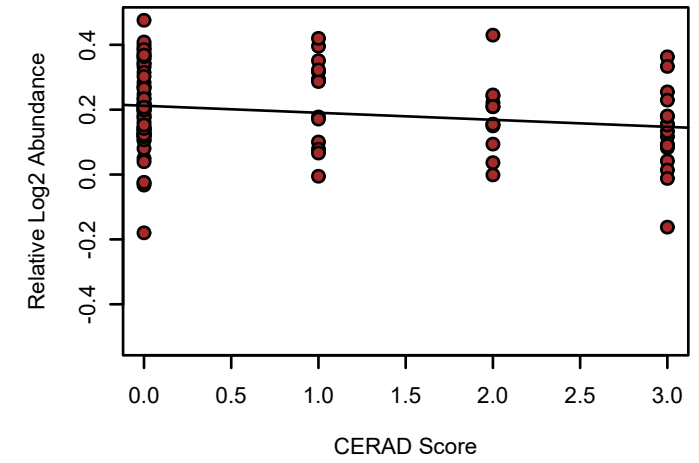
ACO2 UPenn Mixed PRM
K-W ANOVA p: 0.00086



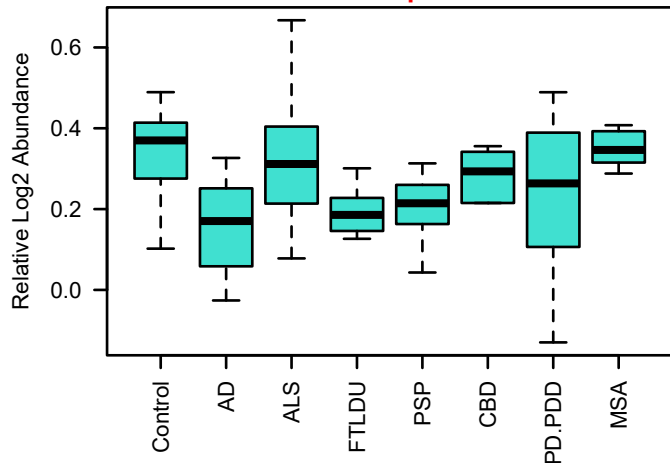
bicor=-0.23, p=0.038
cor=-0.28, p=0.0099



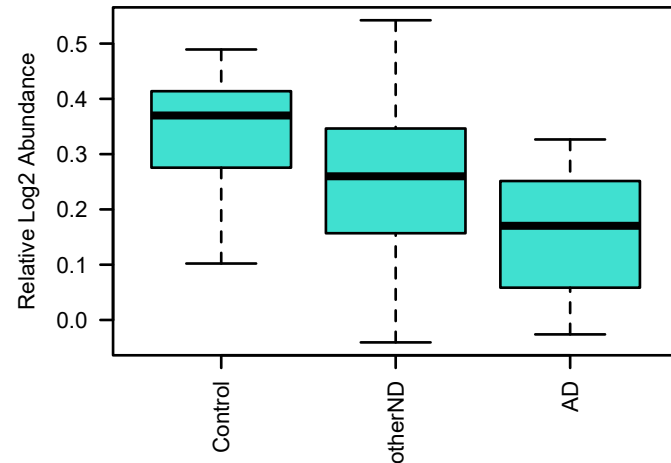
bicor=-0.2, p=0.041
cor=-0.2, p=0.046



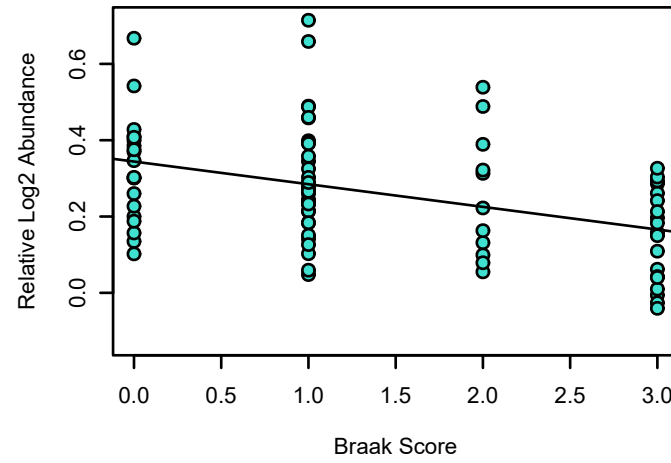
SGIP1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00097



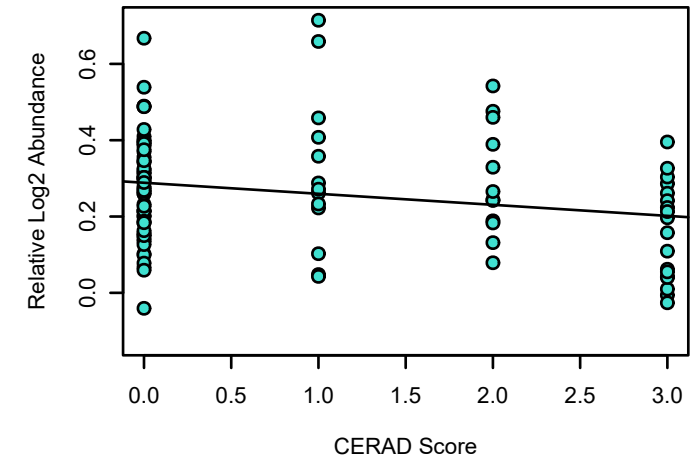
SGIP1 UPenn Mixed PRM
K-W ANOVA p: 0.00022



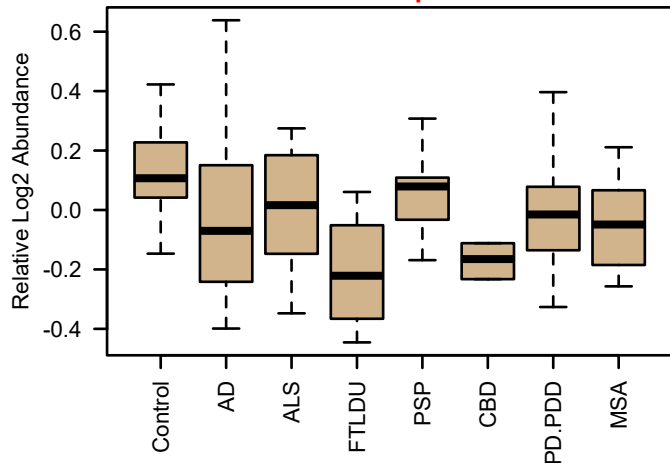
bicor=-0.4, p=2e-04
cor=-0.41, p=0.00011



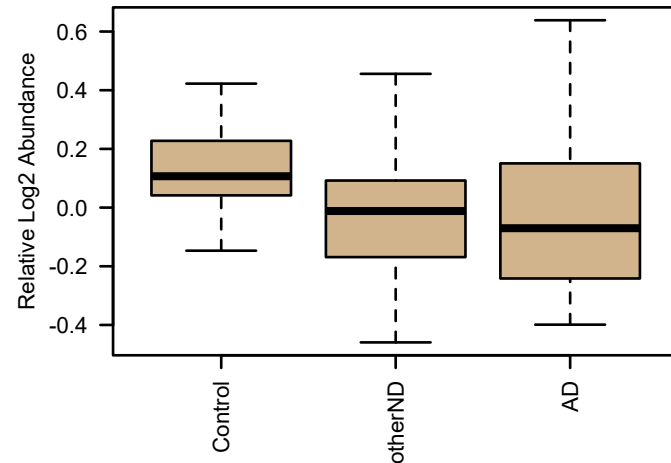
bicor=-0.24, p=0.018
cor=-0.23, p=0.021



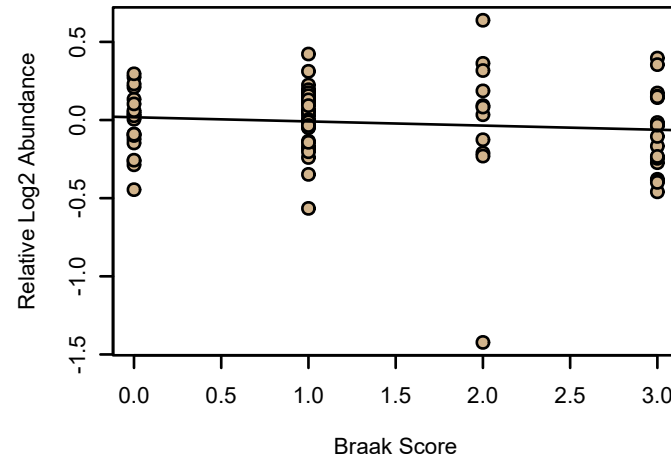
SULT4A1 UPenn Mixed PRM
M12 tan MEGA module member
K-W ANOVA p: 0.0094



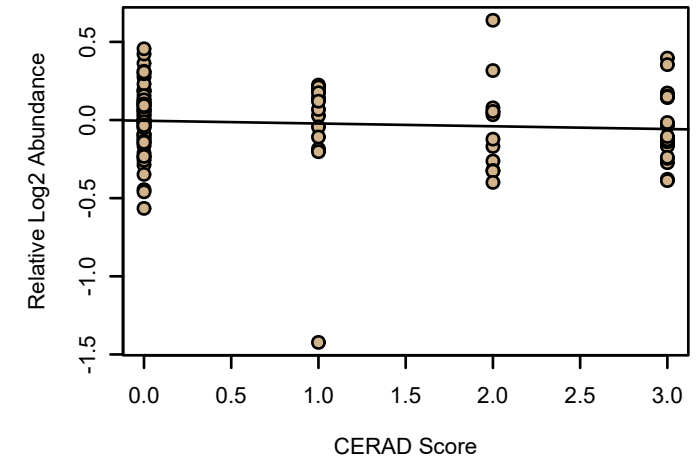
SULT4A1 UPenn Mixed PRM
K-W ANOVA p: 0.073



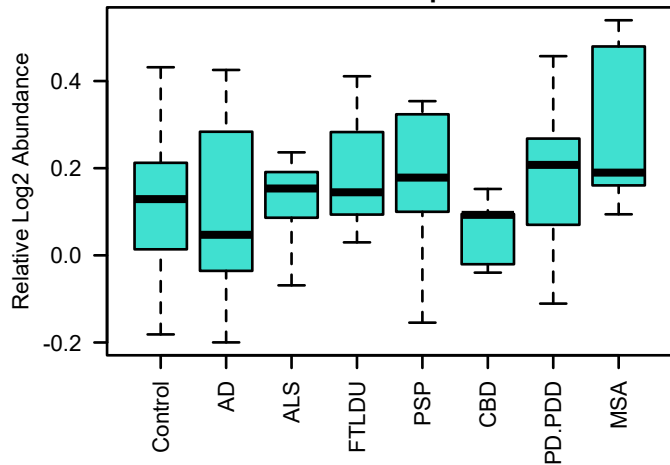
bicor=-0.1, p=0.37
cor=-0.11, p=0.32



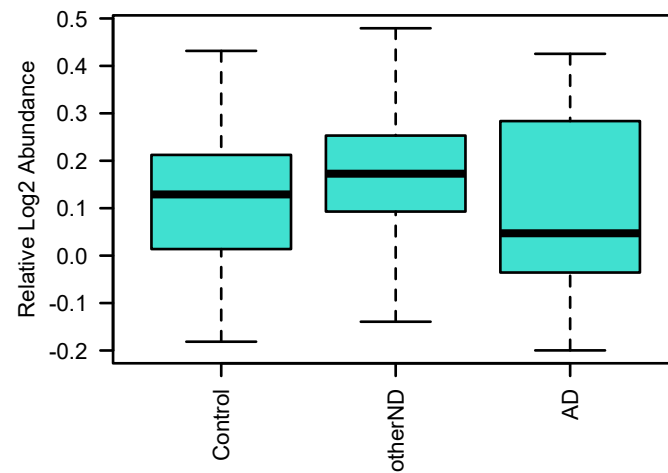
bicor=-0.11, p=0.26
cor=-0.081, p=0.42



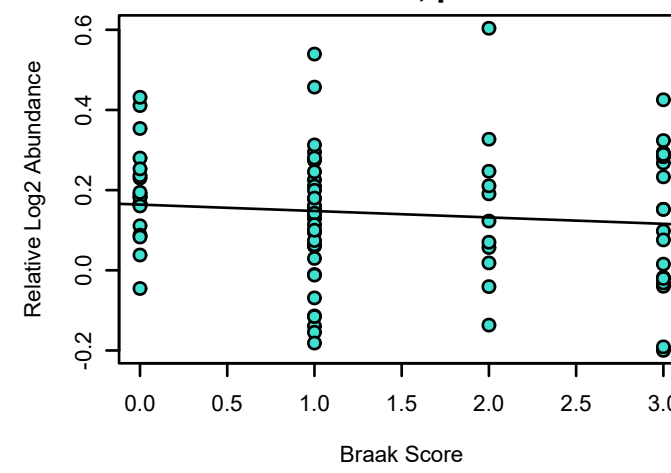
CHCHD6 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.12



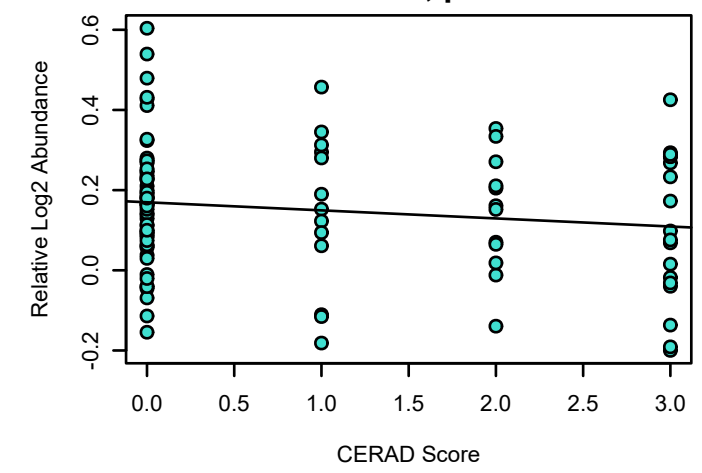
CHCHD6 UPenn Mixed PRM
K-W ANOVA p: 0.061



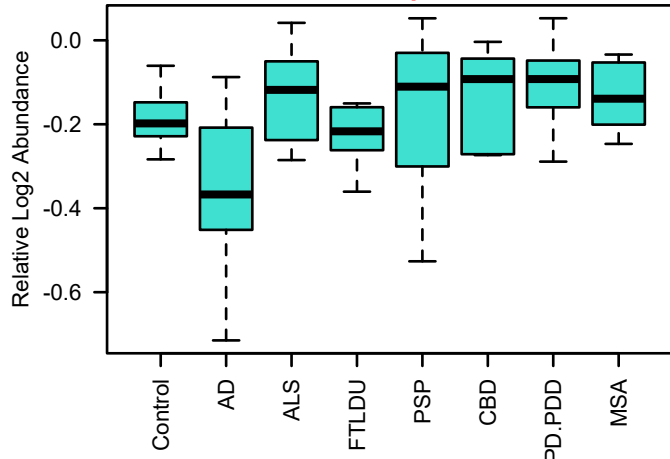
bicor=-0.12, p=0.26
cor=-0.11, p=0.32



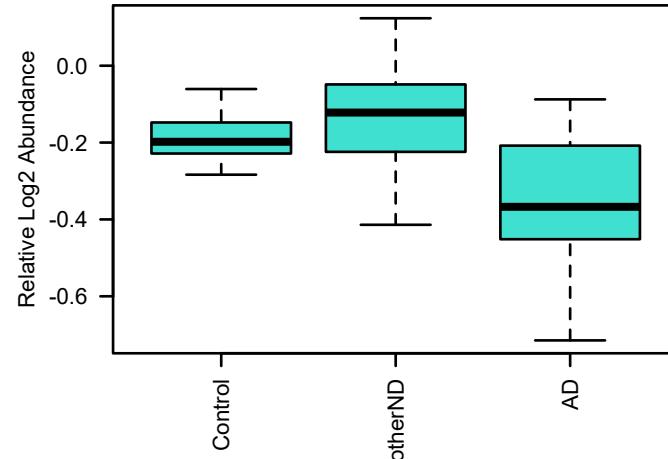
bicor=-0.12, p=0.23
cor=-0.15, p=0.14



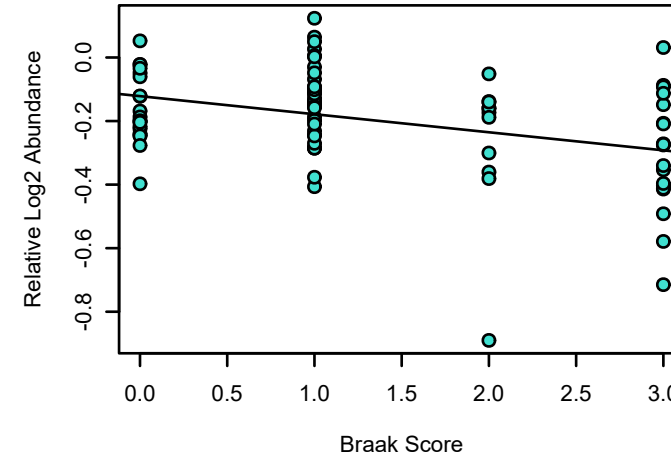
PACSN1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 1.4e-05



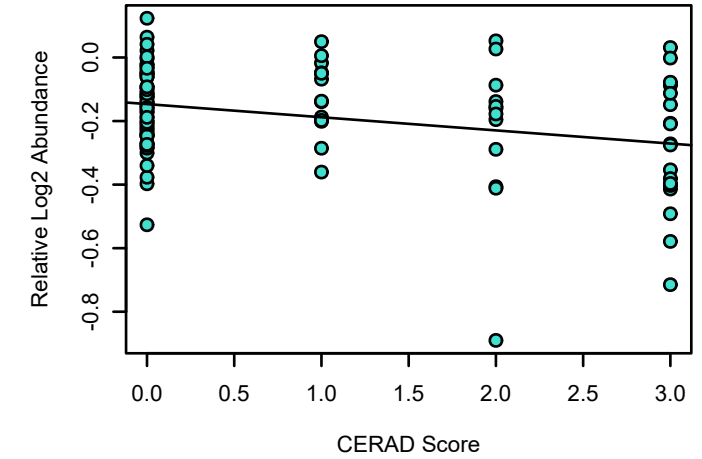
PACSN1 UPenn Mixed PRM
K-W ANOVA p: 1.2e-07



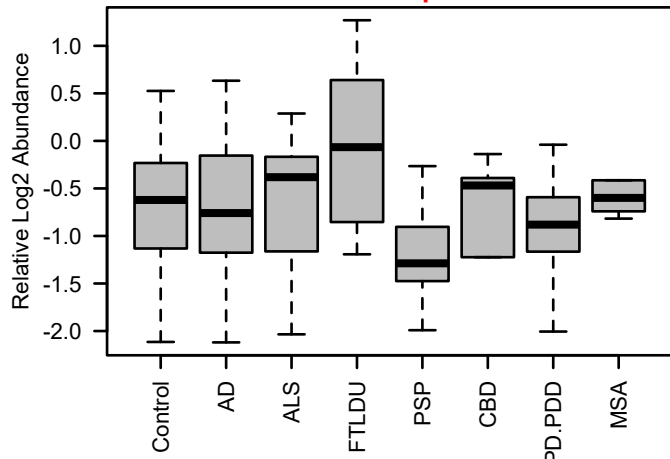
bicor=-0.34, p=0.0016
cor=-0.37, p=0.00053



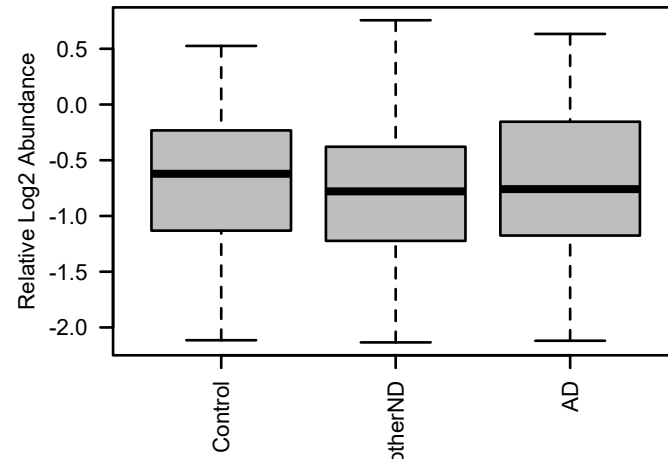
bicor=-0.25, p=0.011
cor=-0.3, p=0.0024



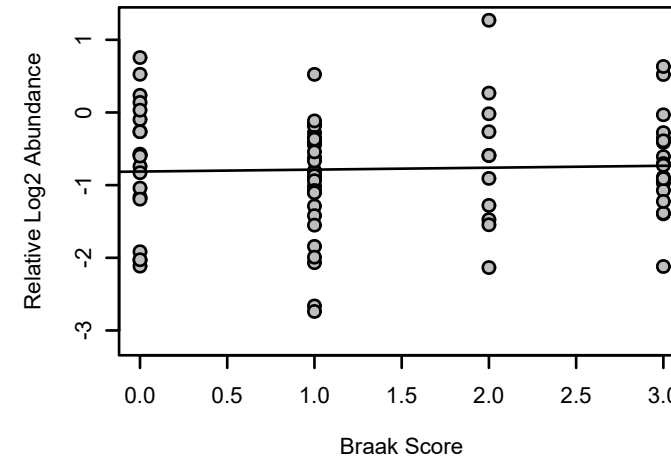
CDC42EP4 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.022



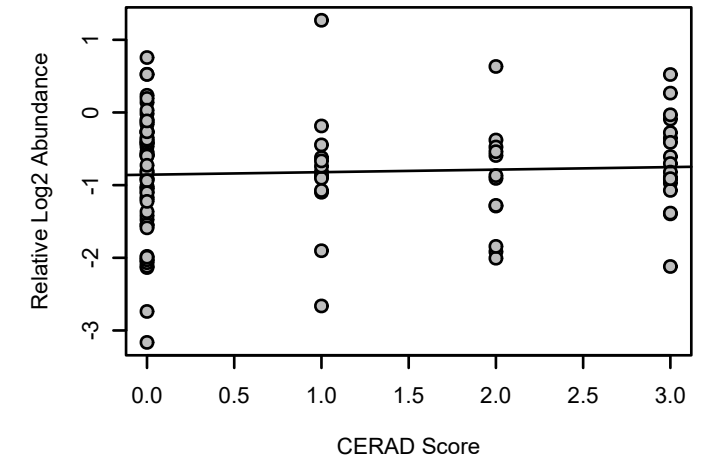
CDC42EP4 UPenn Mixed PRM
K-W ANOVA p: 0.67



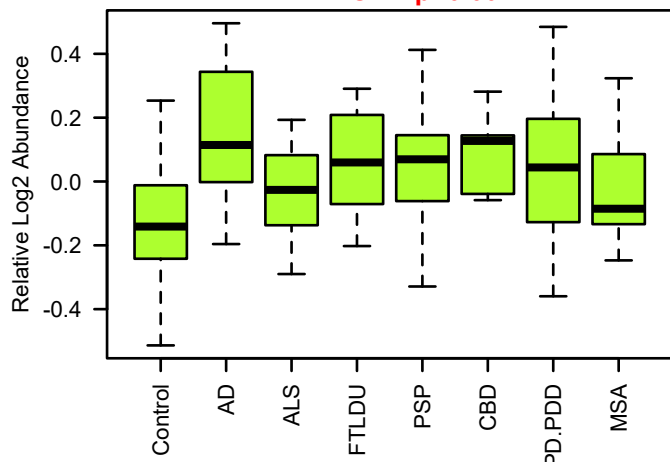
bicor=0.0016, p=0.99
cor=0.037, p=0.74



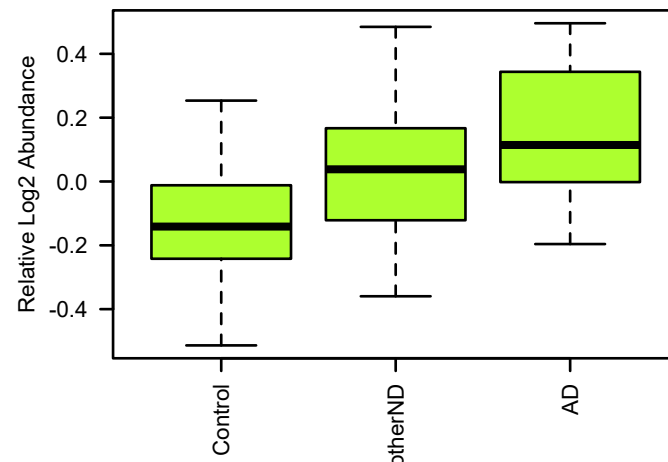
bicor=0.036, p=0.72
cor=0.052, p=0.61



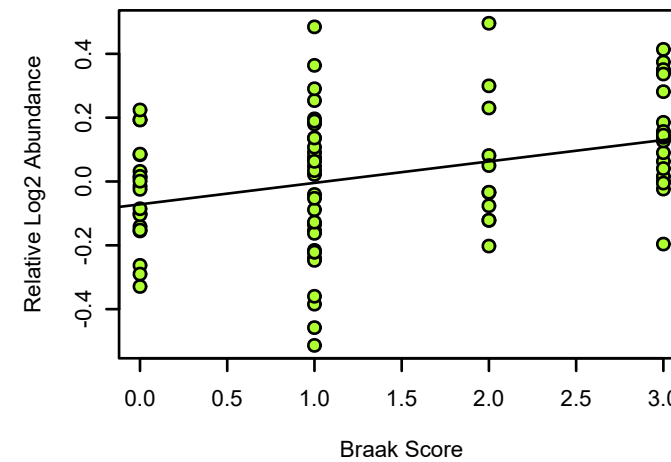
CACYBP UPenn Mixed PRM
M11 greenyellow MEGA module member
K-W ANOVA p: 0.0077



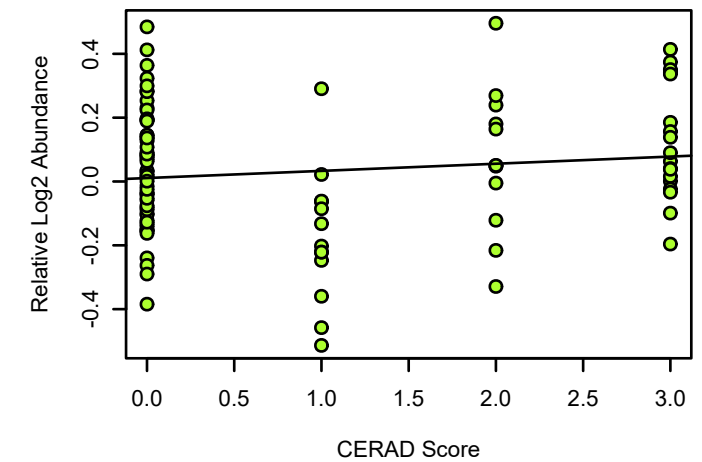
CACYBP UPenn Mixed PRM
K-W ANOVA p: 0.00024



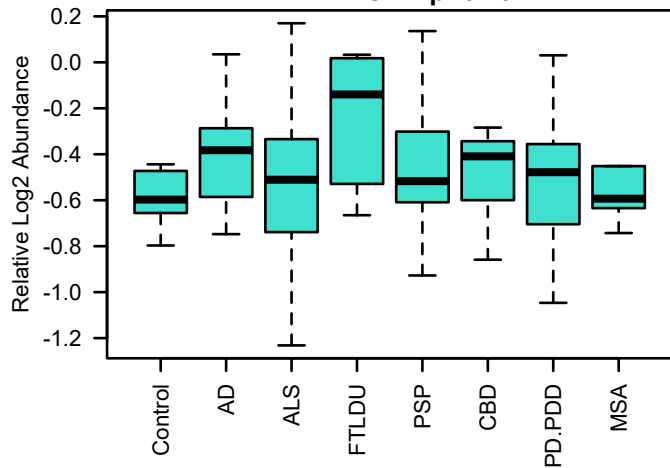
bicor=0.33, p=0.002
cor=0.34, p=0.0016



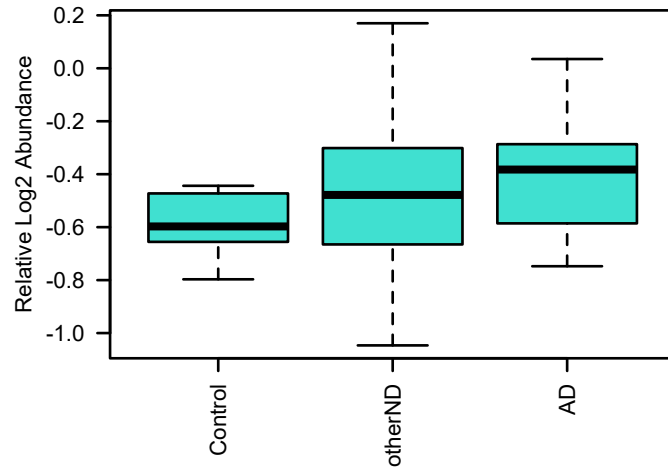
bicor=0.13, p=0.19
cor=0.13, p=0.2



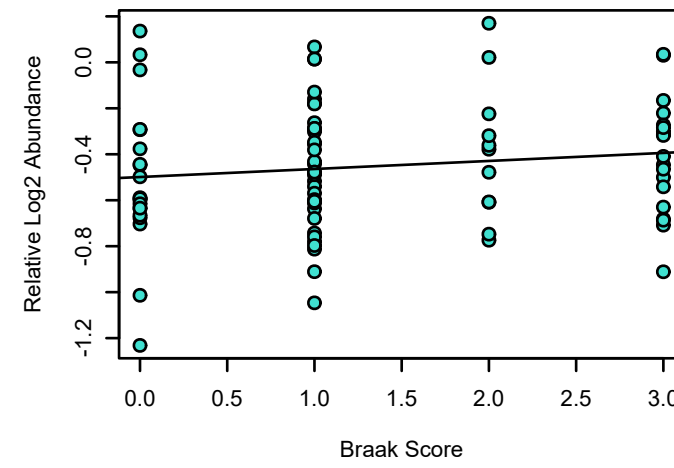
VAT1L UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.19



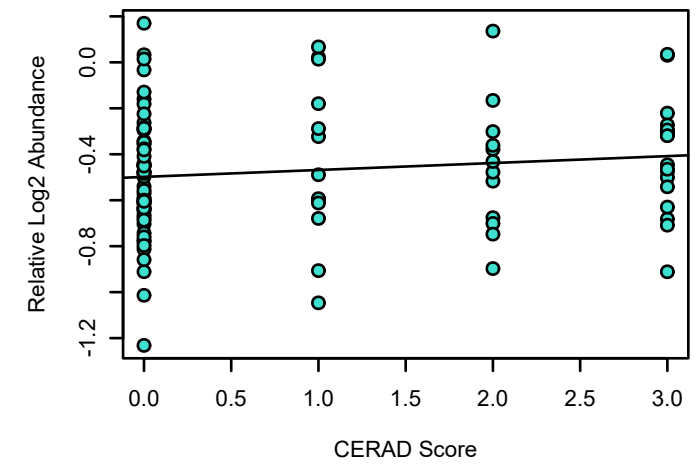
VAT1L UPenn Mixed PRM
K-W ANOVA p: 0.42



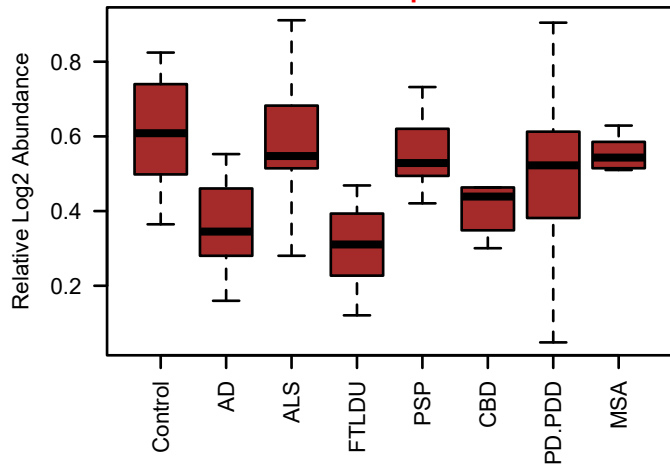
bicor=0.15, p=0.18
cor=0.13, p=0.24



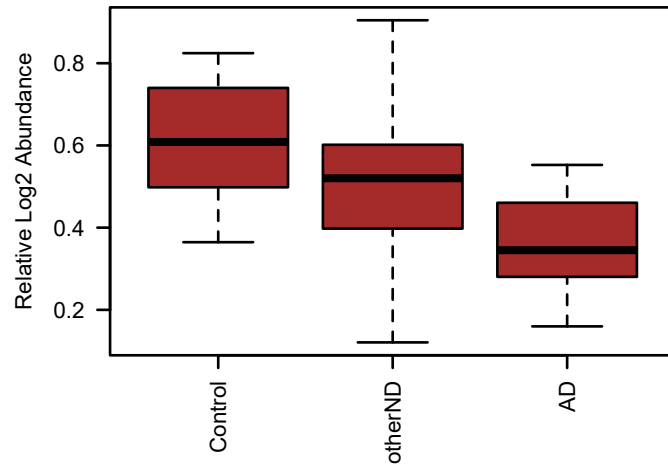
bicor=0.14, p=0.18
cor=0.13, p=0.2



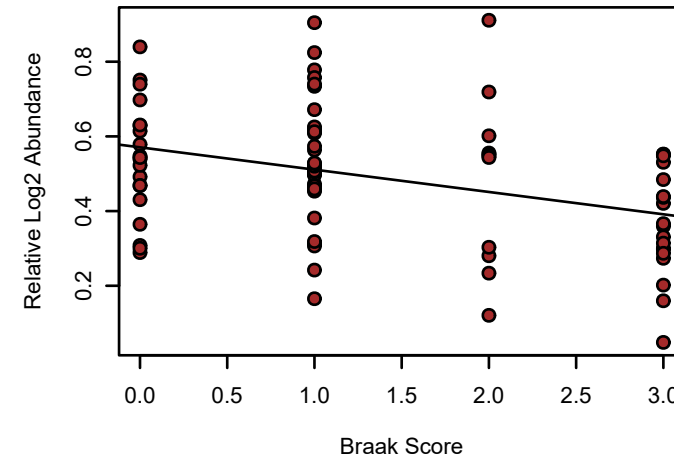
PLCB1 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 4.3e-05



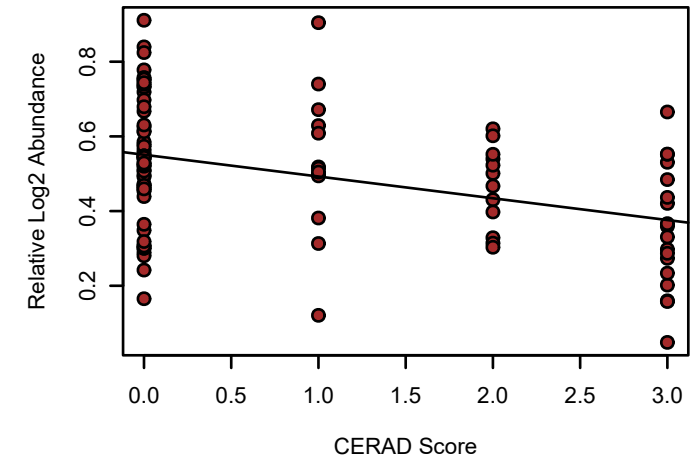
PLCB1 UPenn Mixed PRM
K-W ANOVA p: 0.00045



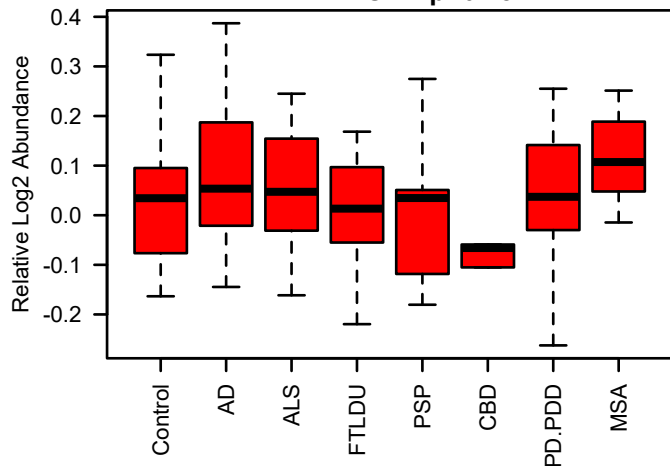
bicor=-0.37, p=0.00056
cor=-0.36, p=0.00077



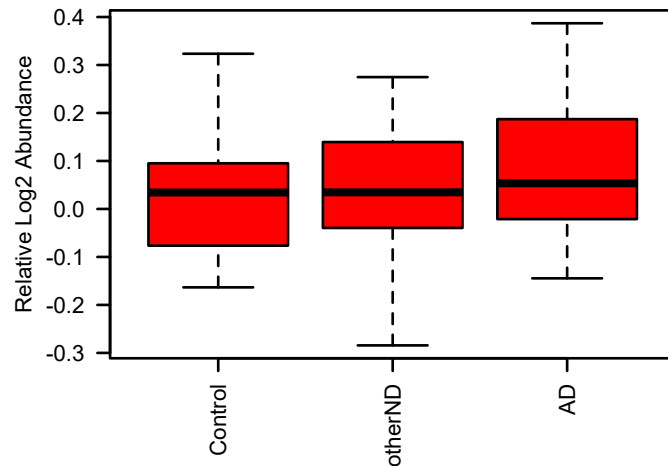
bicor=-0.39, p=7.6e-05
cor=-0.39, p=6e-05



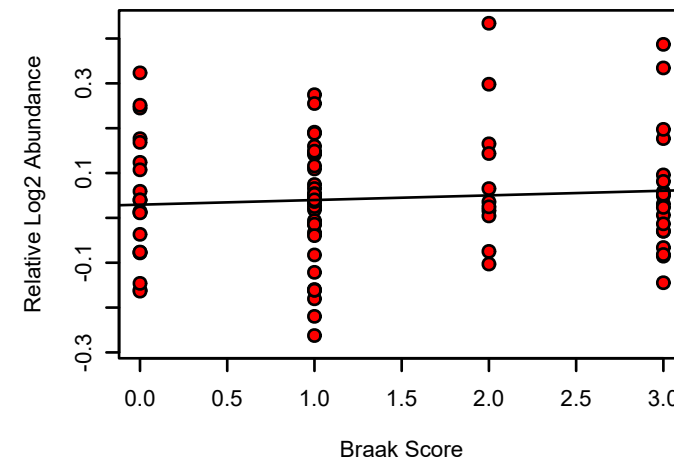
RTN4 UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.28



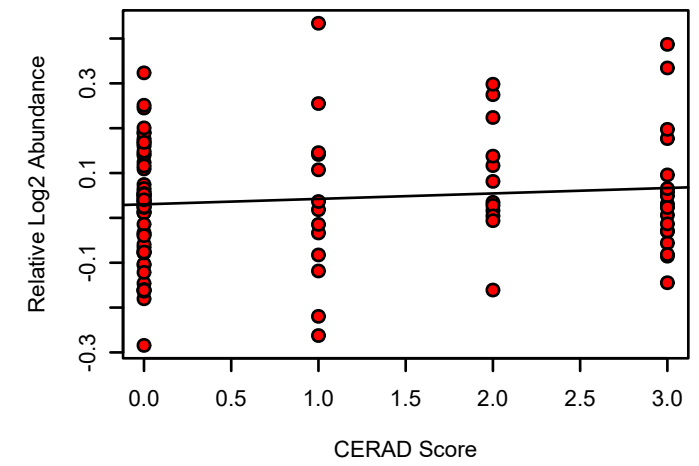
RTN4 UPenn Mixed PRM
K-W ANOVA p: 0.39



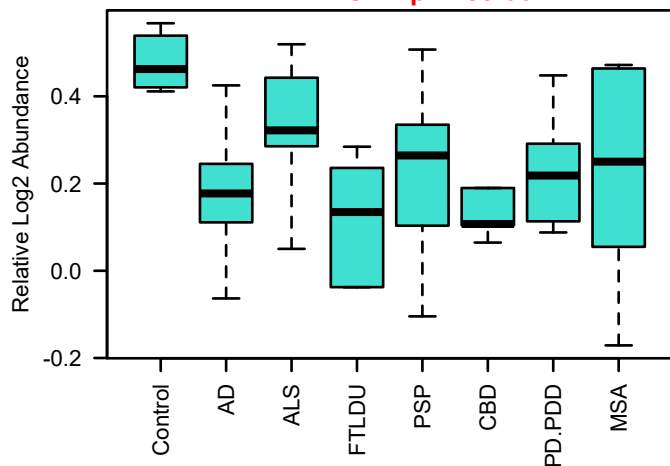
bicor=0.062, p=0.57
cor=0.08, p=0.47



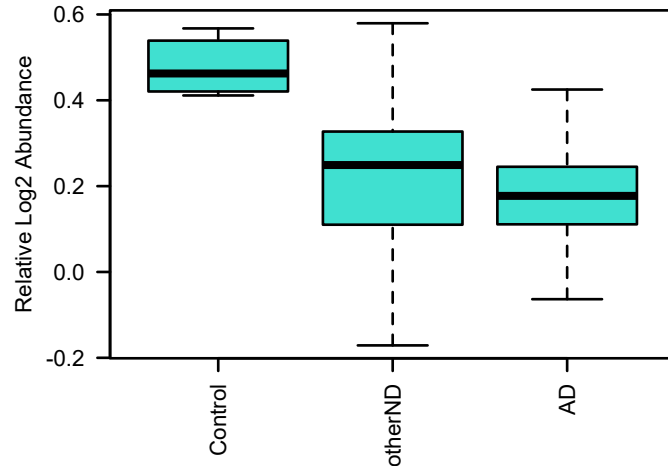
bicor=0.085, p=0.4
cor=0.1, p=0.32



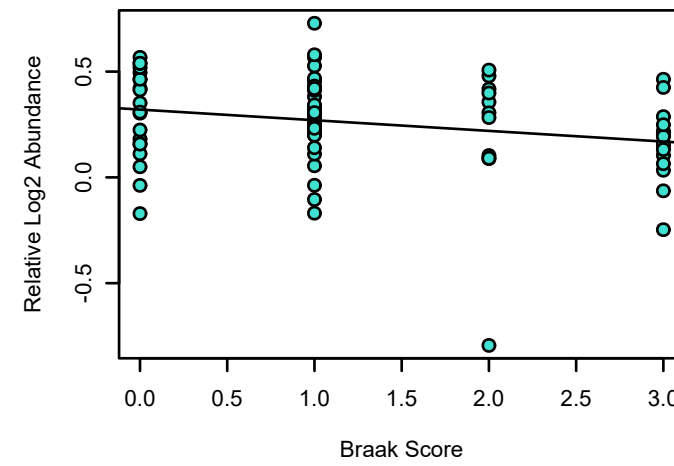
GPHN UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 2.8e-06



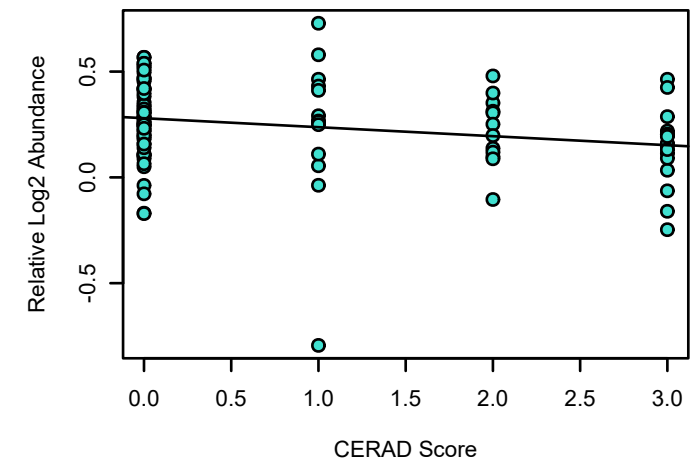
GPHN UPenn Mixed PRM
K-W ANOVA p: 1.3e-05



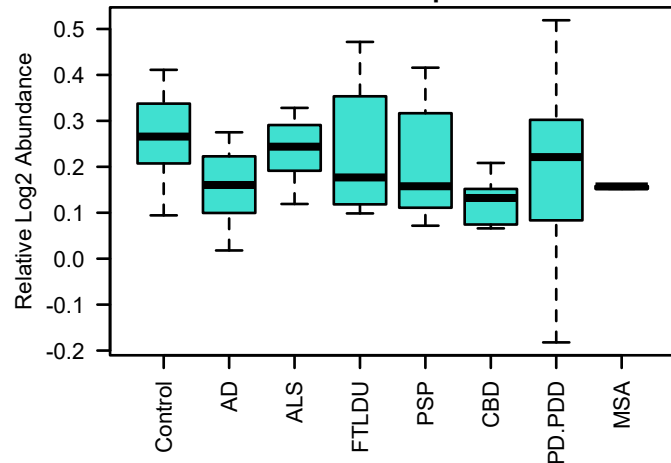
bicor=-0.23, p=0.037
cor=-0.25, p=0.022



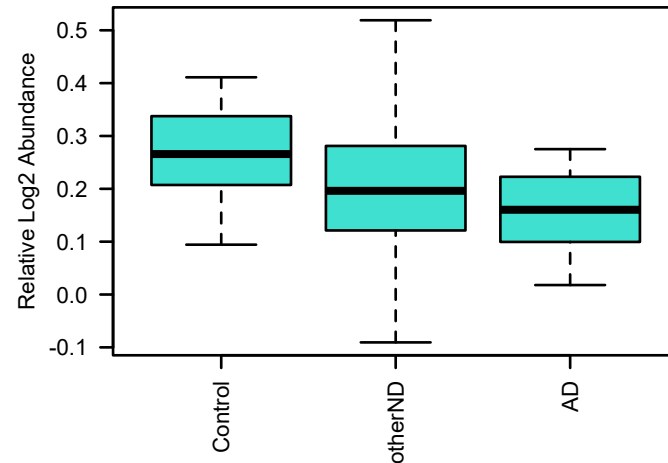
bicor=-0.27, p=0.0061
cor=-0.24, p=0.016



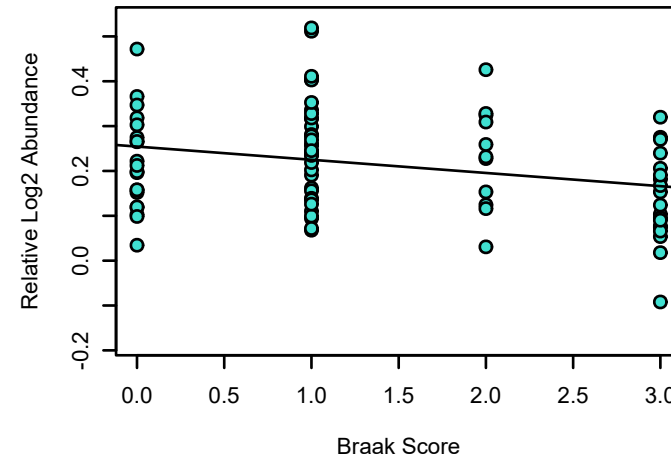
LANCL2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.13



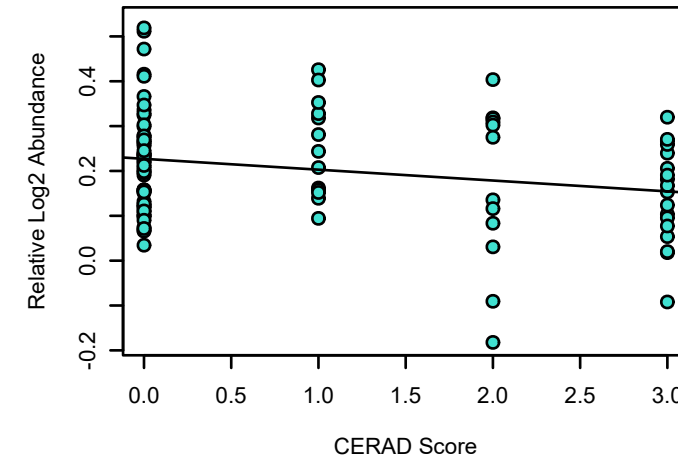
LANCL2 UPenn Mixed PRM
K-W ANOVA p: 0.064



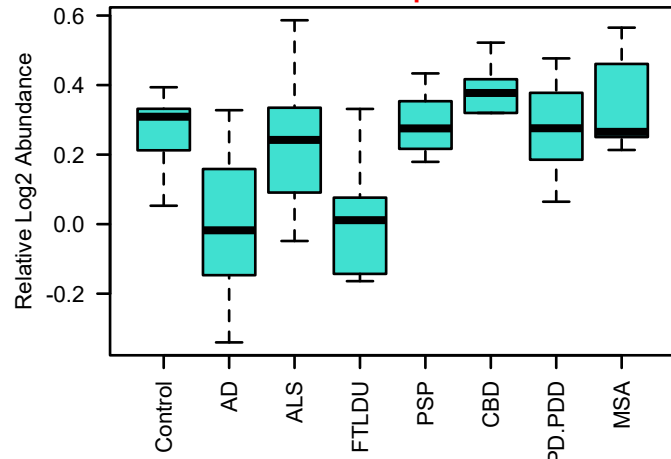
bicor=-0.25, p=0.021
cor=-0.27, p=0.013



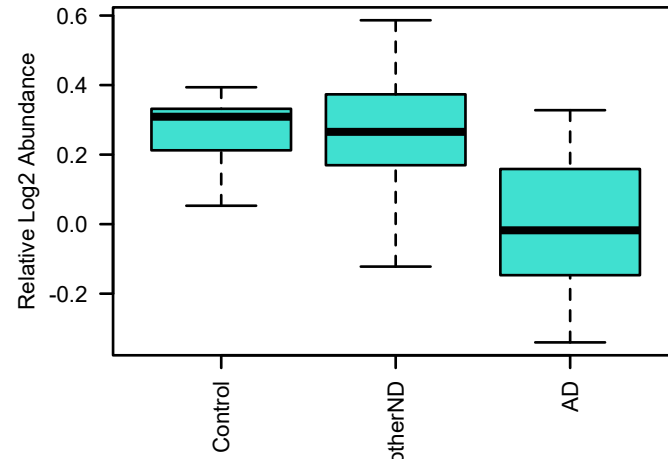
bicor=-0.21, p=0.038
cor=-0.23, p=0.021



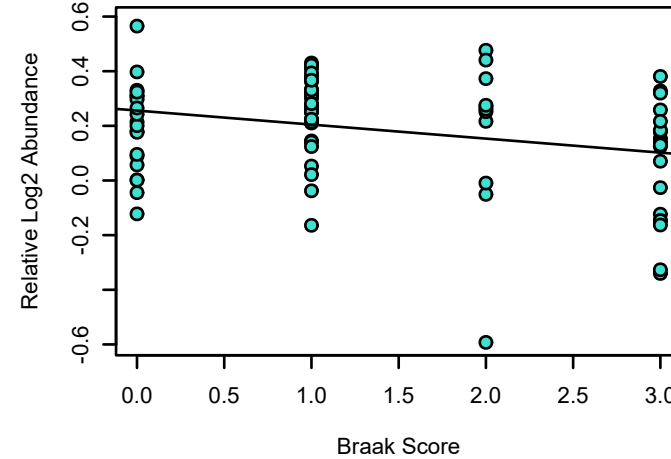
FARSB UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 2.2e-09



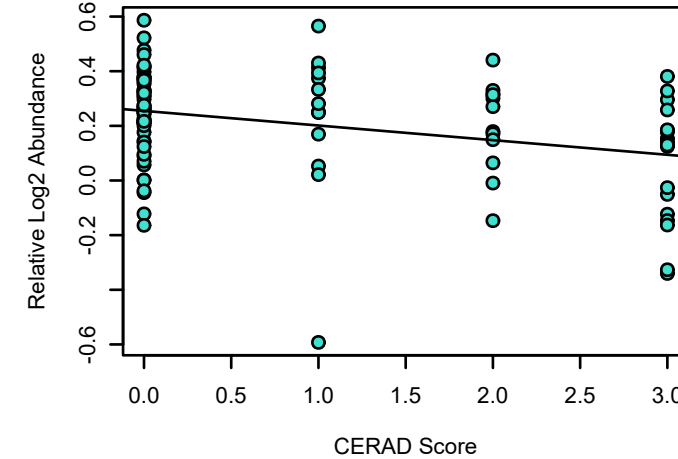
FARSB UPenn Mixed PRM
K-W ANOVA p: 7e-06



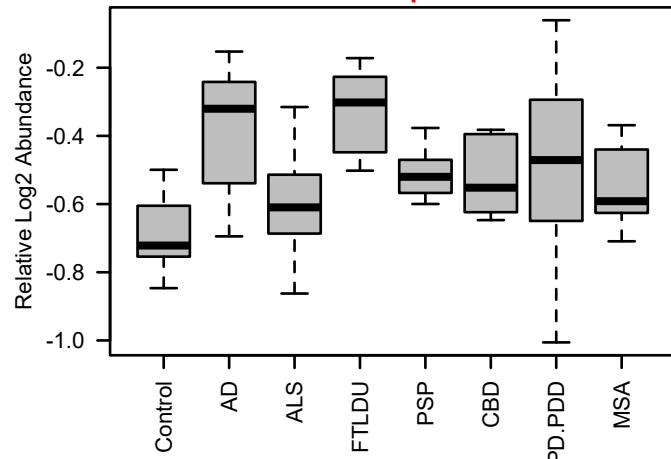
bicor=-0.22, p=0.041
cor=-0.28, p=0.0099



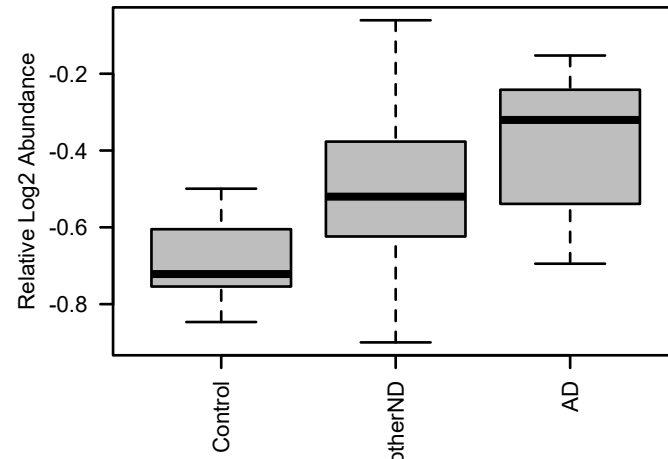
bicor=-0.3, p=0.0022
cor=-0.32, p=0.0012



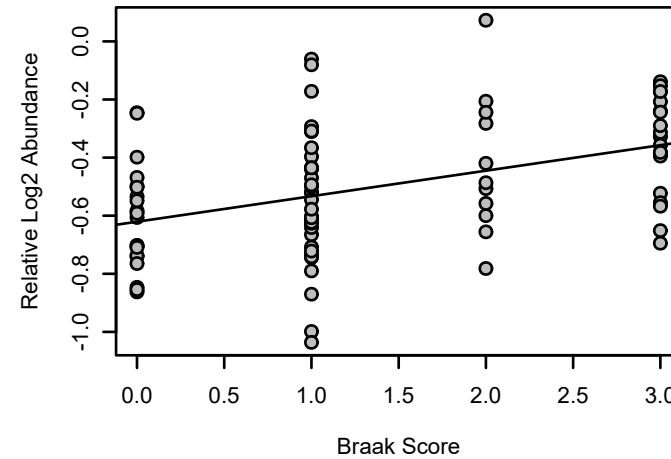
TMEM30A UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.00027



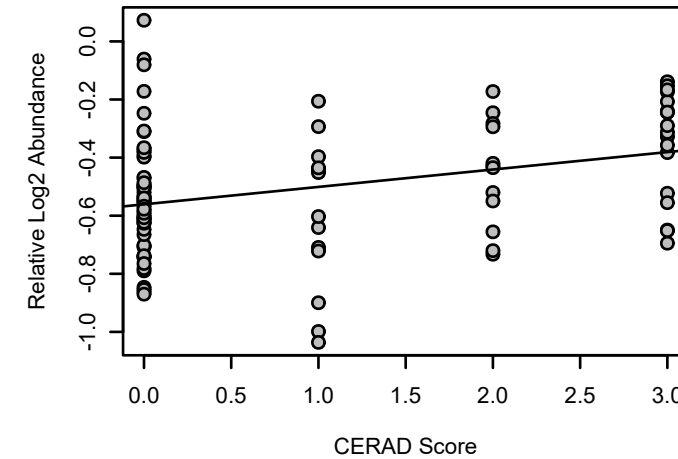
TMEM30A UPenn Mixed PRM
K-W ANOVA p: 5.4e-05



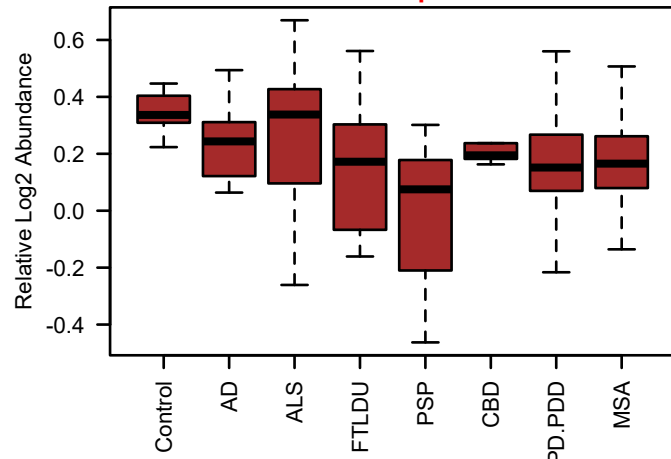
bicor=0.43, p=4e-05
cor=0.42, p=7e-05



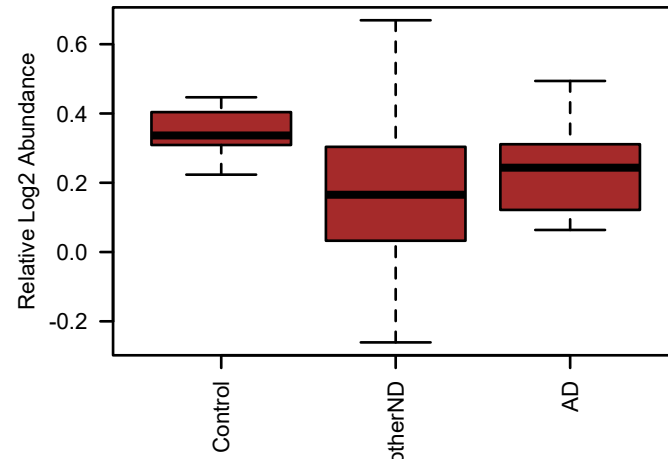
bicor=0.35, p=0.00037
cor=0.33, p=8e-04



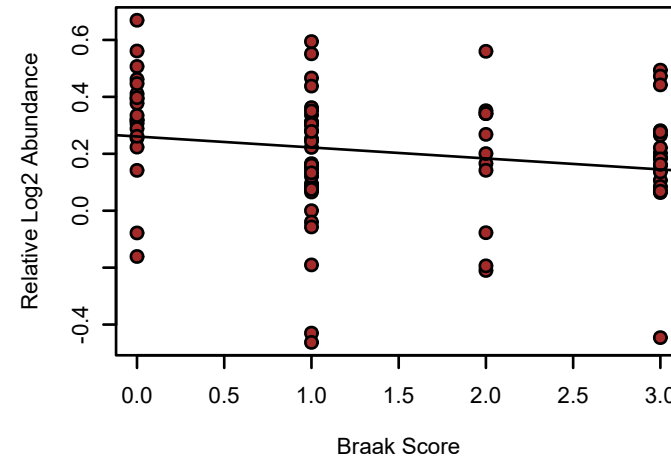
NDUFB11 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.0033



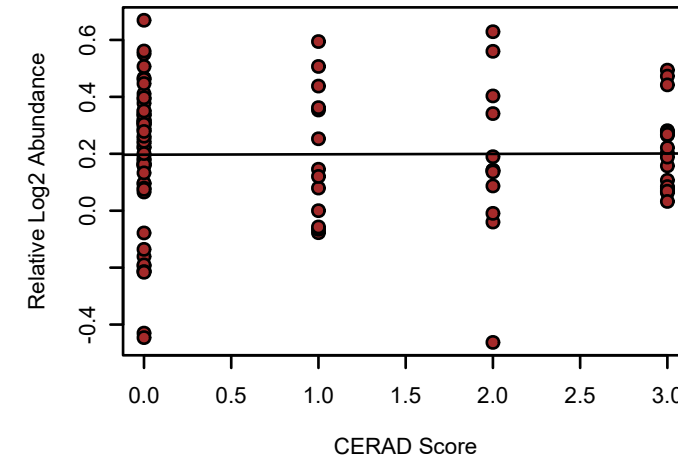
NDUFB11 UPenn Mixed PRM
K-W ANOVA p: 0.0067

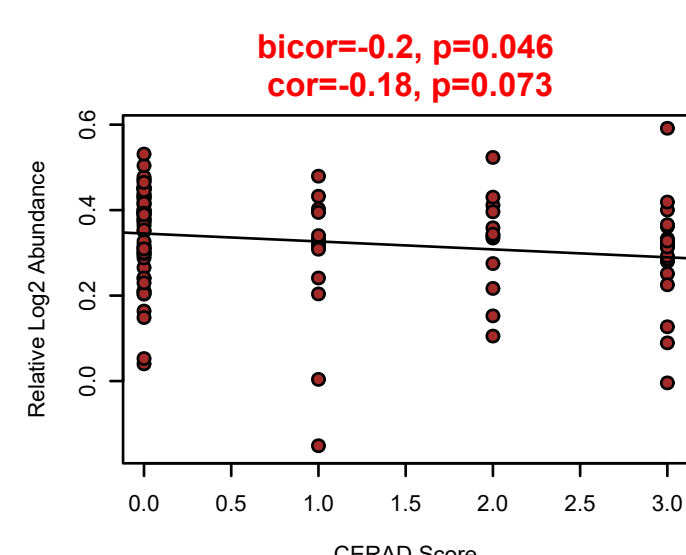
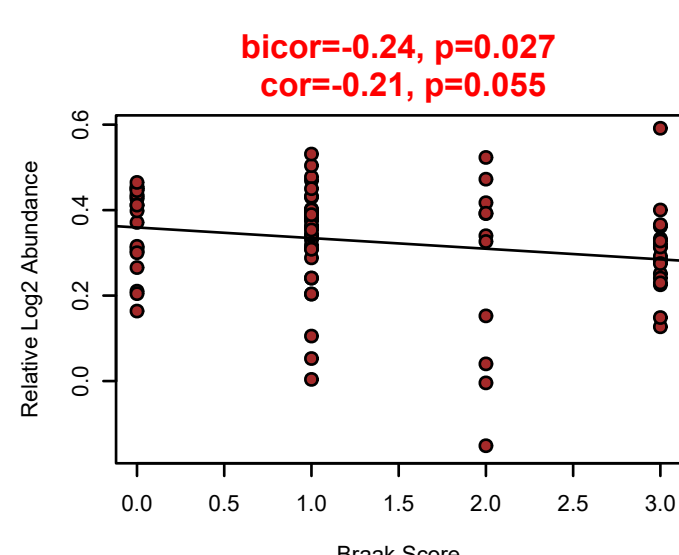
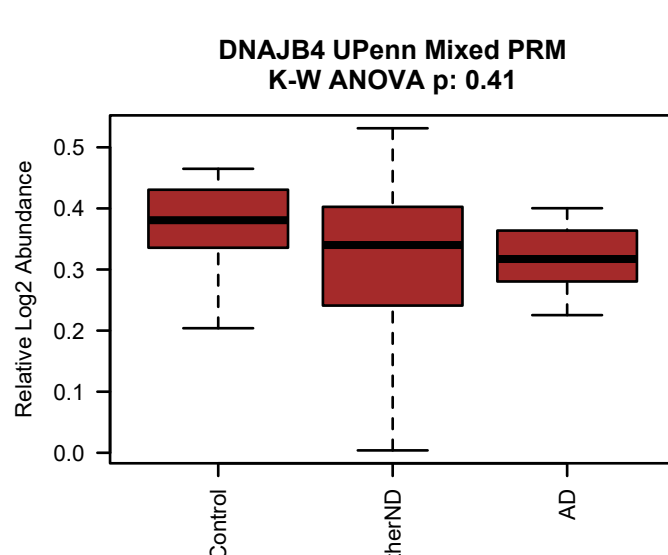
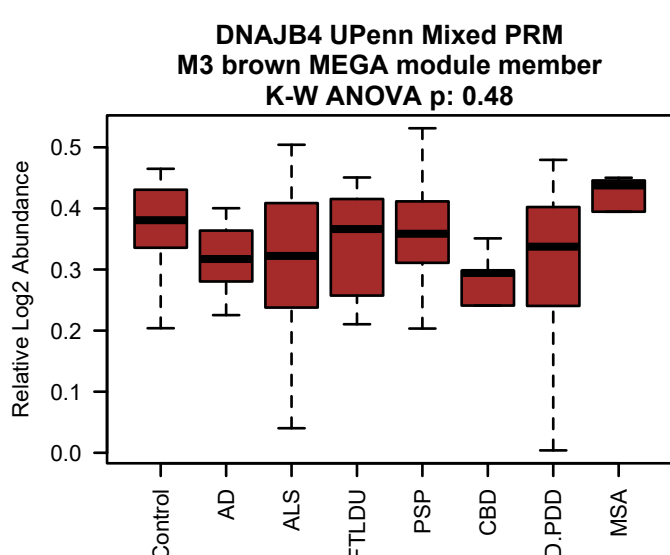
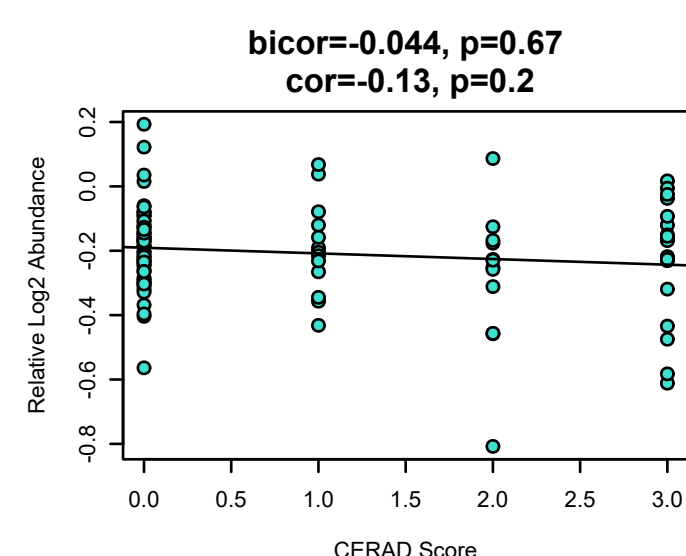
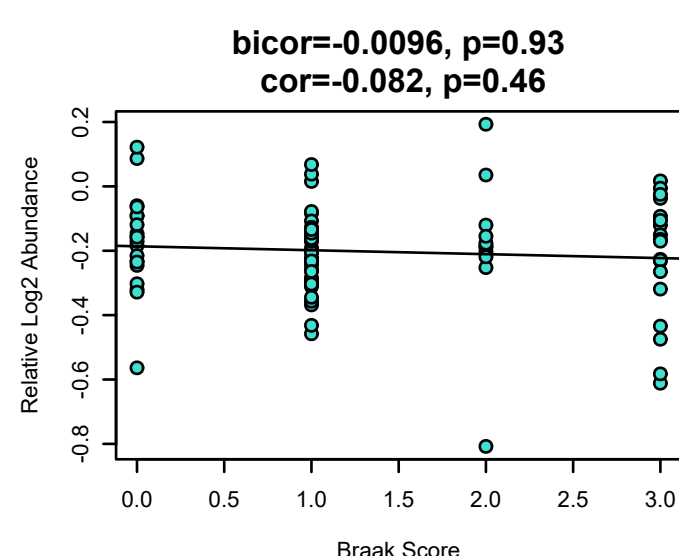
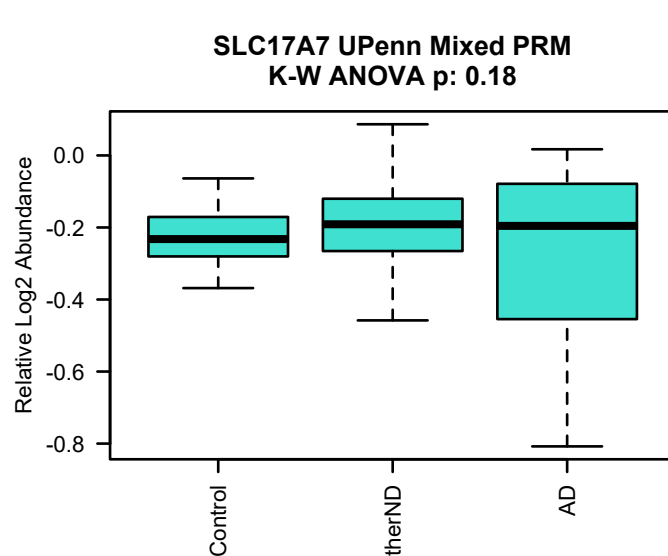
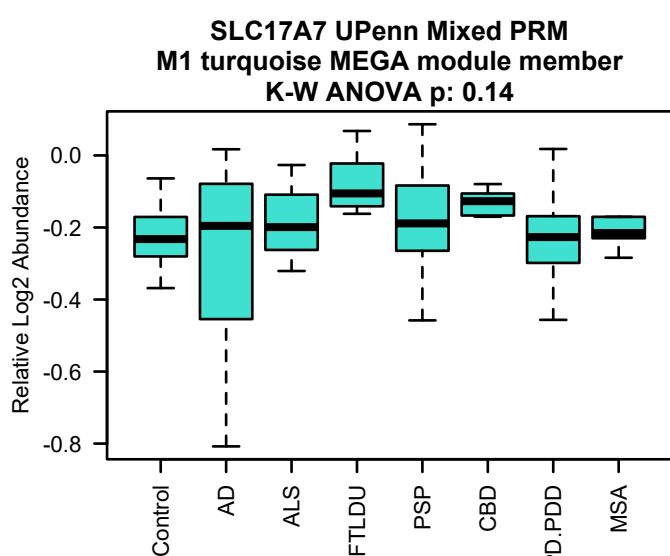
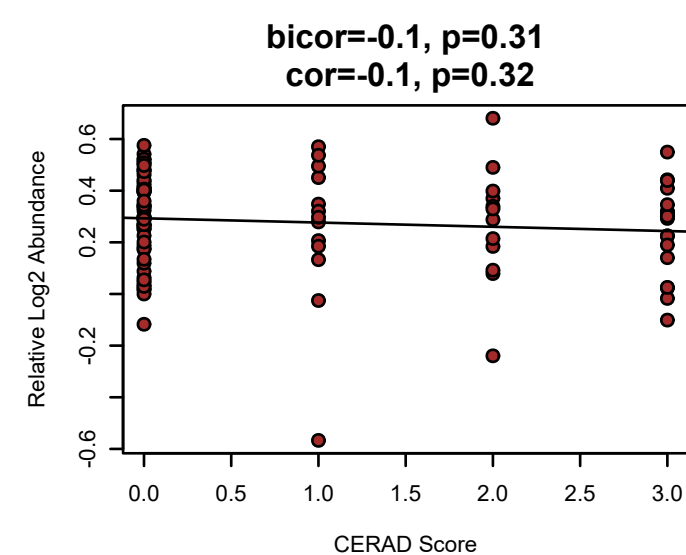
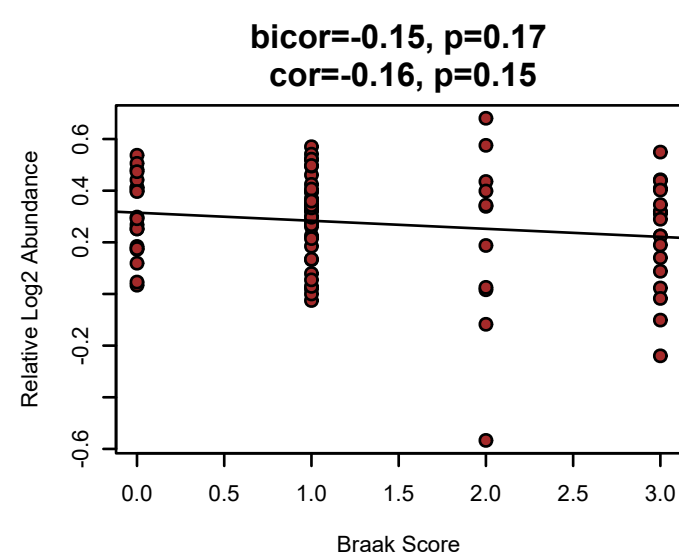
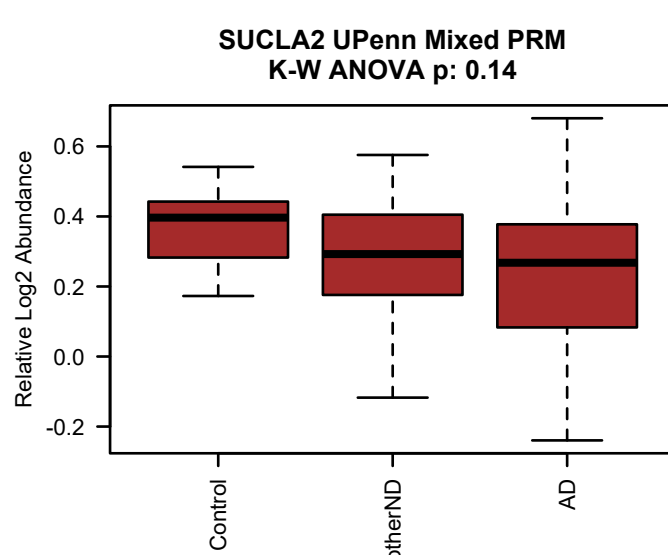
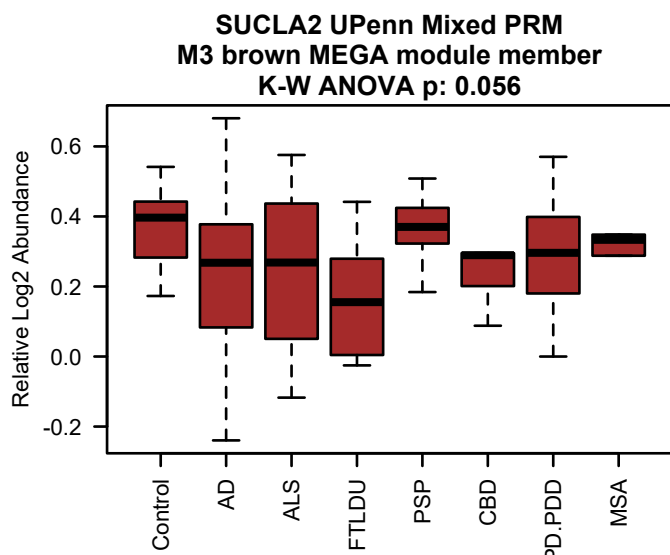
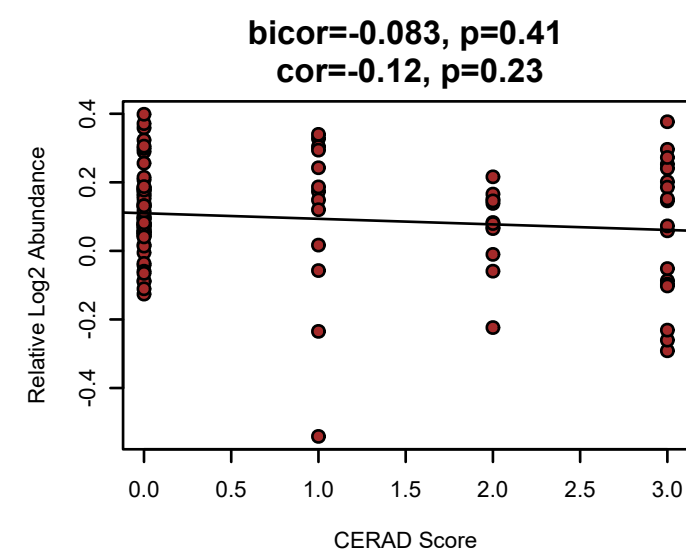
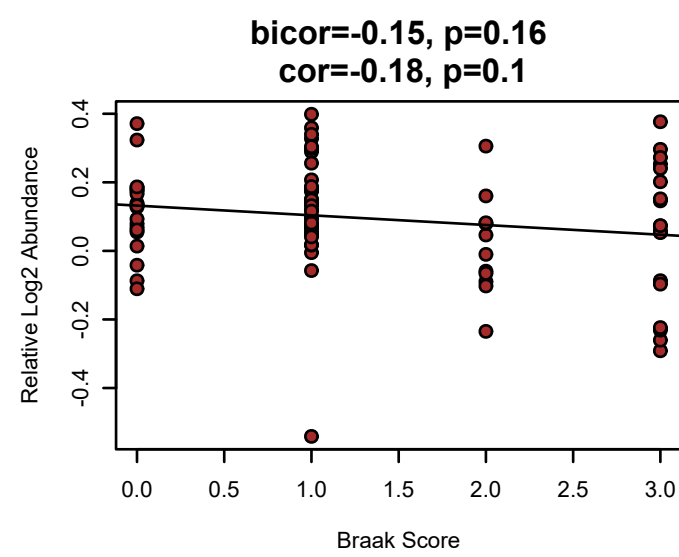
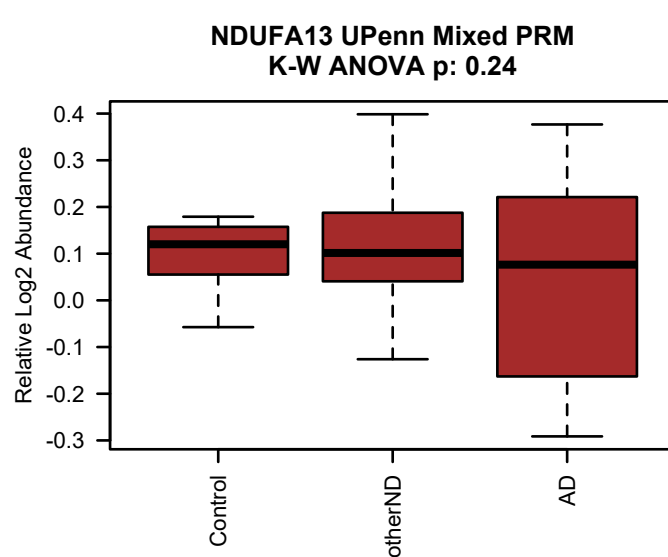
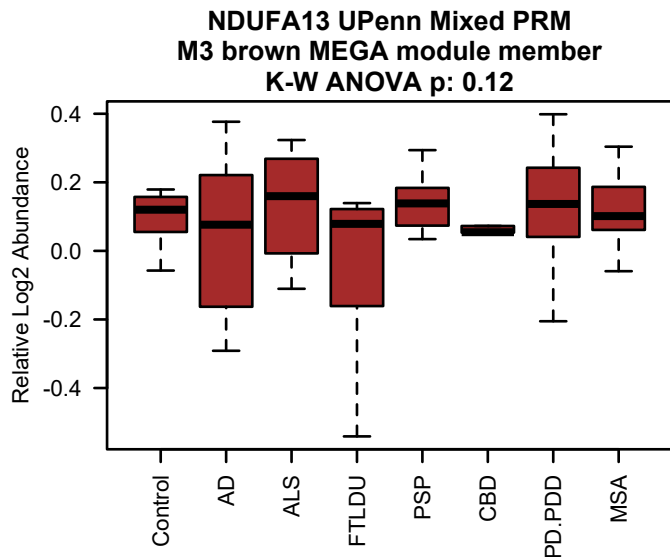


bicor=-0.22, p=0.044
cor=-0.19, p=0.083

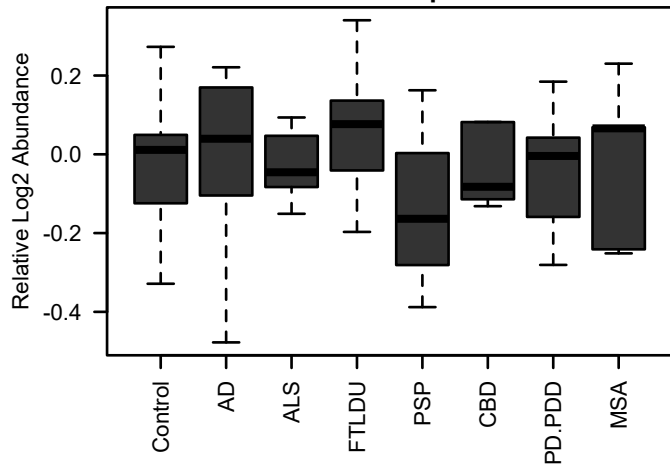


bicor=-0.024, p=0.81
cor=0.0071, p=0.94

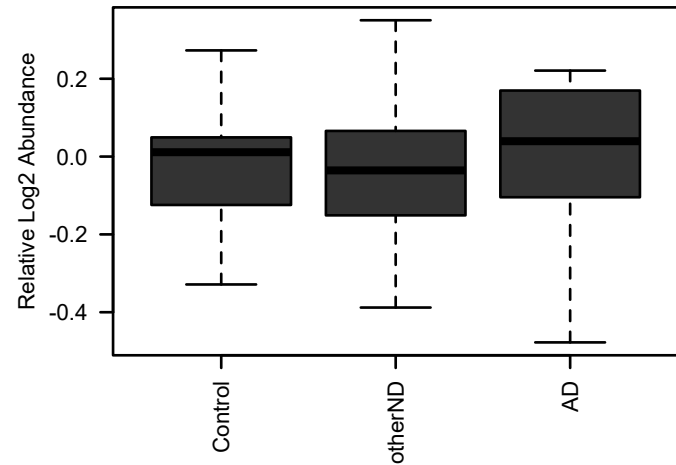




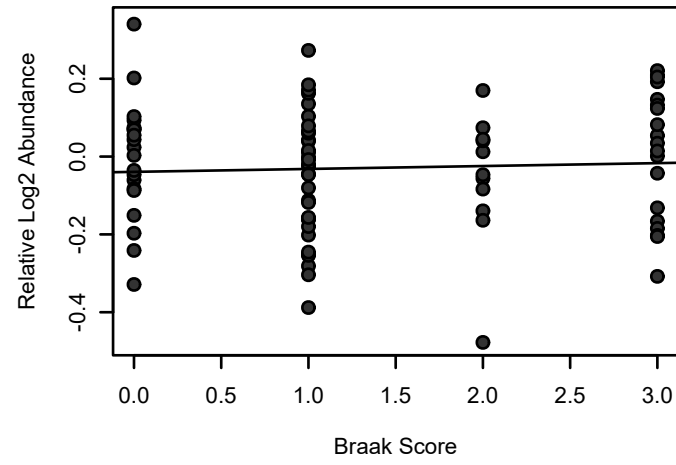
SEPT1 UPenn Mixed PRM
NA grey20 MEGA module member
K-W ANOVA p: 0.28



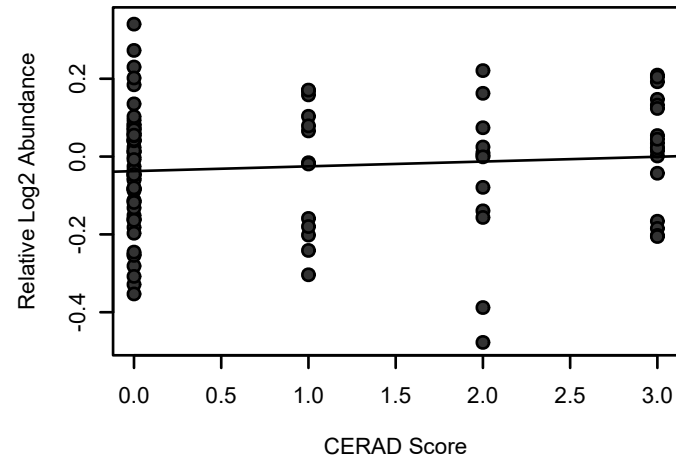
SEPT1 UPenn Mixed PRM
K-W ANOVA p: 0.57



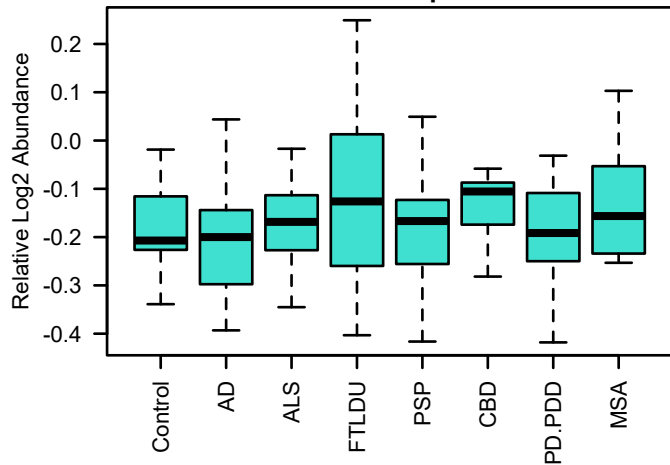
bicor=0.016, p=0.89
cor=0.05, p=0.65



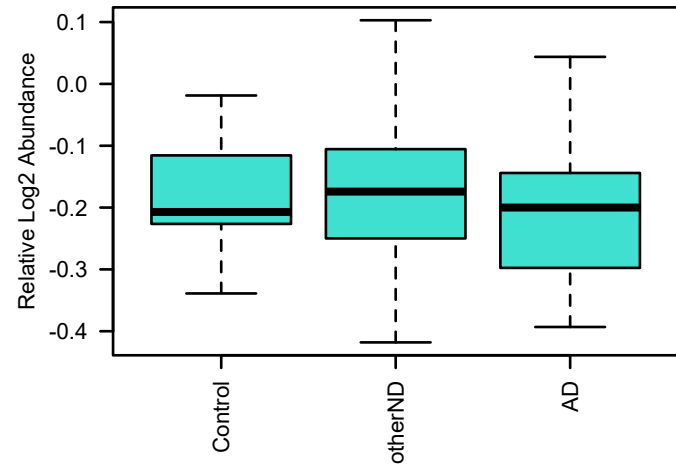
bicor=0.12, p=0.23
cor=0.094, p=0.35



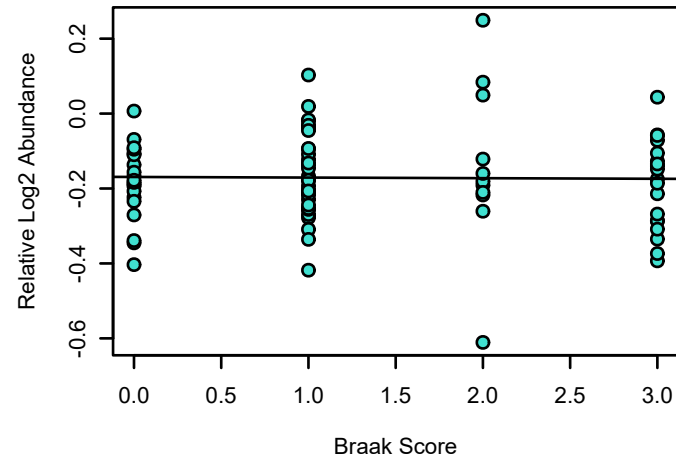
SEPT3 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.43



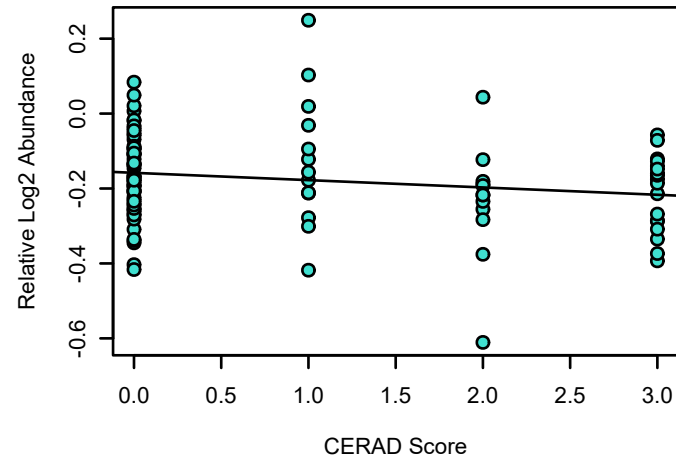
SEPT3 UPenn Mixed PRM
K-W ANOVA p: 0.2



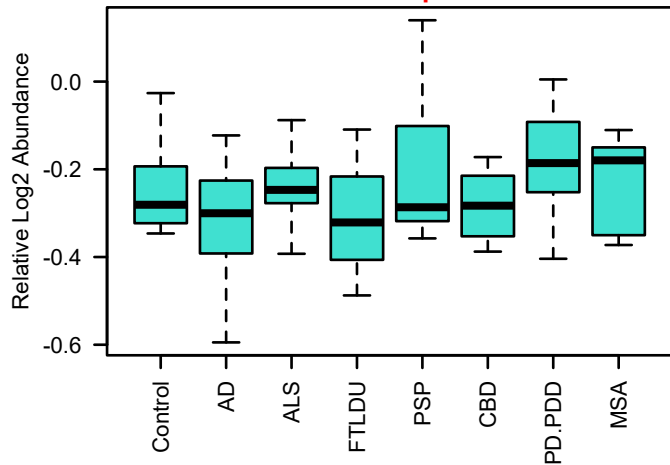
bicor=-0.0011, p=0.99
cor=-0.014, p=0.9



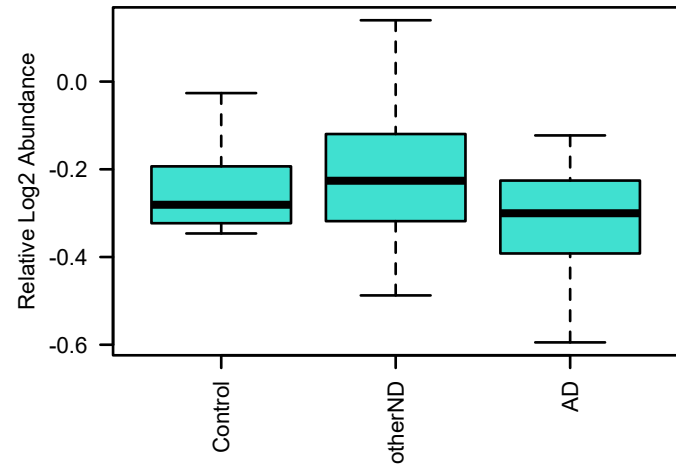
bicor=-0.19, p=0.06
cor=-0.18, p=0.073



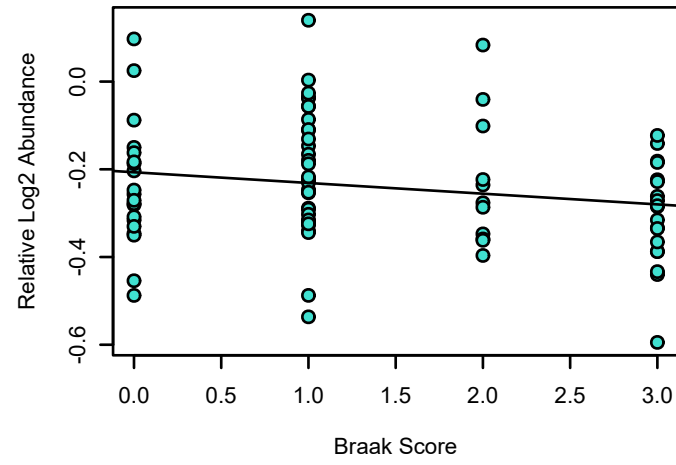
ATP6V1H UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.025



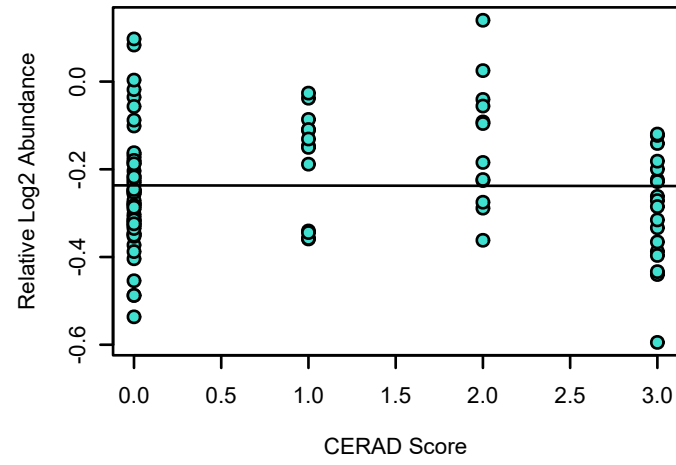
ATP6V1H UPenn Mixed PRM
K-W ANOVA p: 0.02



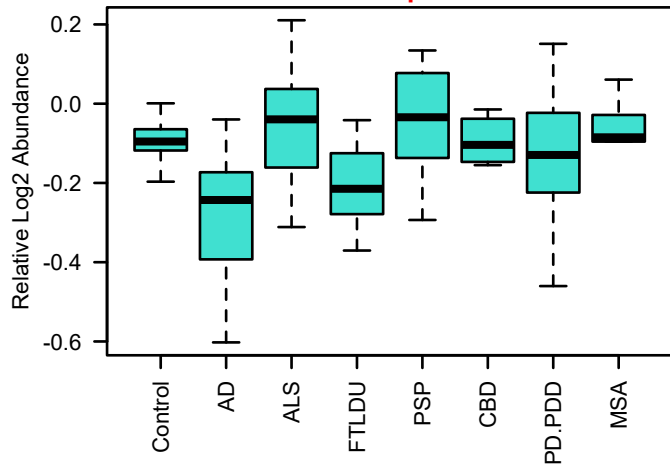
bicor=-0.14, p=0.19
cor=-0.19, p=0.083



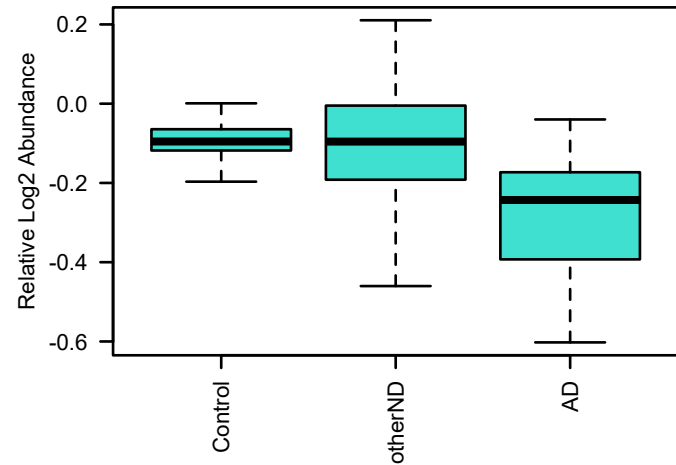
bicor=0.0091, p=0.93
cor=-0.0043, p=0.97



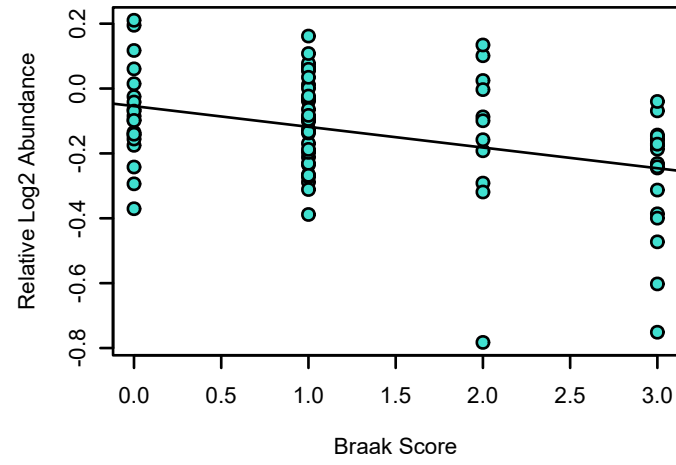
PLXNA1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00017



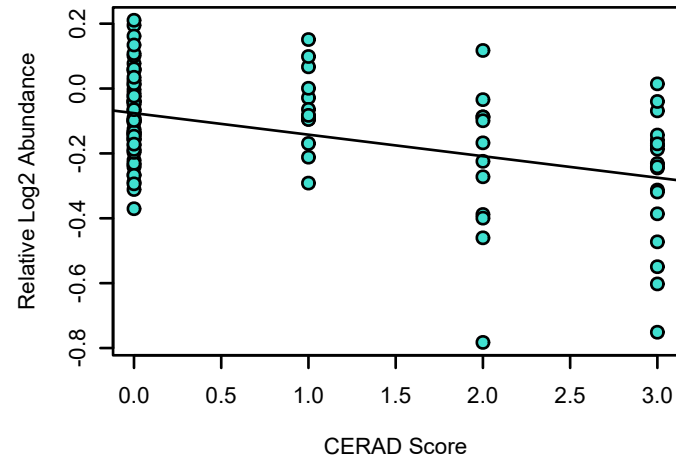
PLXNA1 UPenn Mixed PRM
K-W ANOVA p: 9.6e-05



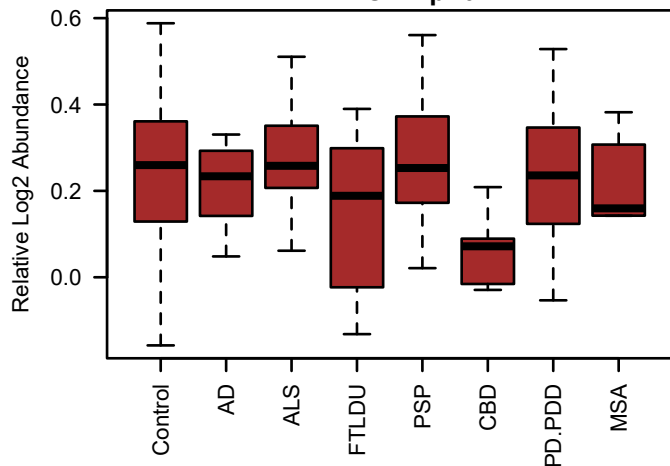
bicor=-0.32, p=0.0027
cor=-0.38, p=0.00036



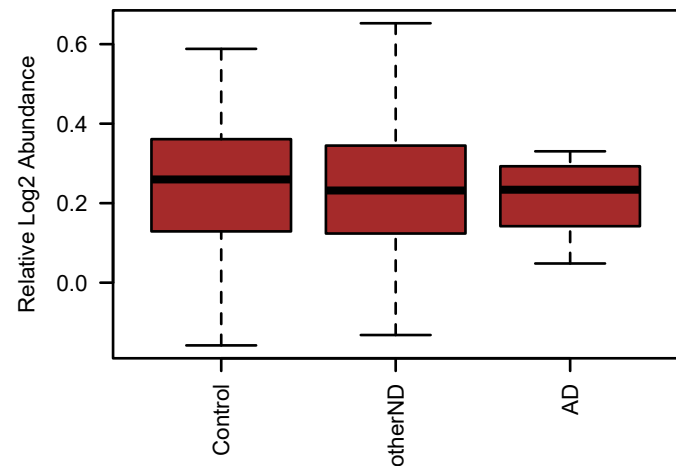
bicor=-0.38, p=7.9e-05
cor=-0.44, p=4.6e-06



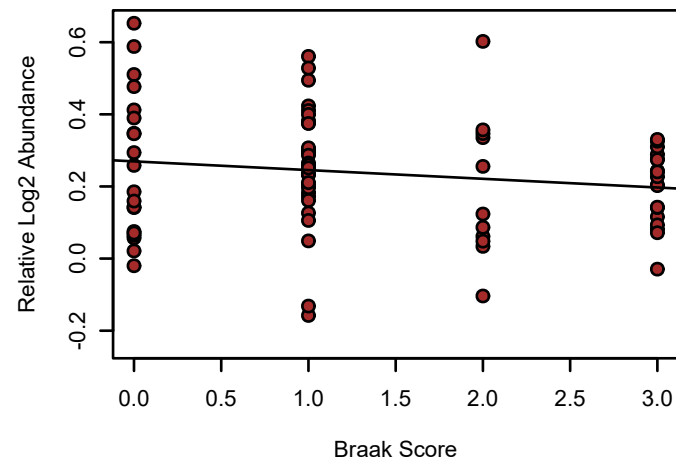
CADPS UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.21



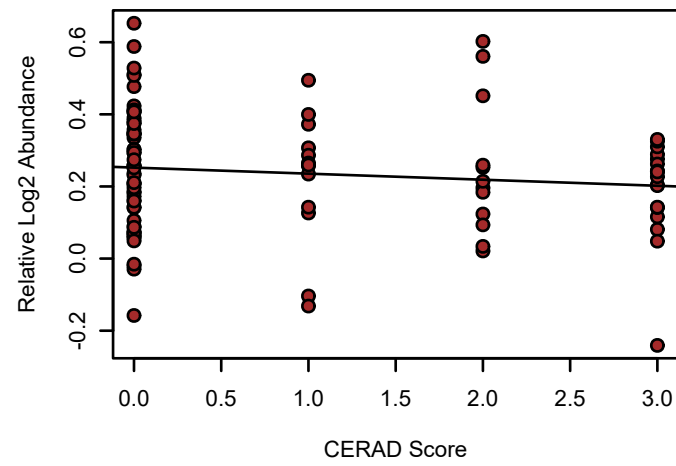
CADPS UPenn Mixed PRM
K-W ANOVA p: 0.99



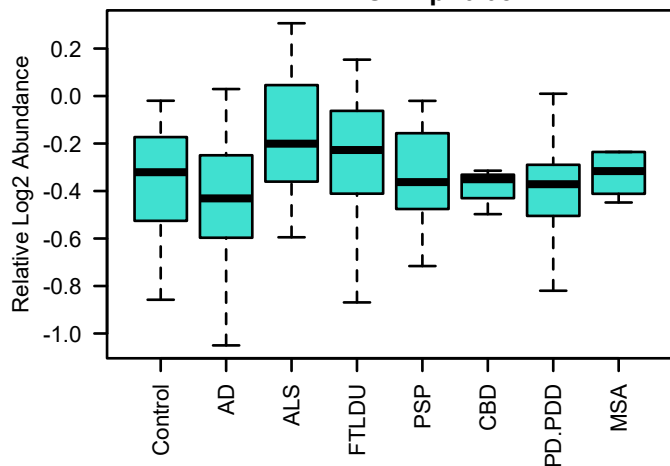
bicor=-0.16, p=0.14
cor=-0.16, p=0.15



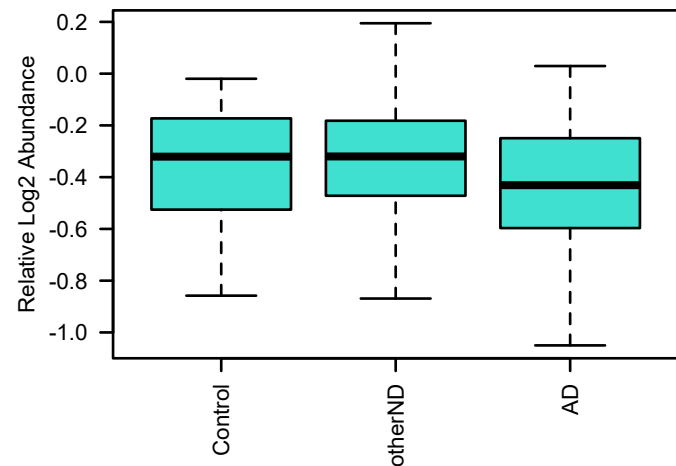
bicor=-0.11, p=0.26
cor=-0.12, p=0.23



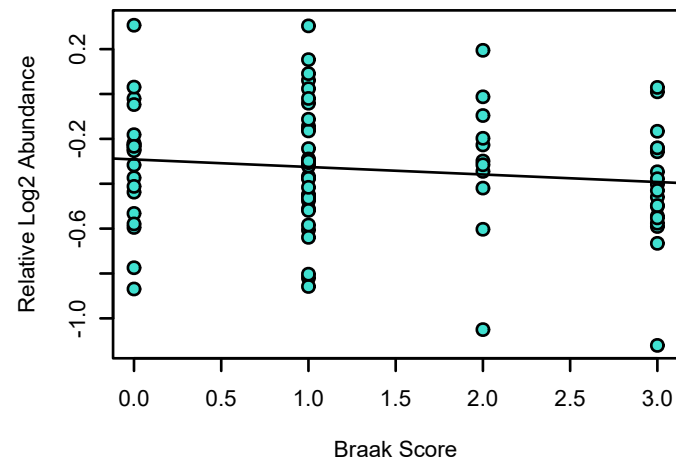
ICAM5 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.08



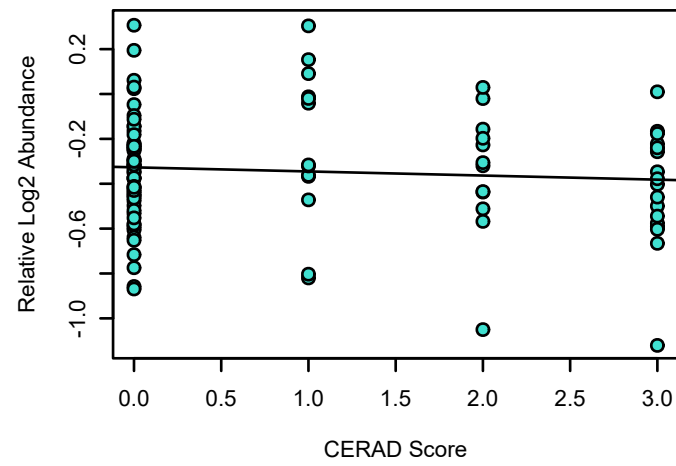
ICAM5 UPenn Mixed PRM
K-W ANOVA p: 0.076



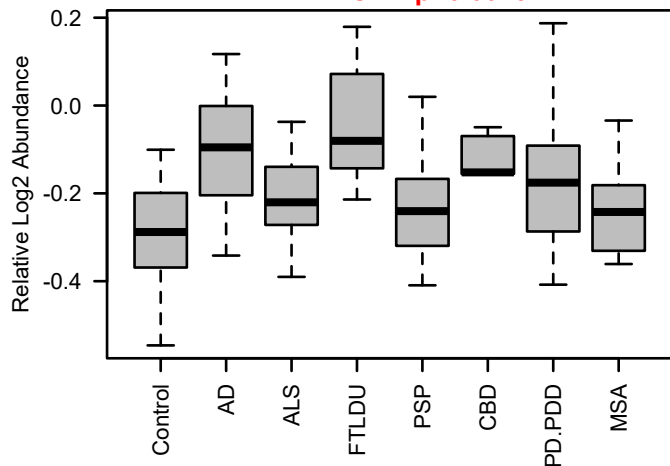
bicor=-0.12, p=0.26
cor=-0.13, p=0.24



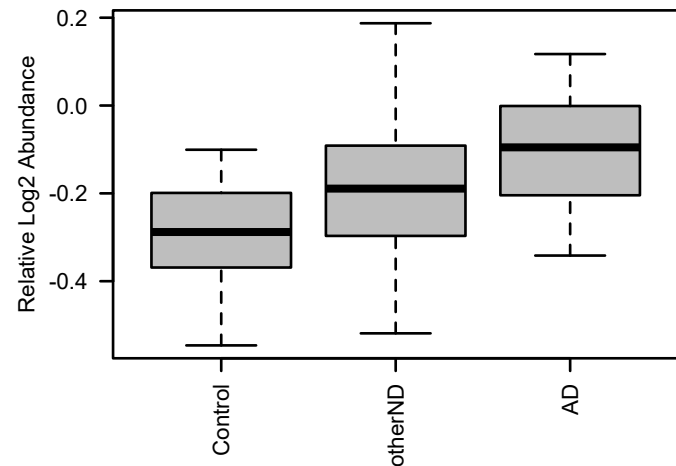
bicor=-0.049, p=0.63
cor=-0.083, p=0.41



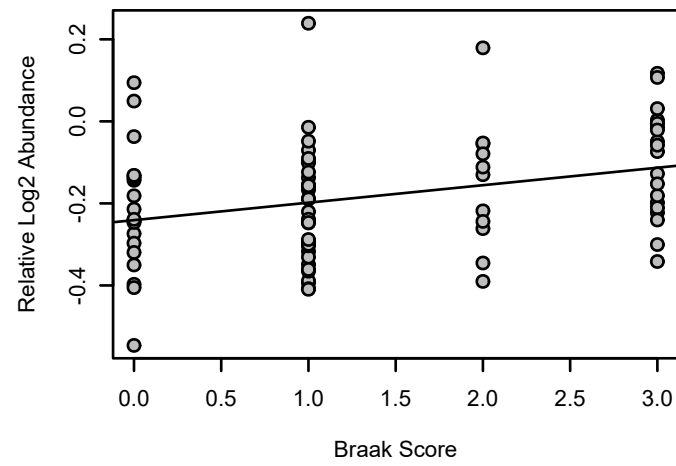
NSFL1C UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.0013



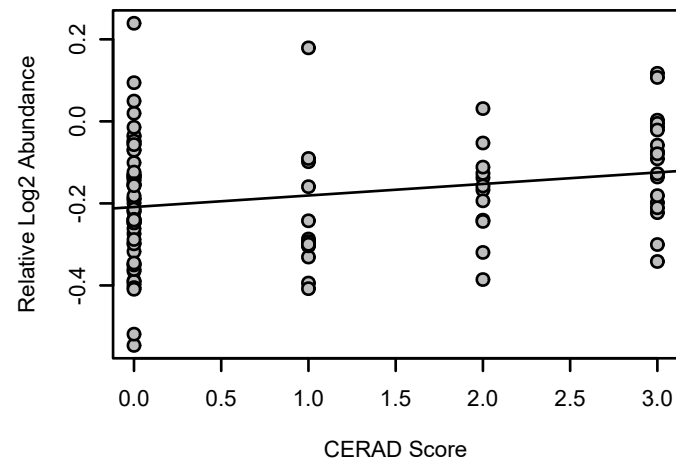
NSFL1C UPenn Mixed PRM
K-W ANOVA p: 0.0022



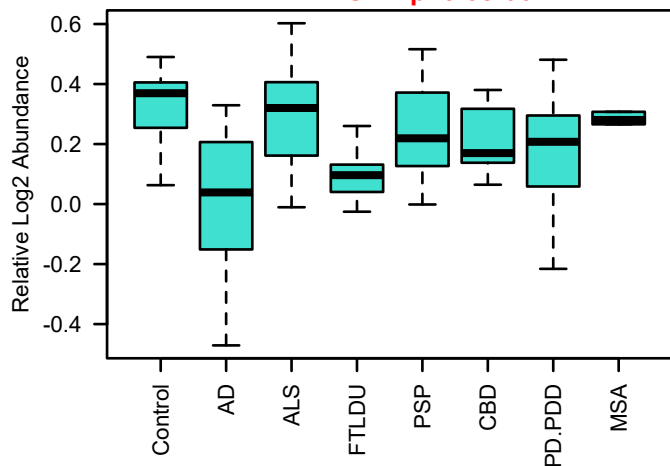
bicor=0.31, p=0.0046
cor=0.31, p=0.0041



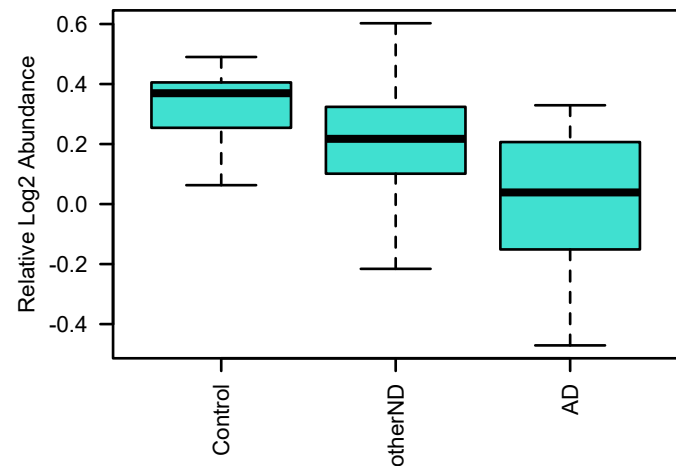
bicor=0.24, p=0.018
cor=0.23, p=0.021



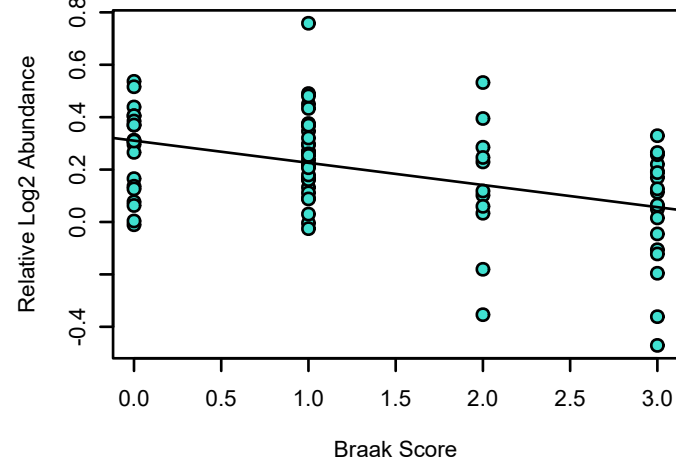
BSN UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 9.3e-06



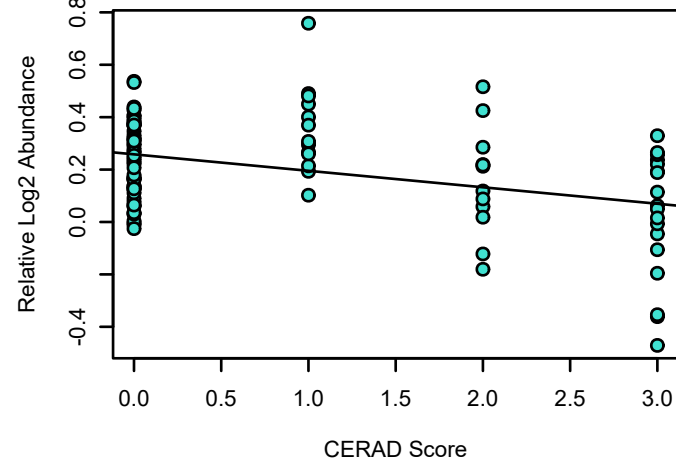
BSN UPenn Mixed PRM
K-W ANOVA p: 5.9e-06



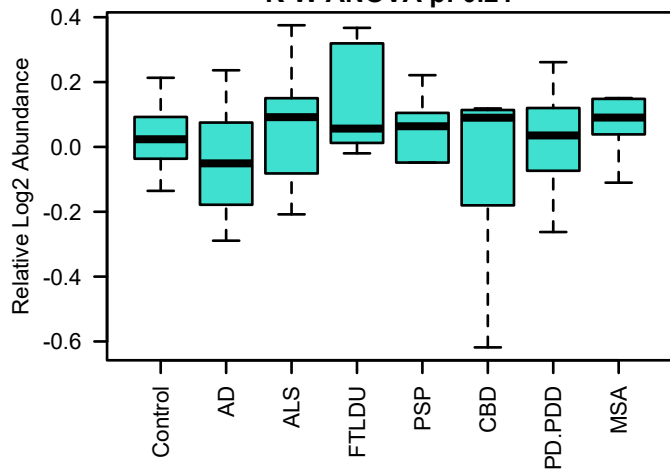
bicor=-0.43, p=4.2e-05
cor=-0.44, p=2.8e-05



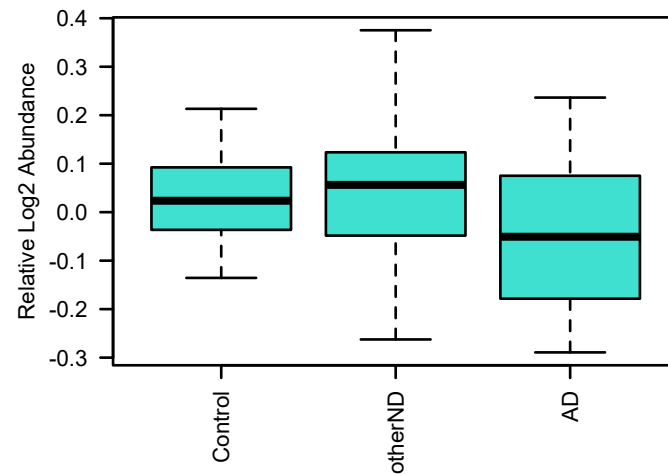
bicor=-0.34, p=0.00055
cor=-0.38, p=9.6e-05



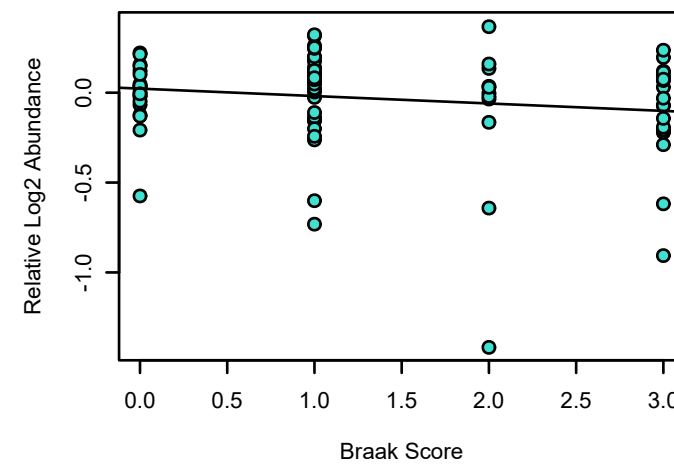
SLC8A2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.21



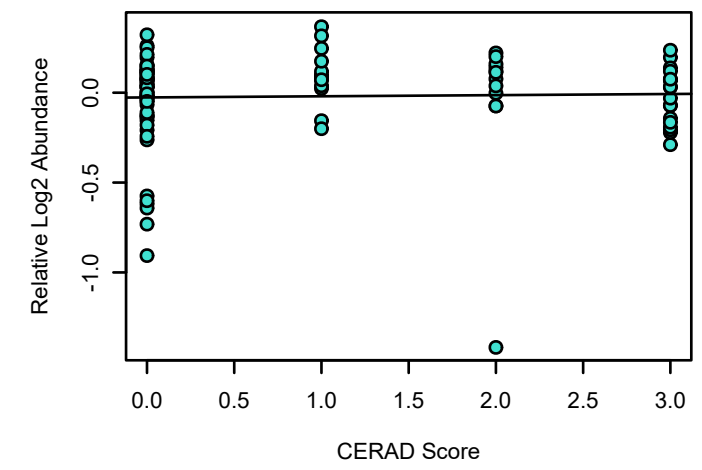
SLC8A2 UPenn Mixed PRM
K-W ANOVA p: 0.21



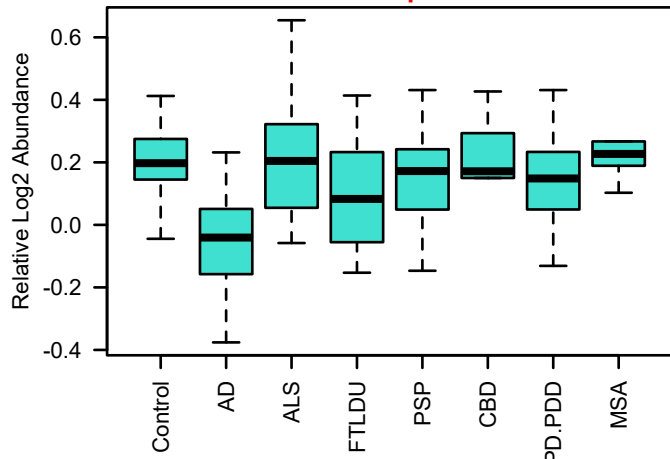
bicor=-0.1, p=0.36
cor=-0.16, p=0.15



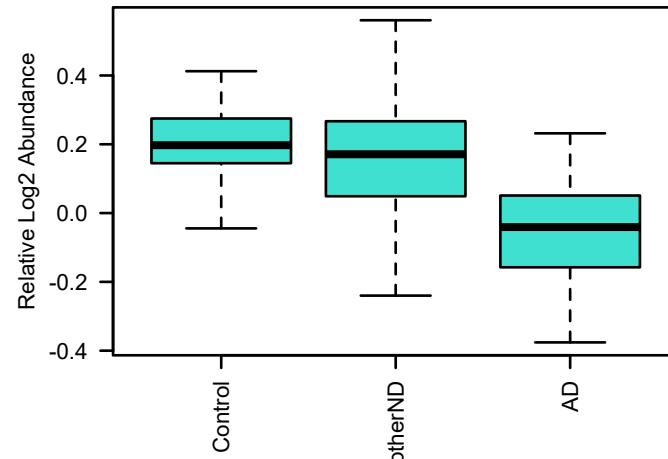
bicor=-0.06, p=0.56
cor=0.029, p=0.77



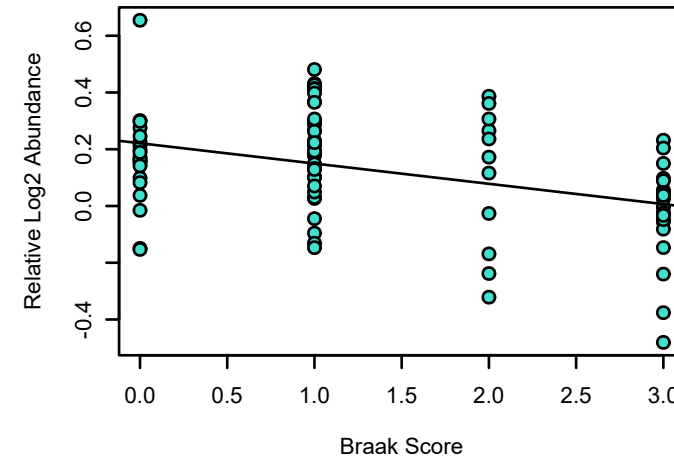
BAIAP2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.00039



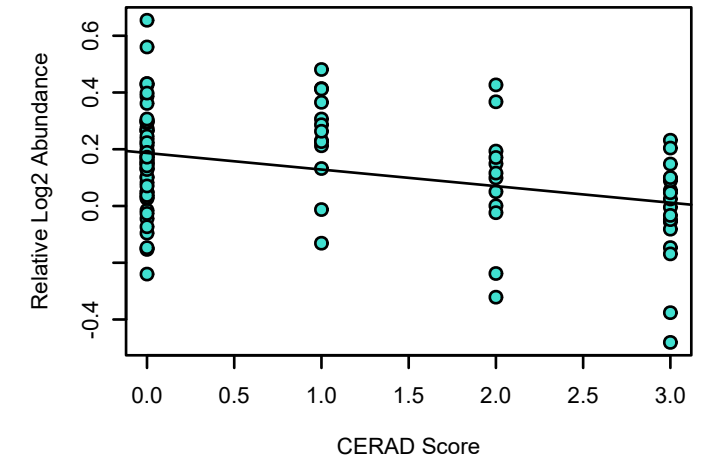
BAIAP2 UPenn Mixed PRM
K-W ANOVA p: 1.2e-05



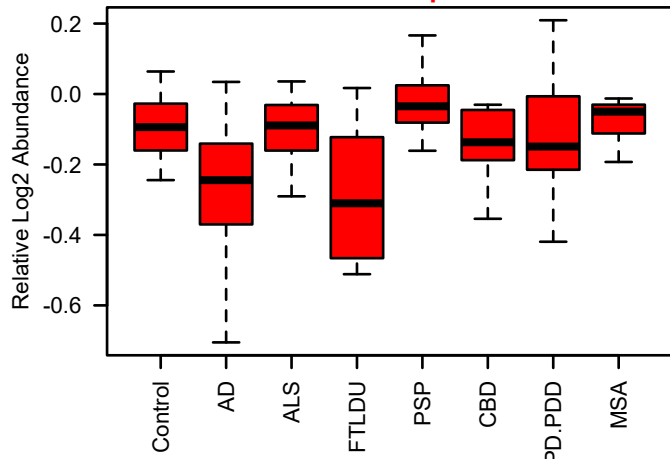
bicor=-0.37, p=0.00058
cor=-0.38, p=0.00036



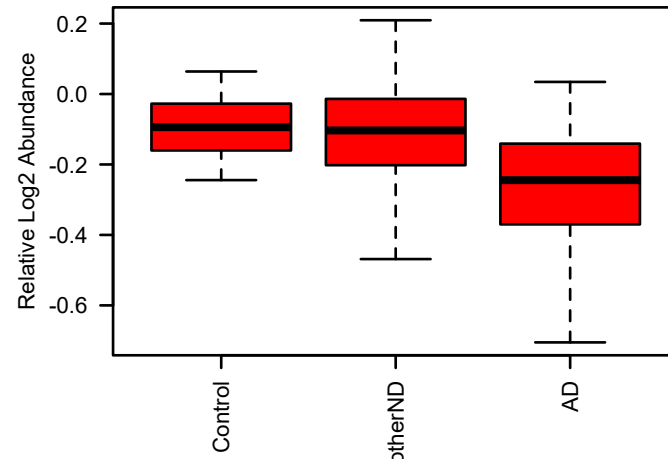
bicor=-0.33, p=0.00072
cor=-0.35, p=0.00036



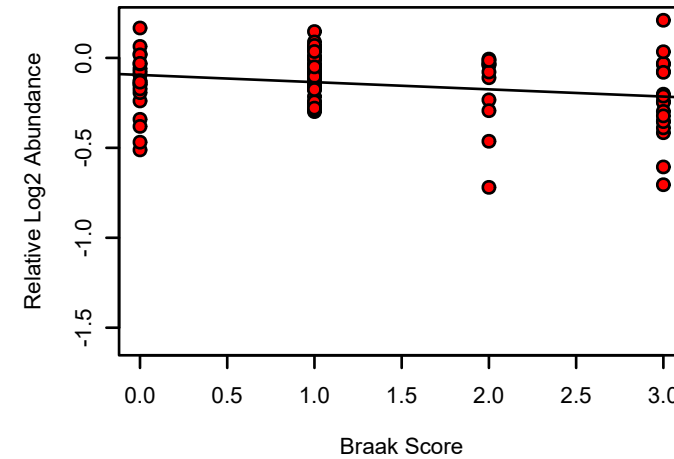
CAMK2A UPenn Mixed PRM
M6 red MEGA module member
K-W ANOVA p: 0.03



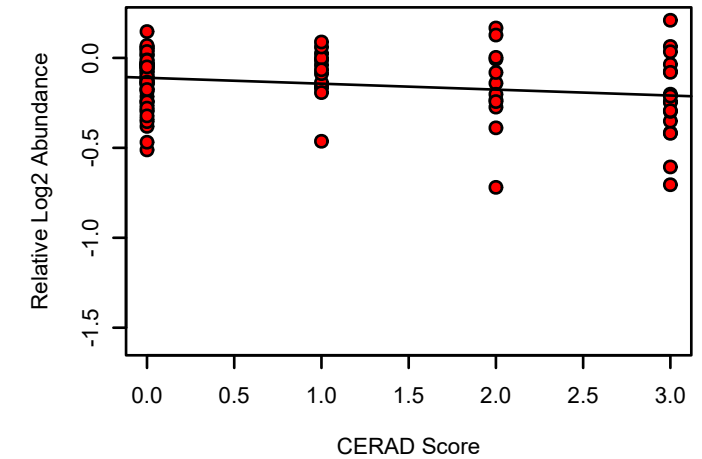
CAMK2A UPenn Mixed PRM
K-W ANOVA p: 0.024



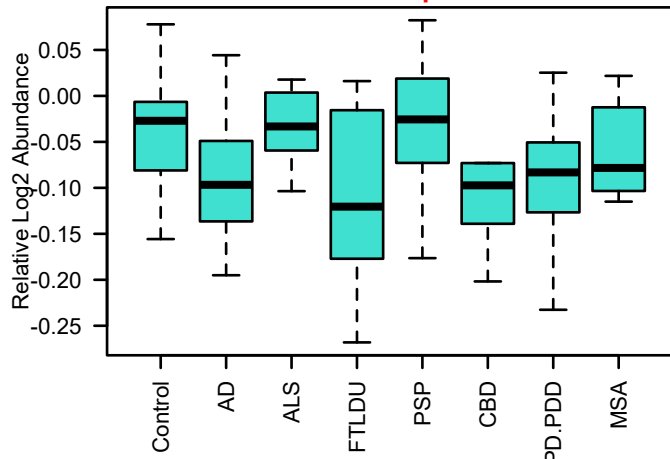
bicor=-0.24, p=0.031
cor=-0.24, p=0.028



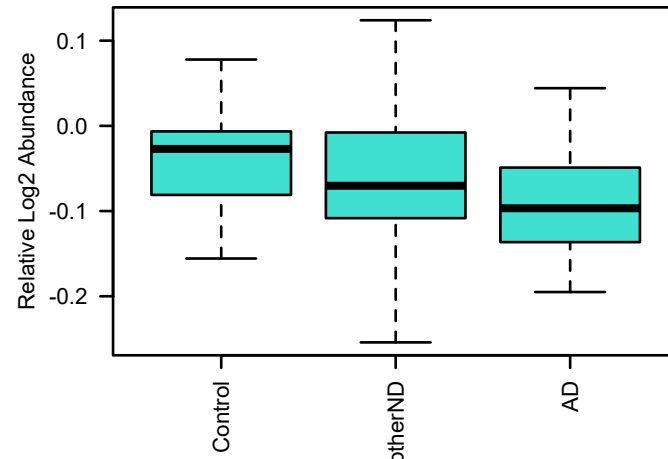
bicor=-0.18, p=0.068
cor=-0.22, p=0.028



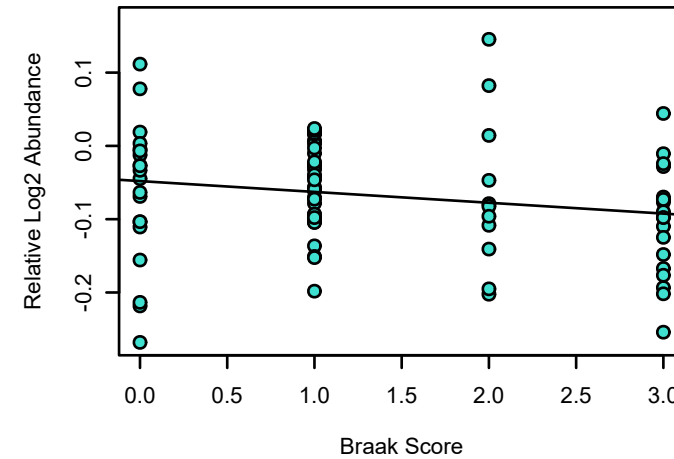
NCKAP1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.036



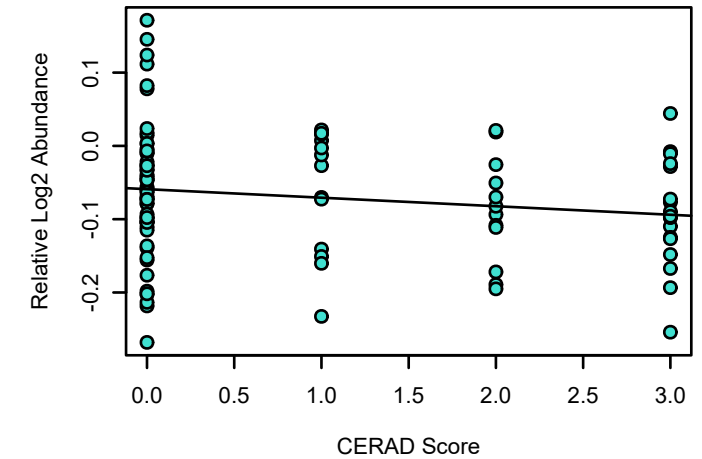
NCKAP1 UPenn Mixed PRM
K-W ANOVA p: 0.32

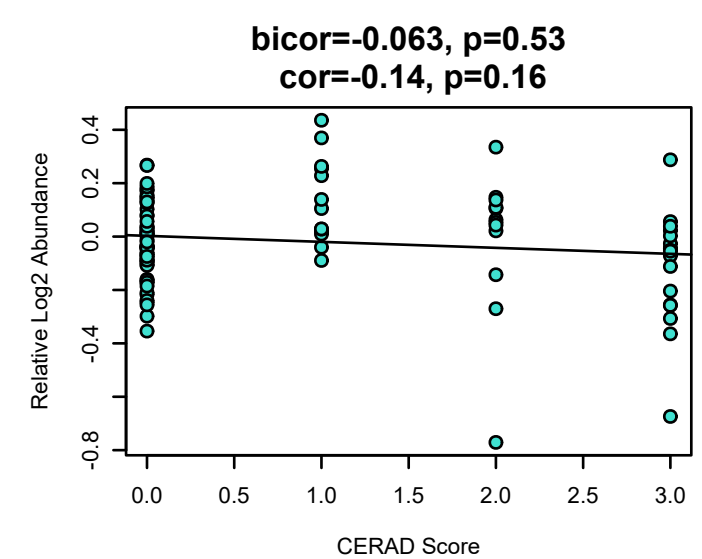
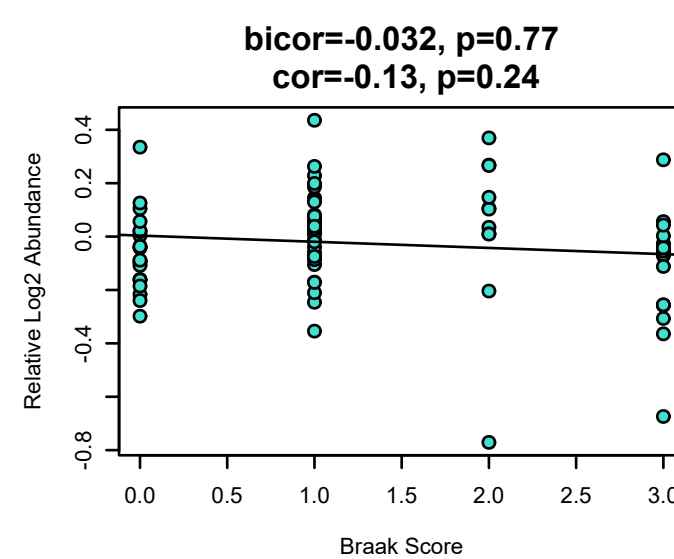
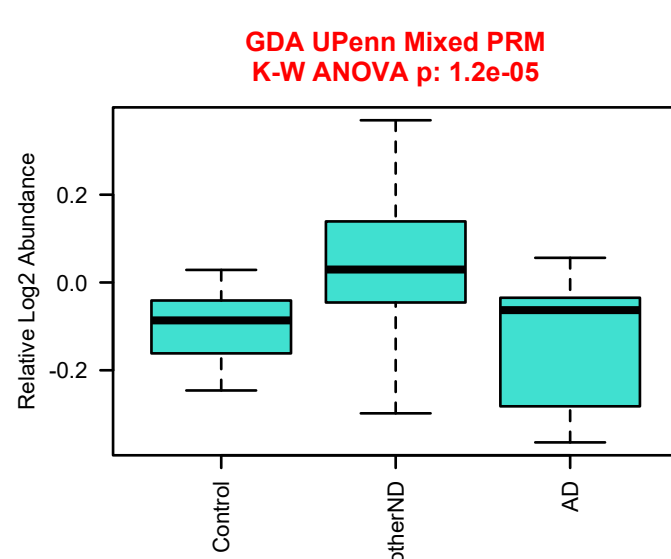
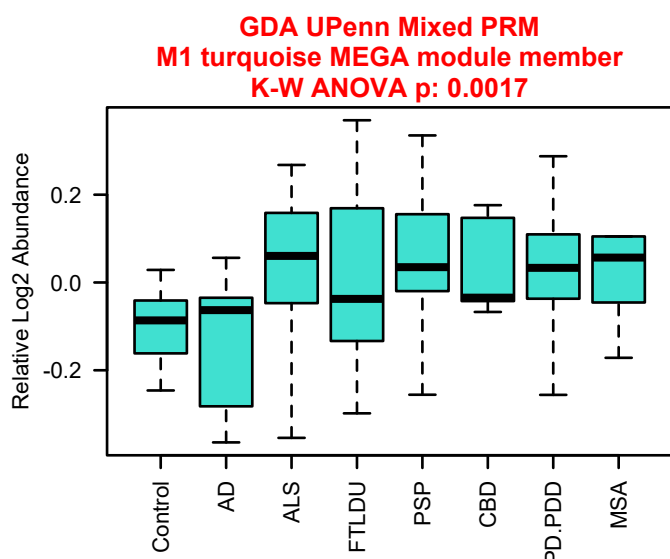
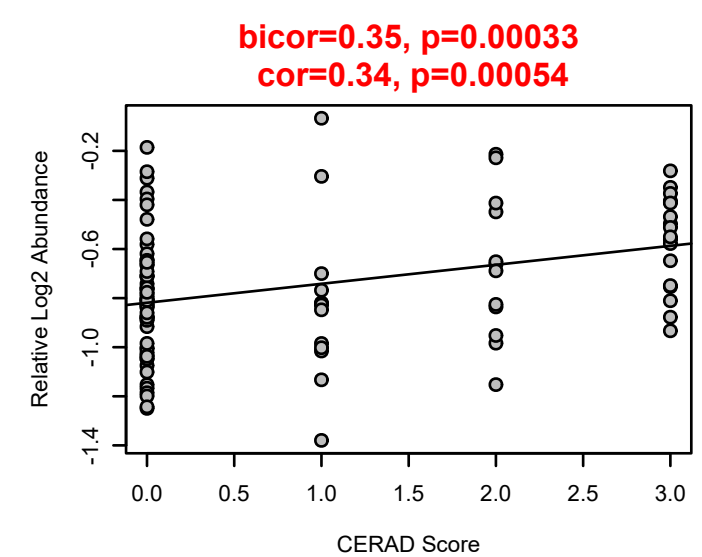
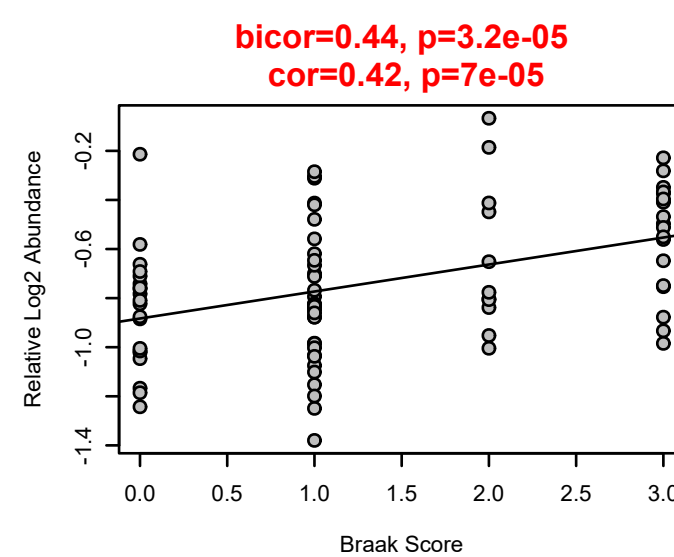
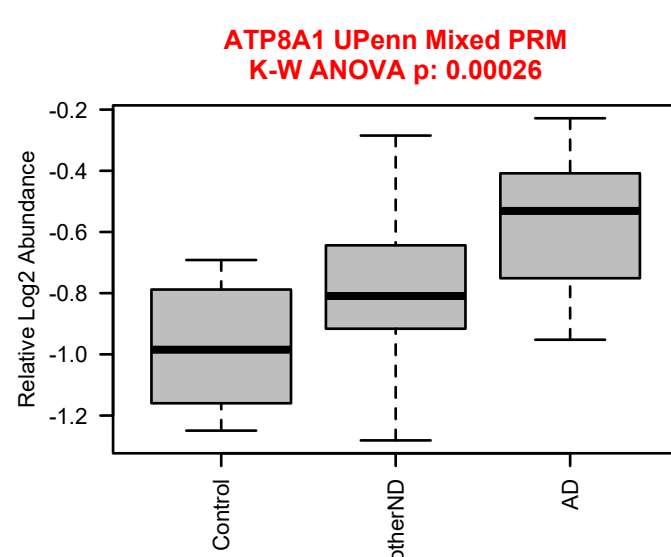
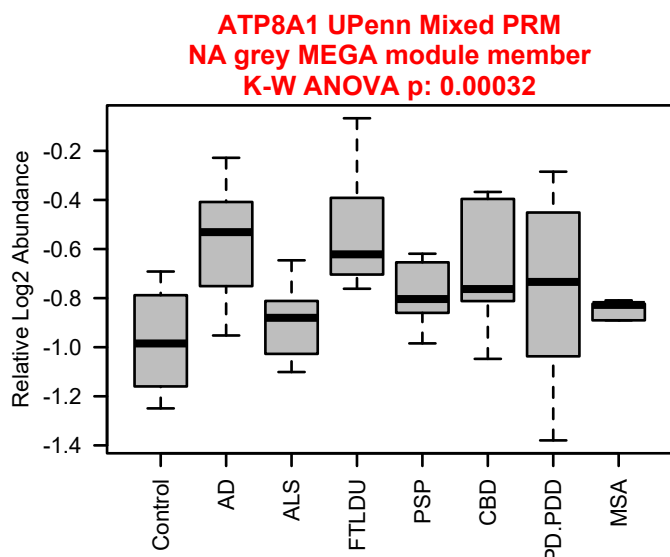
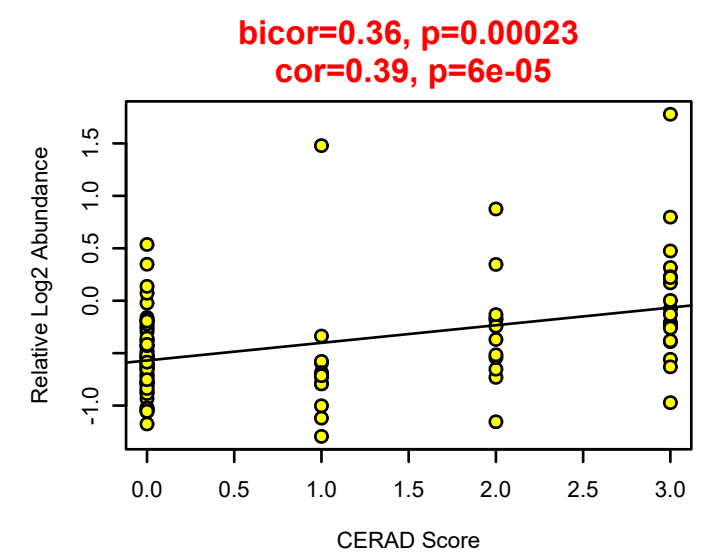
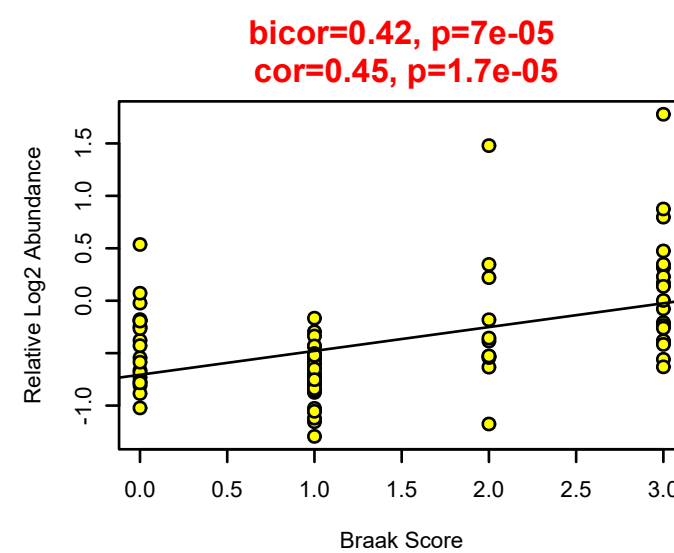
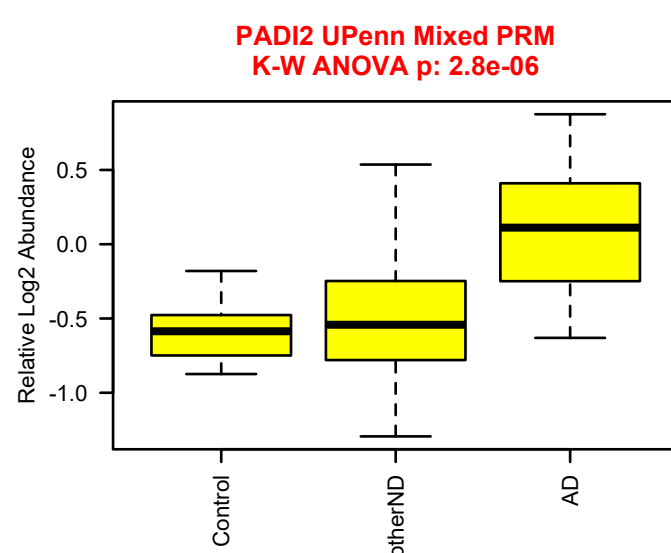
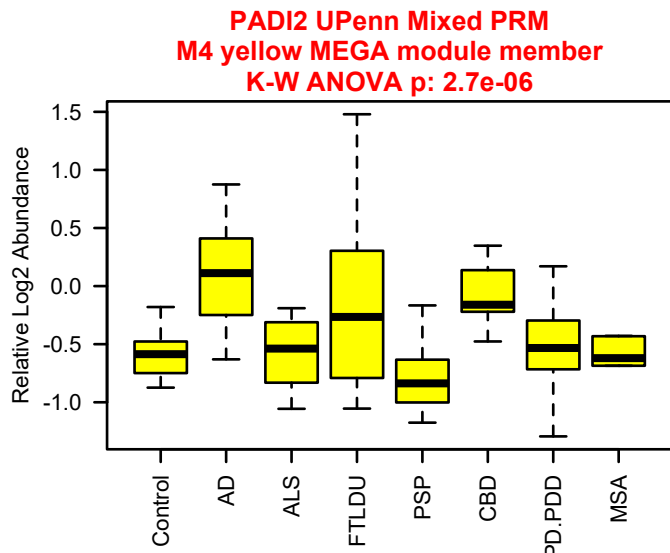
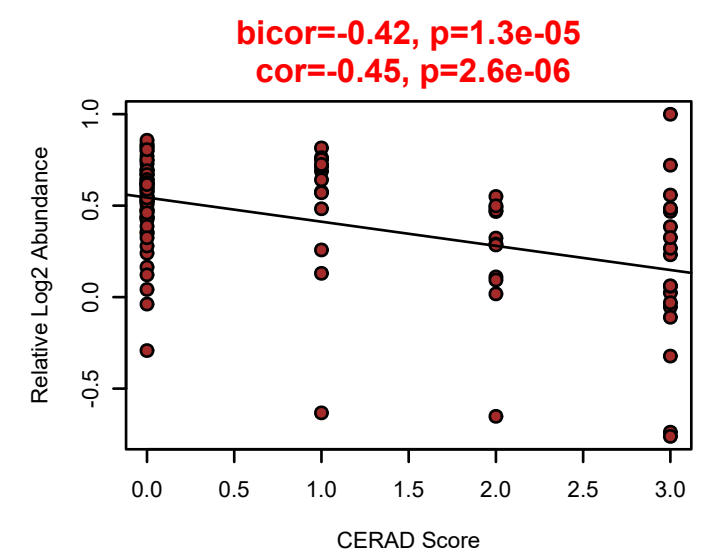
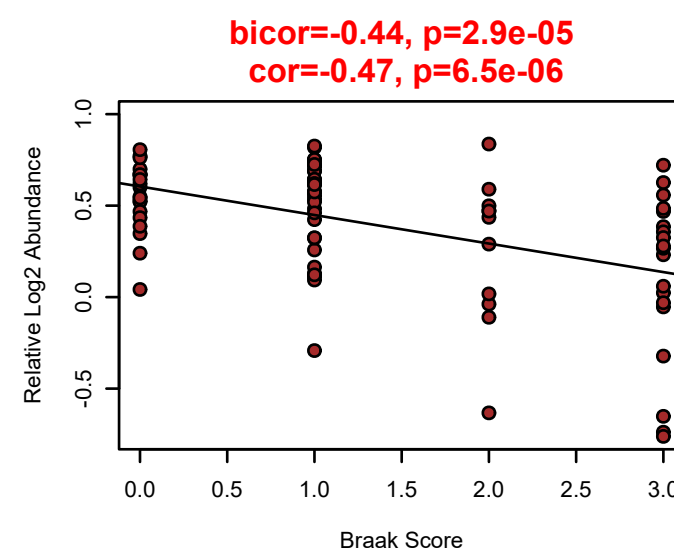
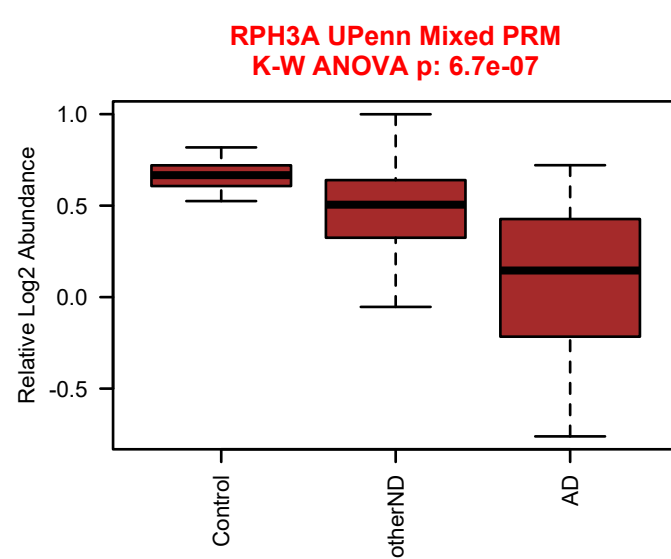
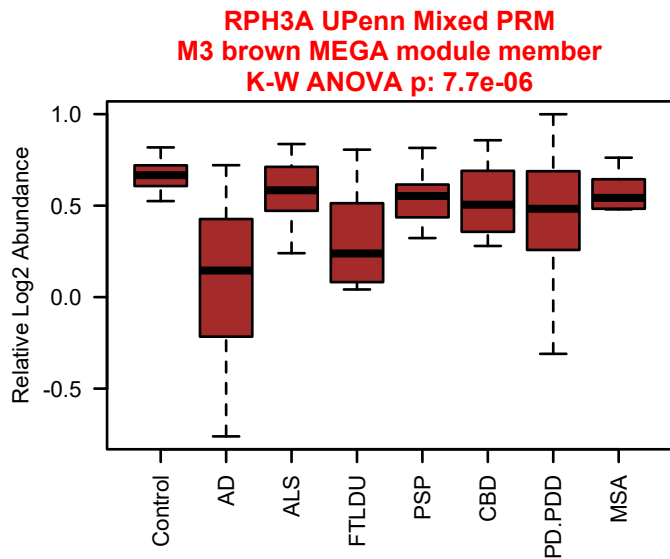


bicor=-0.21, p=0.057
cor=-0.2, p=0.068

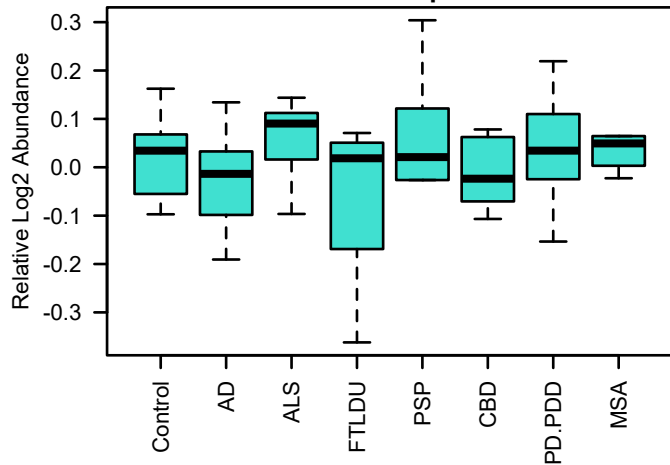


bicor=-0.16, p=0.12
cor=-0.16, p=0.11

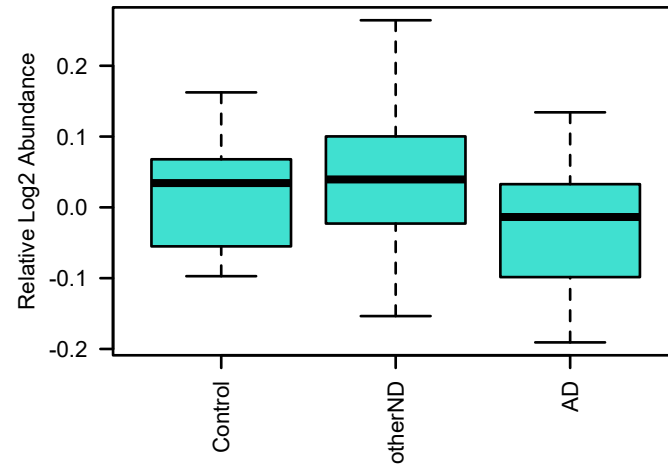




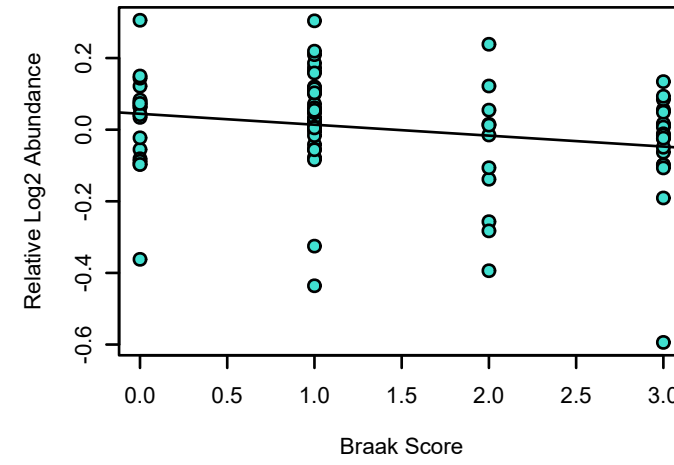
WDR7 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.25



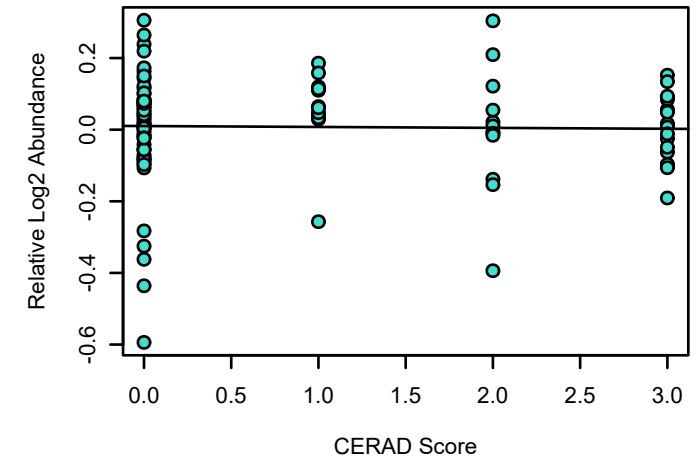
WDR7 UPenn Mixed PRM
K-W ANOVA p: 0.32



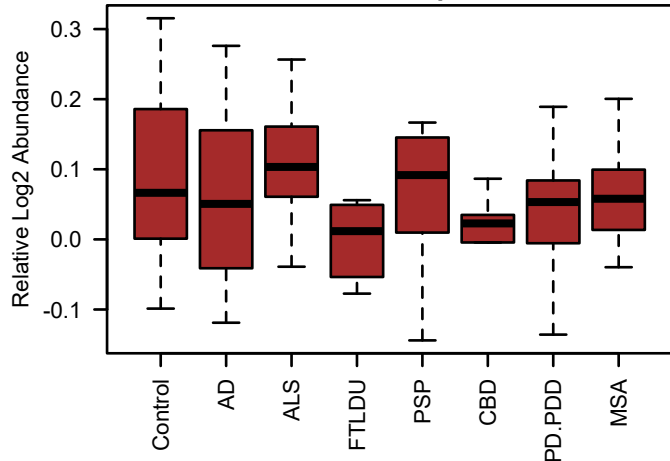
bicor=-0.2, p=0.063
cor=-0.22, p=0.044



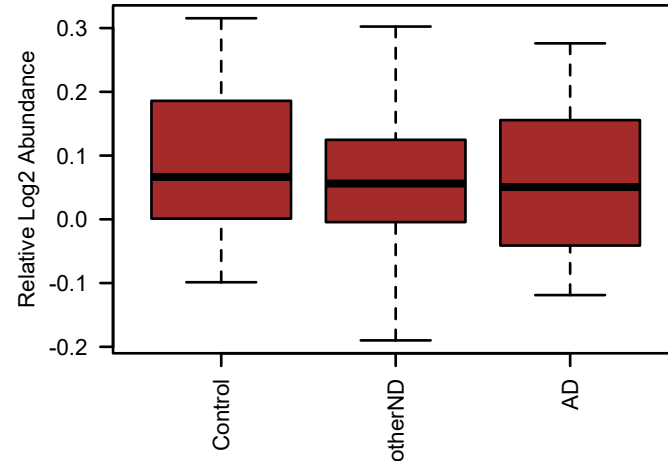
bicor=-0.11, p=0.27
cor=-0.021, p=0.84



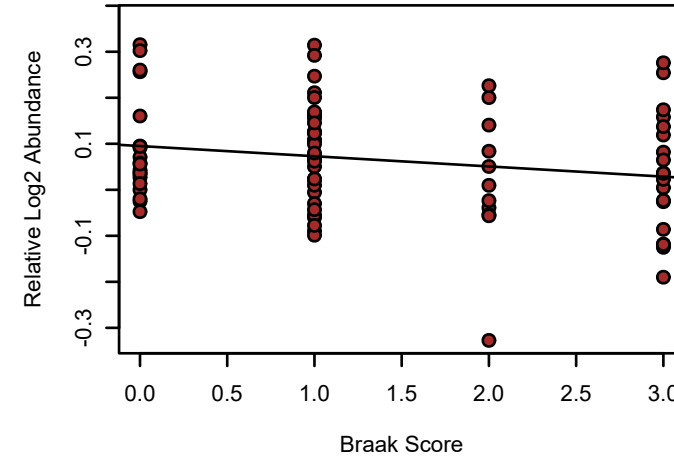
AFG3L2 UPenn Mixed PRM
M3 brown MEGA module member
K-W ANOVA p: 0.5



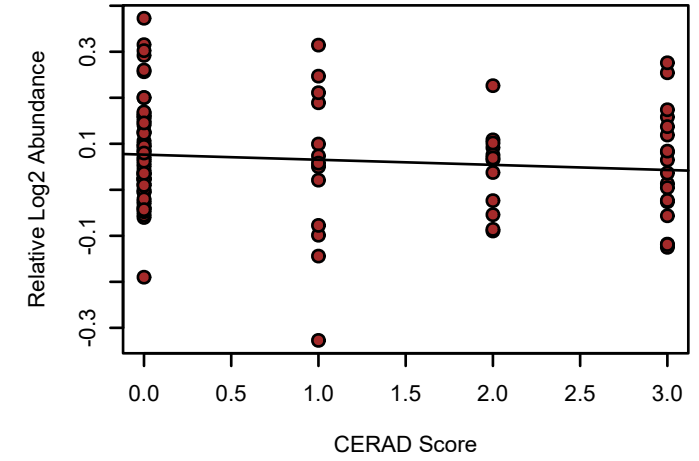
AFG3L2 UPenn Mixed PRM
K-W ANOVA p: 0.52



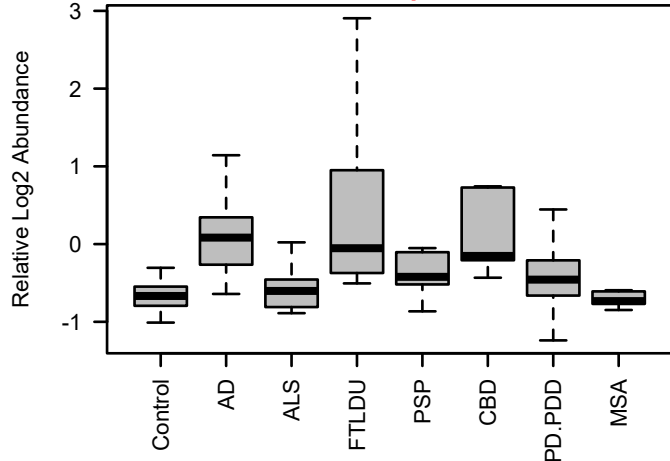
bicor=-0.16, p=0.14
cor=-0.2, p=0.068



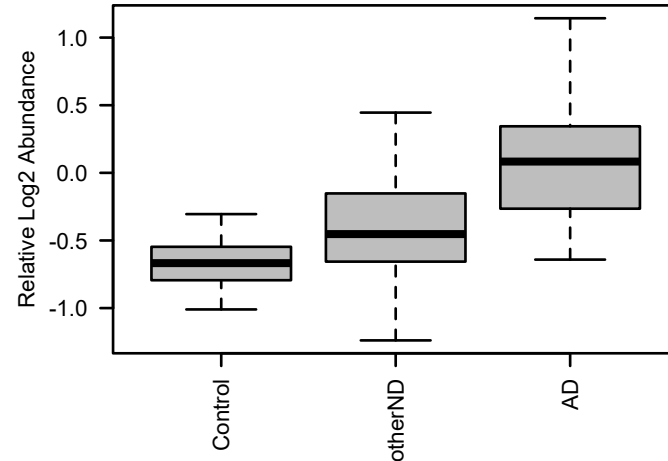
bicor=-0.11, p=0.29
cor=-0.11, p=0.28



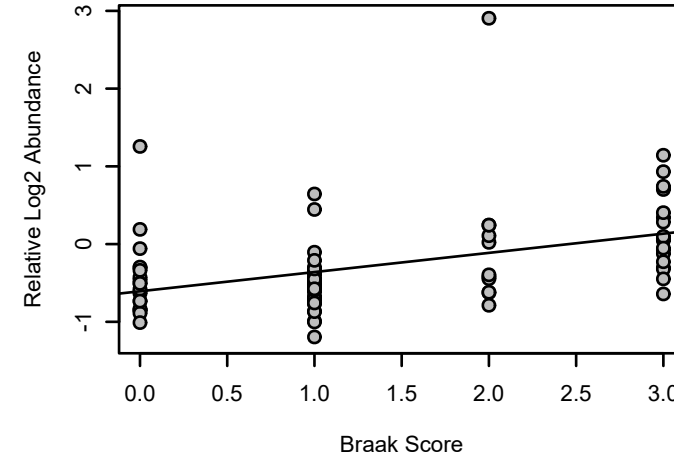
S100A6 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 2.4e-07



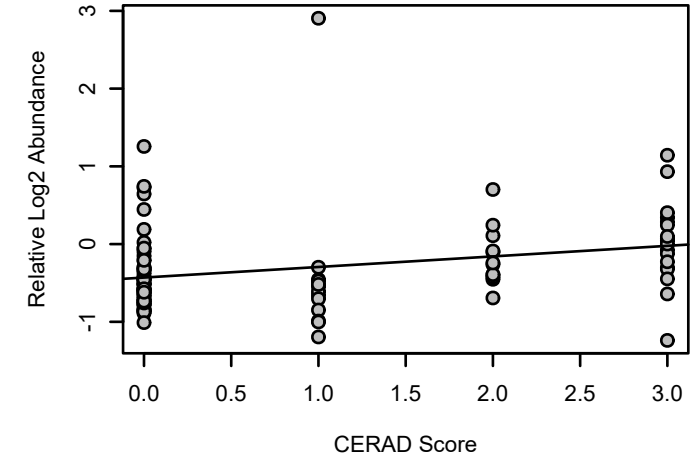
S100A6 UPenn Mixed PRM
K-W ANOVA p: 0.00041



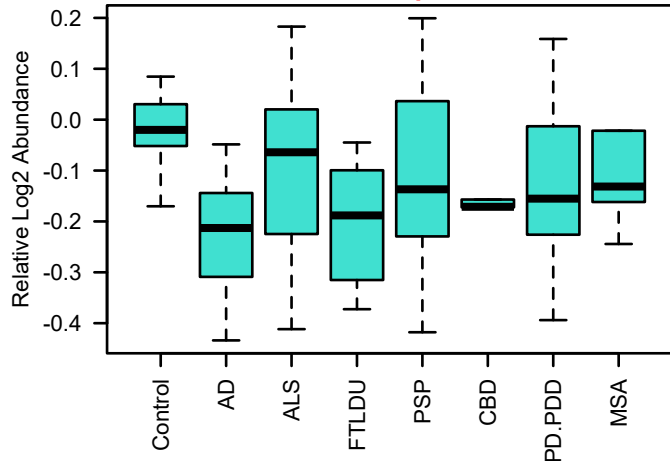
bicor=0.55, p=5e-08
cor=0.44, p=2.8e-05



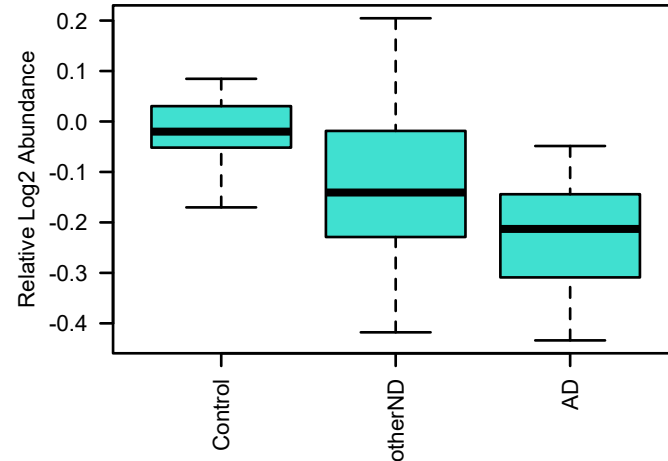
bicor=0.38, p=8.3e-05
cor=0.28, p=0.0048



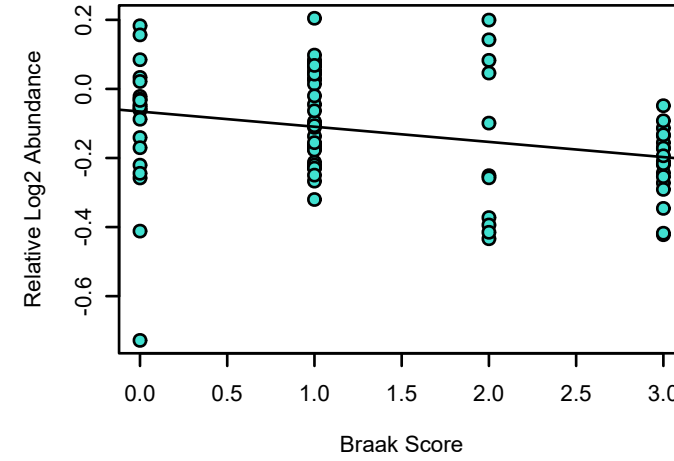
SH3GLB2 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.0021



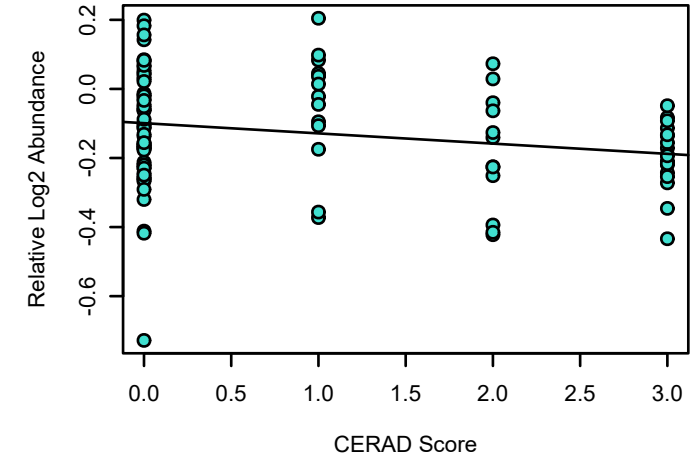
SH3GLB2 UPenn Mixed PRM
K-W ANOVA p: 0.00059



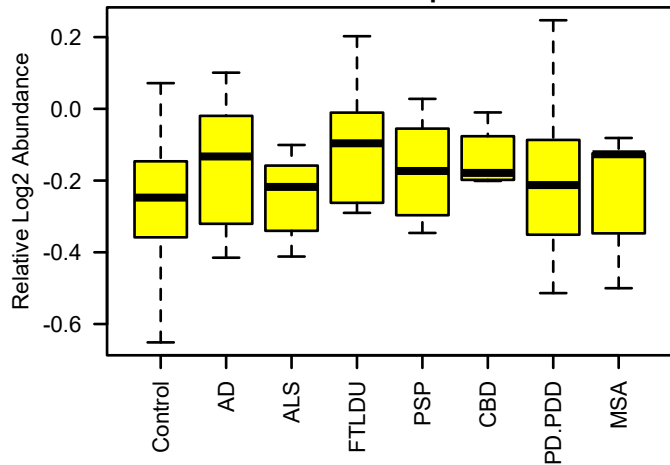
bicor=-0.29, p=0.0067
cor=-0.28, p=0.0099



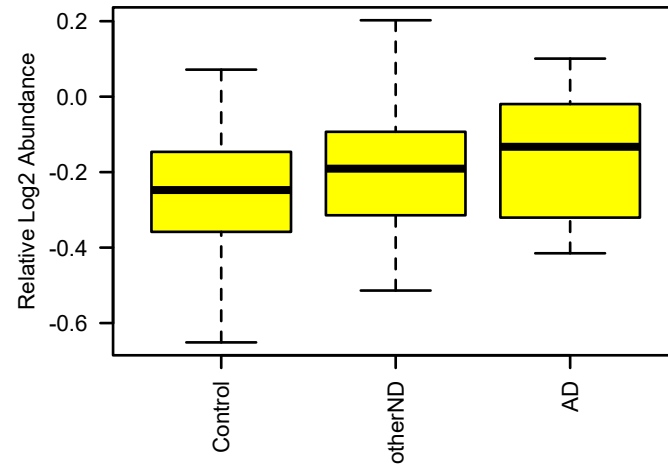
bicor=-0.25, p=0.011
cor=-0.22, p=0.028



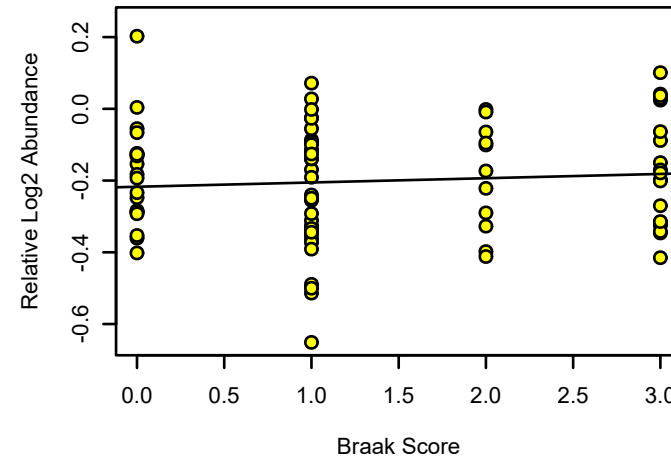
GLOD4 UPenn Mixed PRM
M4 yellow MEGA module member
K-W ANOVA p: 0.22



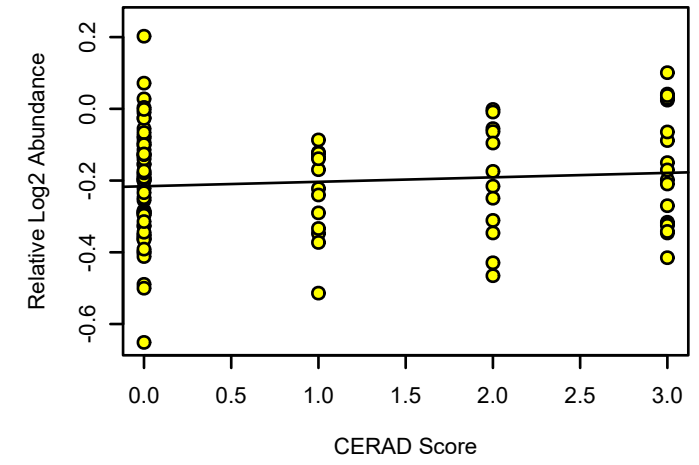
GLOD4 UPenn Mixed PRM
K-W ANOVA p: 0.14



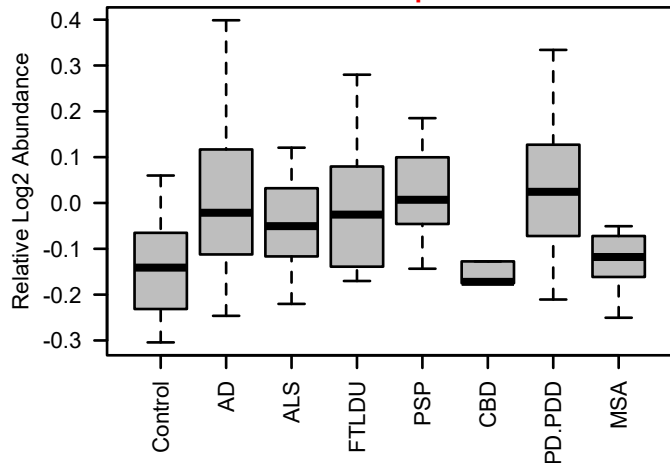
bicor=0.059, p=0.59
cor=0.081, p=0.46



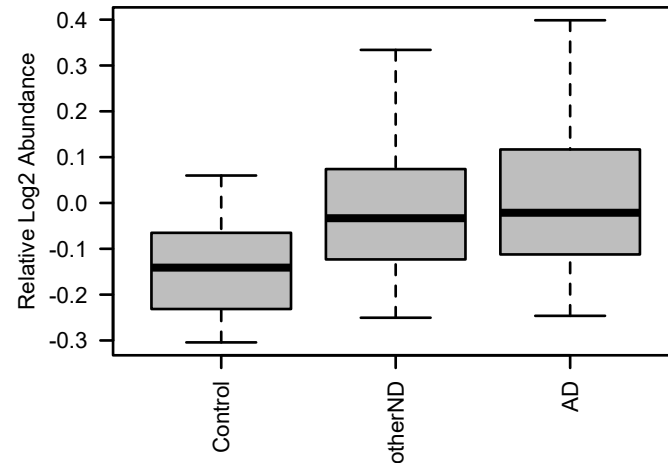
bicor=0.09, p=0.37
cor=0.096, p=0.34



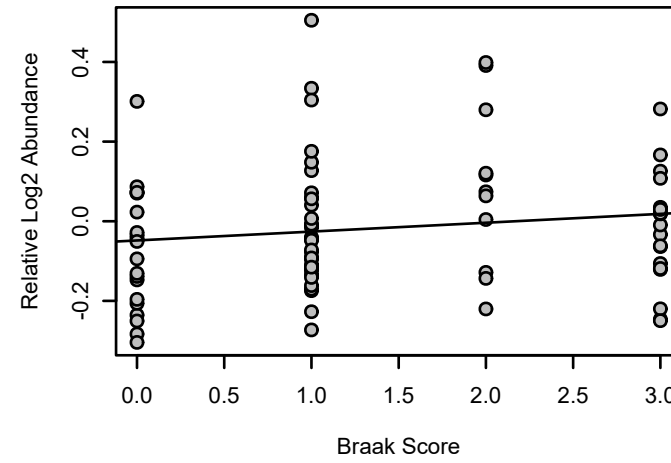
LCMT1 UPenn Mixed PRM
NA grey MEGA module member
K-W ANOVA p: 0.0021



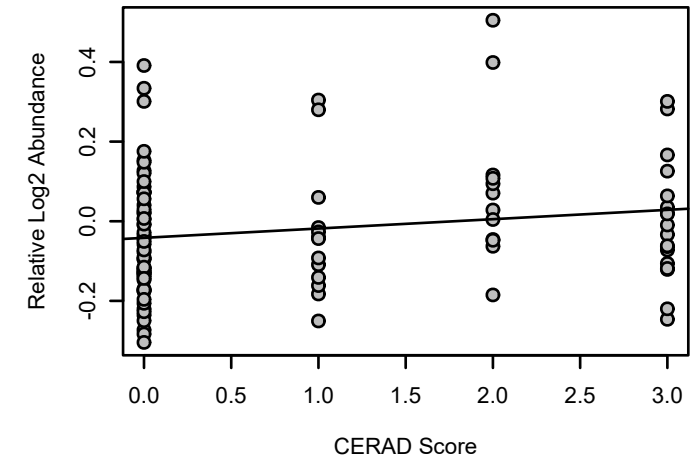
LCMT1 UPenn Mixed PRM
K-W ANOVA p: 0.0057



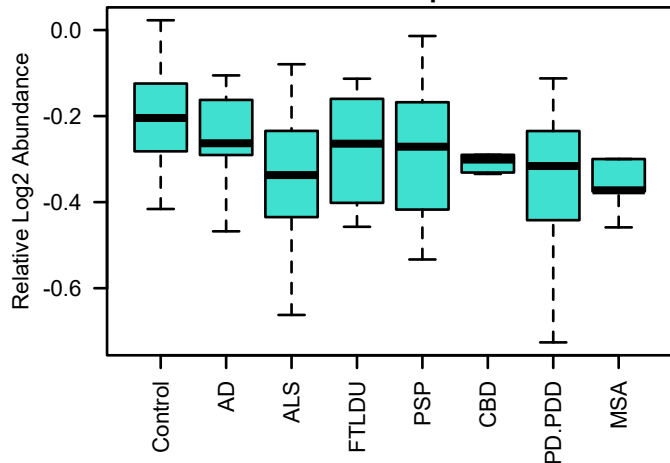
bicor=0.19, p=0.088
cor=0.14, p=0.2



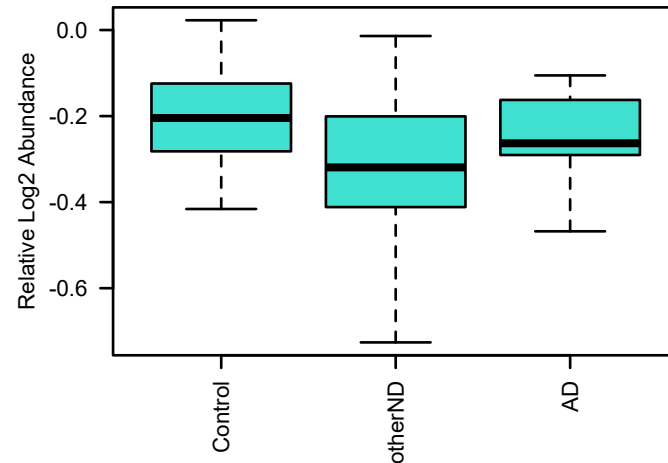
bicor=0.17, p=0.09
cor=0.17, p=0.091



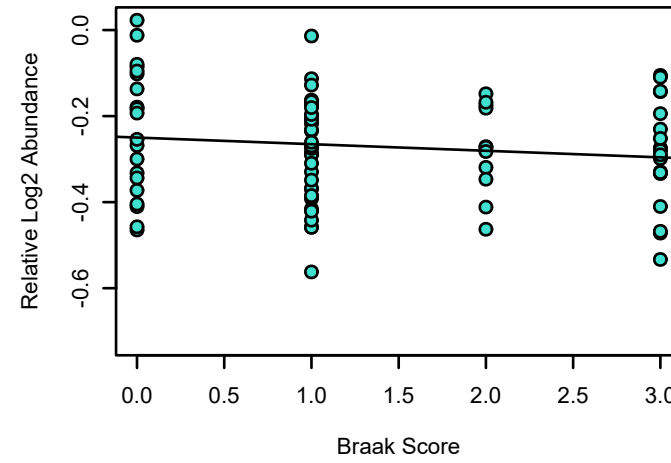
CADM1 UPenn Mixed PRM
M1 turquoise MEGA module member
K-W ANOVA p: 0.08



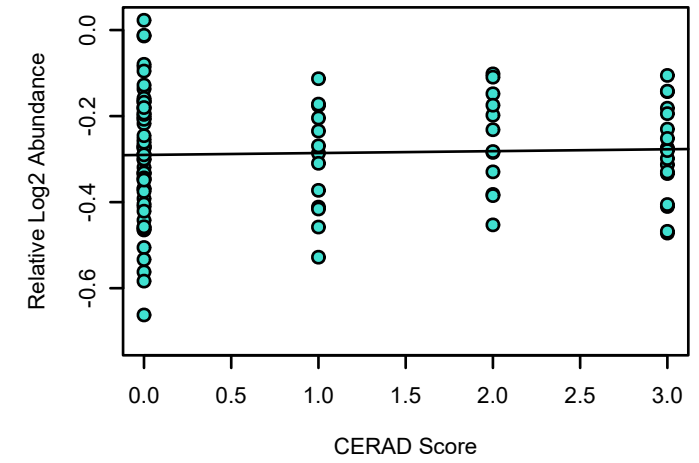
CADM1 UPenn Mixed PRM
K-W ANOVA p: 0.0049



bicor=-0.11, p=0.32
cor=-0.13, p=0.24

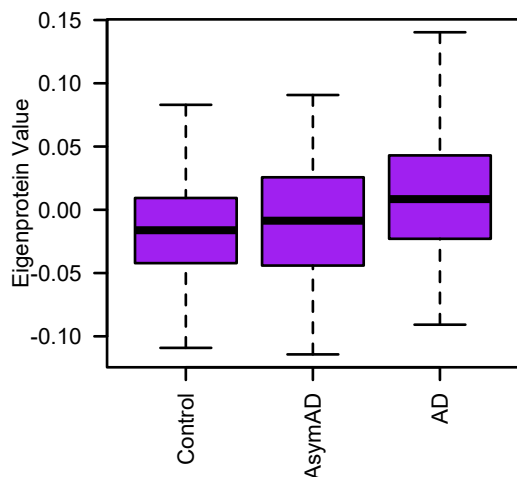


bicor=0.035, p=0.73
cor=0.039, p=0.7

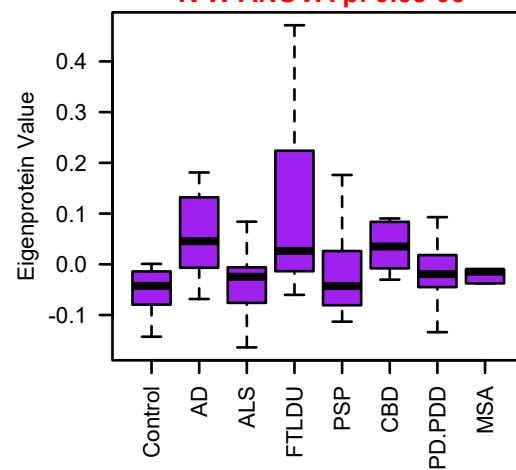


Supplementary Figure 11. Targeted Individual Protein Measurements in Other Neurodegenerative Diseases. Peptides from proteins across all modules in the AD network were targeted for measurement by parallel reaction monitoring mass spectrometry (PRM) in a subset of cases in the UPenn cohort encompassing all disease groups ($n=108$ independent case samples; control $n=15$, AD $n=16$, amyotrophic lateral sclerosis (ALS) $n=16$, frontotemporal lobar degeneration with TAR DNA-binding protein 43 inclusions (FTLD-TDP) $n=8$, progressive supranuclear palsy (PSP) $n=13$, corticobasal degeneration (CBD) $n=5$, Parkinson's disease and Parkinson's disease dementia (PD/PDD) $n=30$, and multiple system atrophy (MSA) $n=5$). Other neurodegenerative diseases (otherND) include these non-AD diseases. Protein levels were correlated with CERAD and Braak scores, using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Protein level differences by case status were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Differences between AD and other case groups were assessed by two-sided Dunnett's test and are provided in **Supplementary Table 4**. Data for each protein is colored by the AD network module in which it resides. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

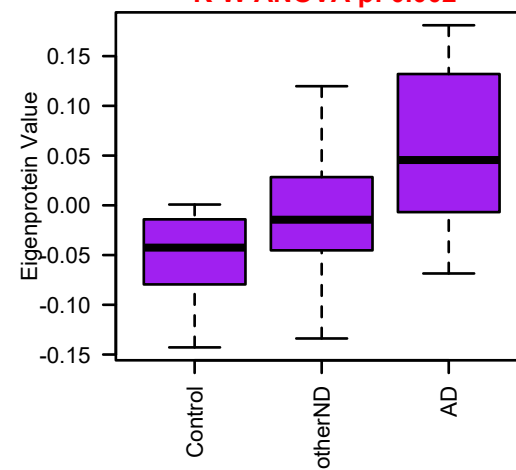
M10 purple.Consensus



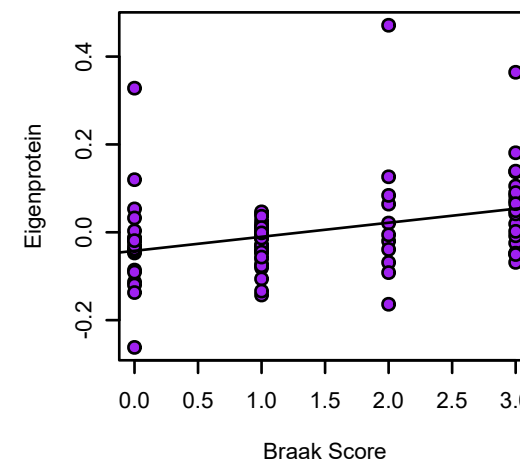
M10 purple.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 9.5e-05



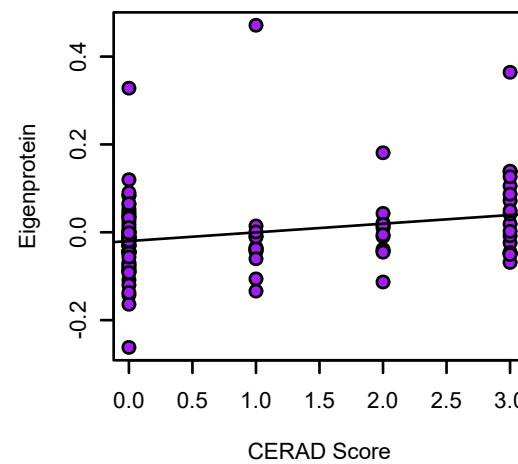
M10 purple.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 0.002



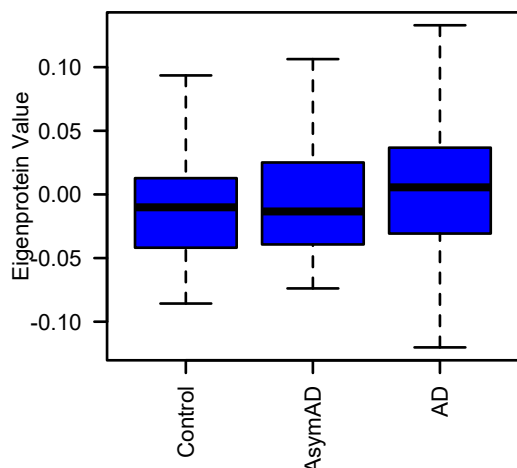
bicor=0.36, p=0.00091
cor=0.33, p=0.0022



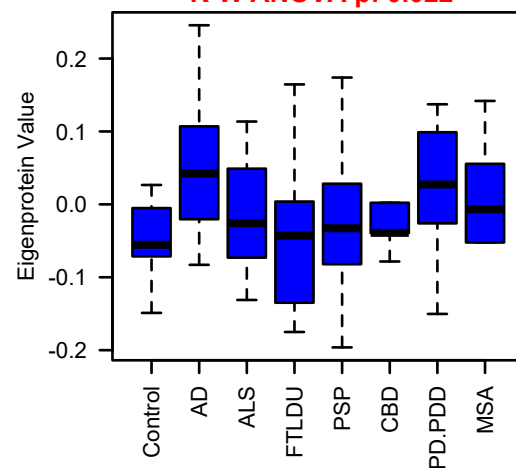
bicor=0.24, p=0.018
cor=0.24, p=0.016



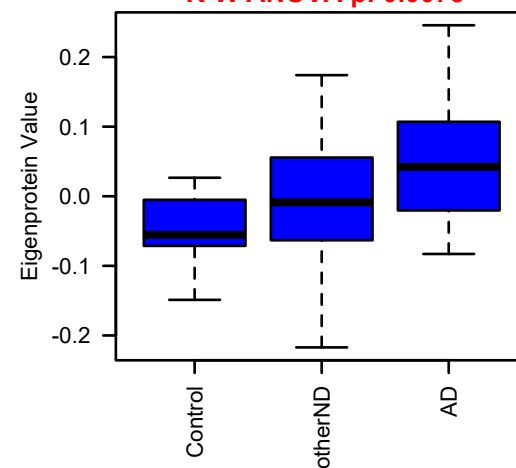
M2 blue.Consensus



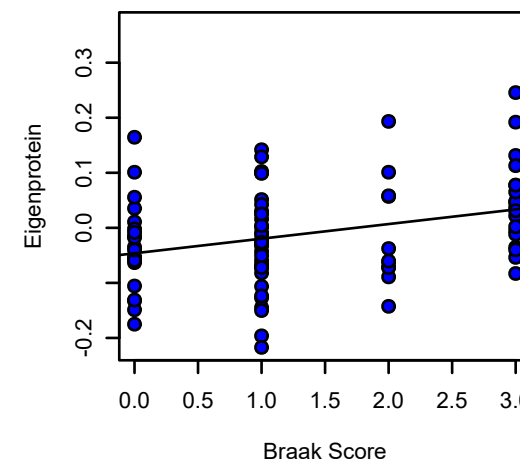
M2 blue.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 0.022



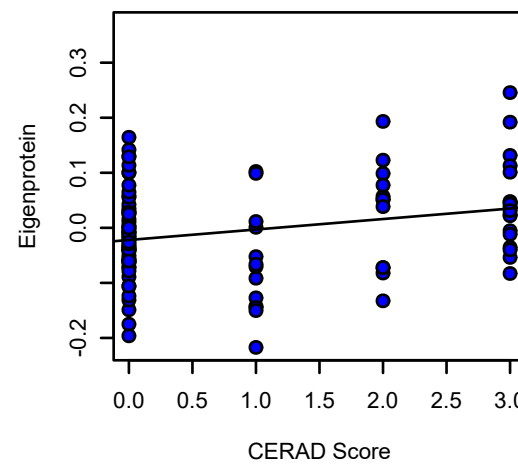
M2 blue.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 0.0075



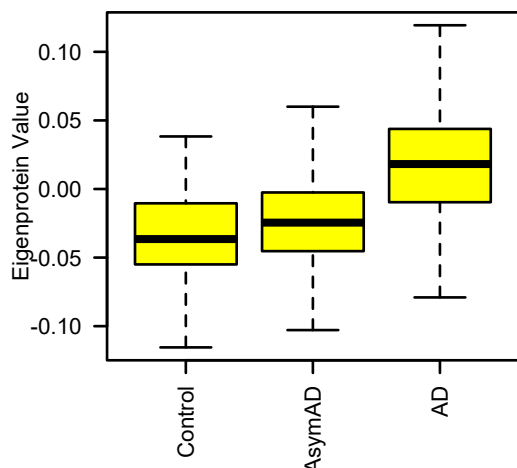
bicor=0.3, p=0.0054
cor=0.31, p=0.0041



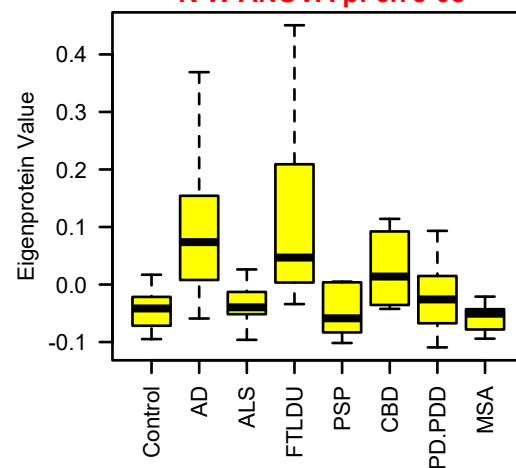
bicor=0.24, p=0.015
cor=0.25, p=0.012



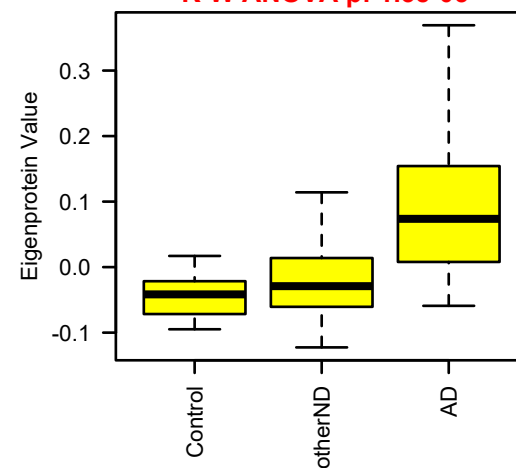
M4 yellow.Consensus



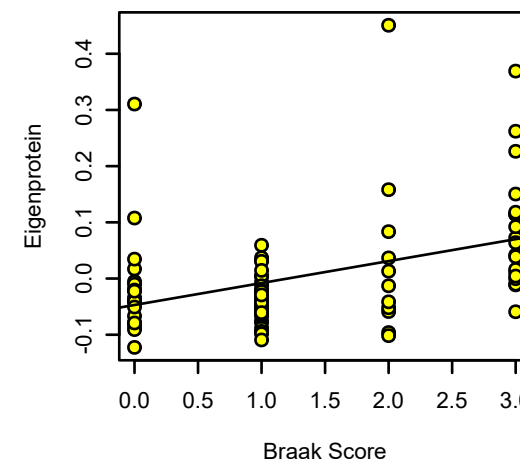
M4 yellow.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 6.7e-08



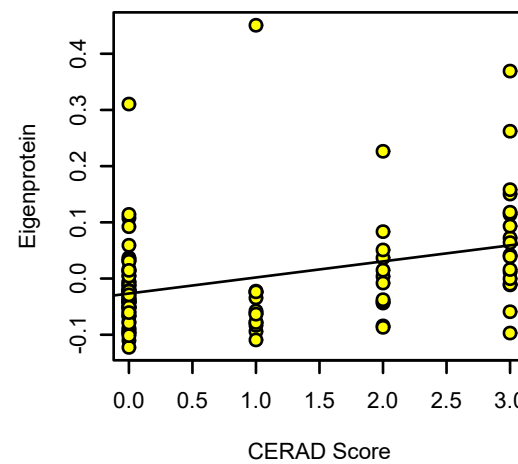
M4 yellow.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 1.3e-05



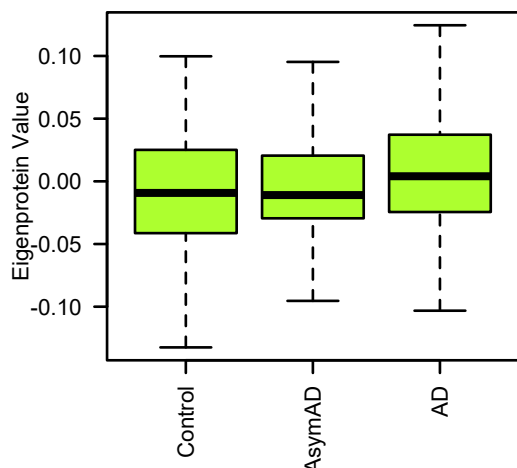
bicor=0.46, p=1e-05
cor=0.41, p=0.00011



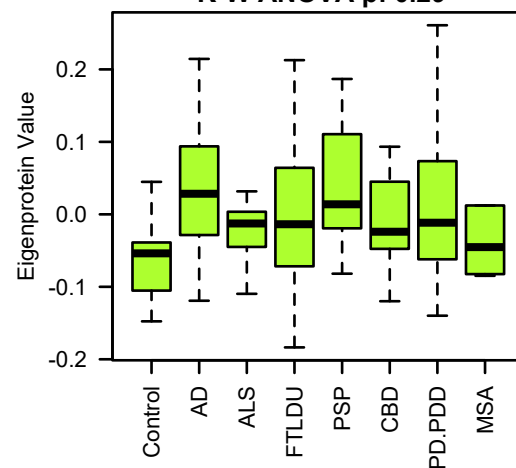
bicor=0.36, p=2e-04
cor=0.35, p=0.00036



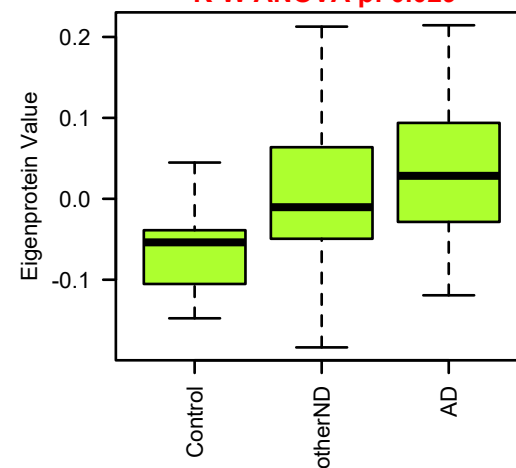
M11 greenyellow.Consensus



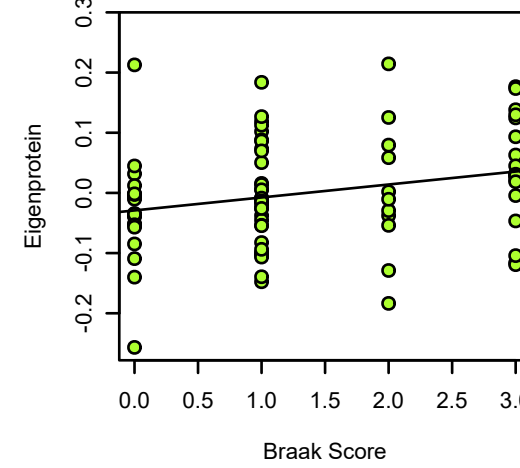
M11 greenyellow.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 0.29



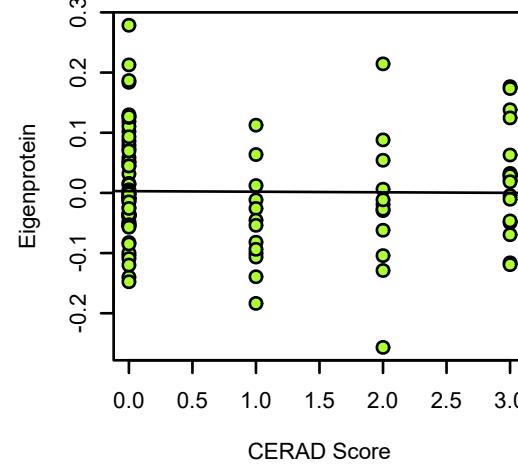
M11 greenyellow.UPenn Mixed PRM (Synthetic Eigenprotein)
K-W ANOVA p: 0.029

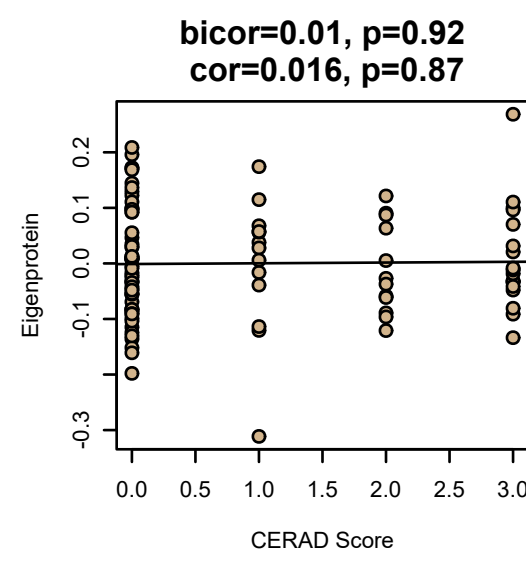
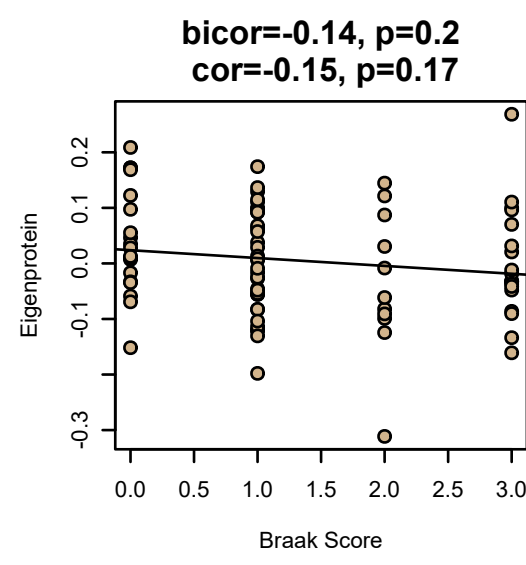
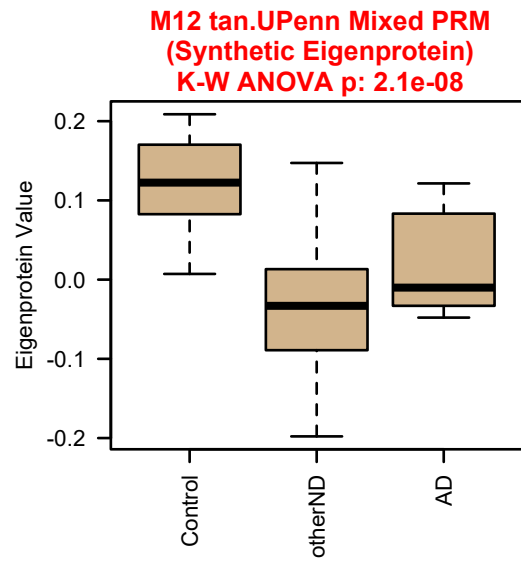
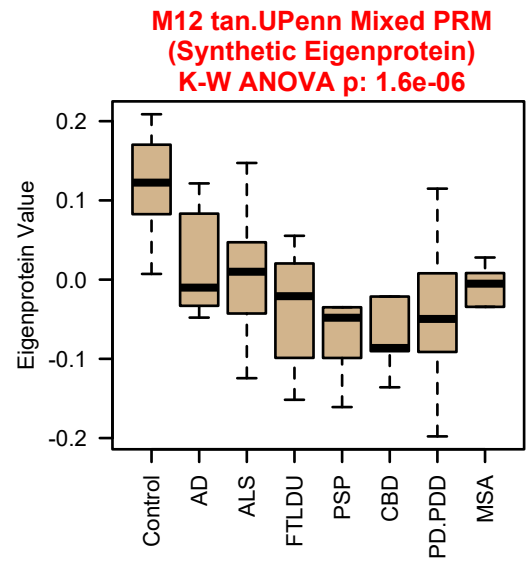
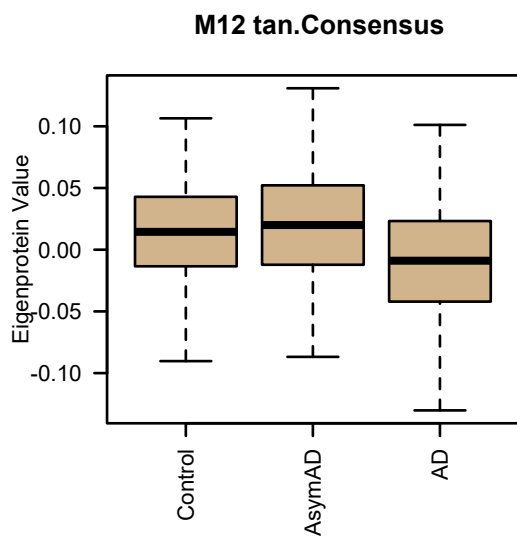
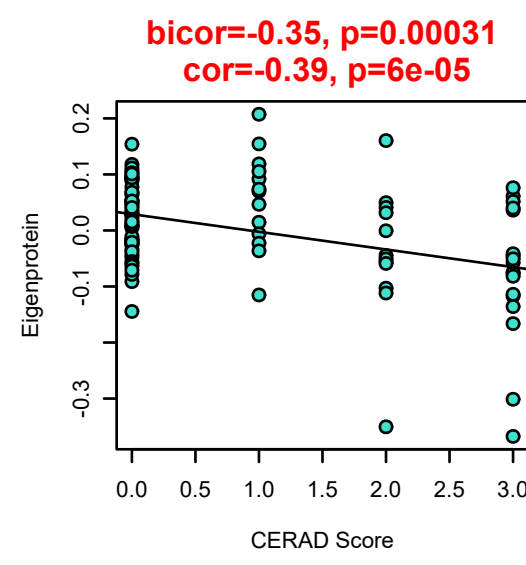
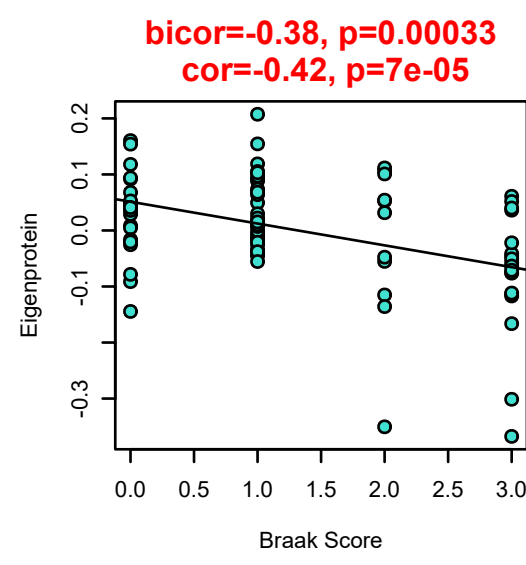
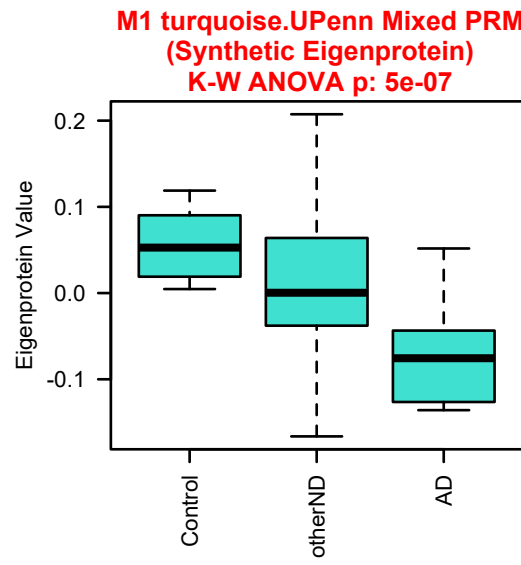
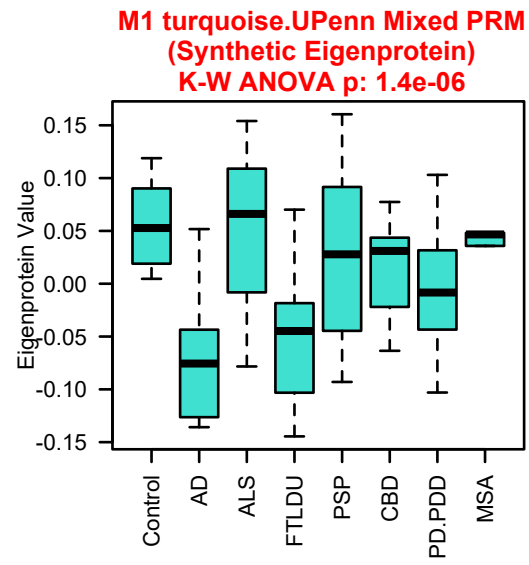
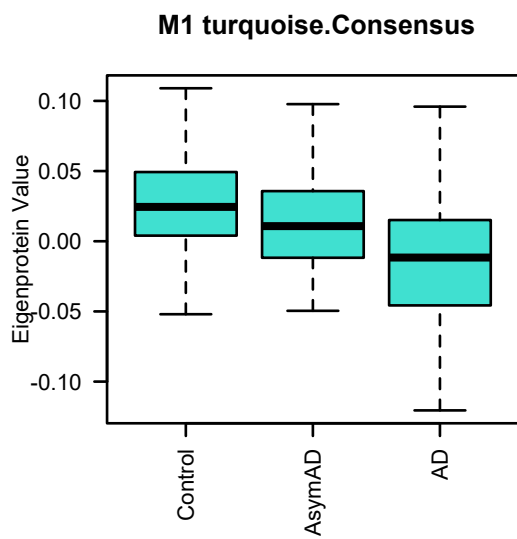
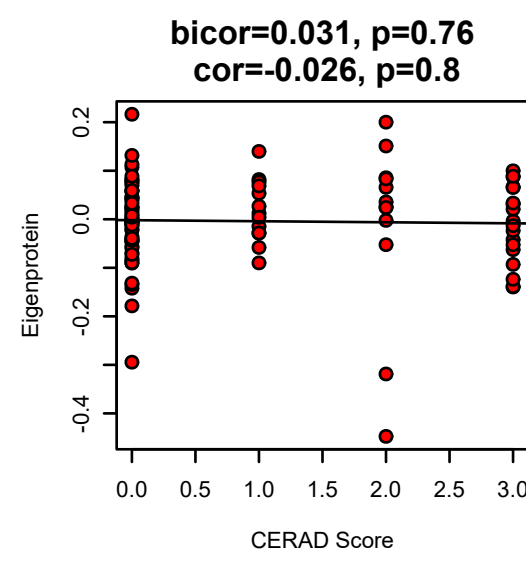
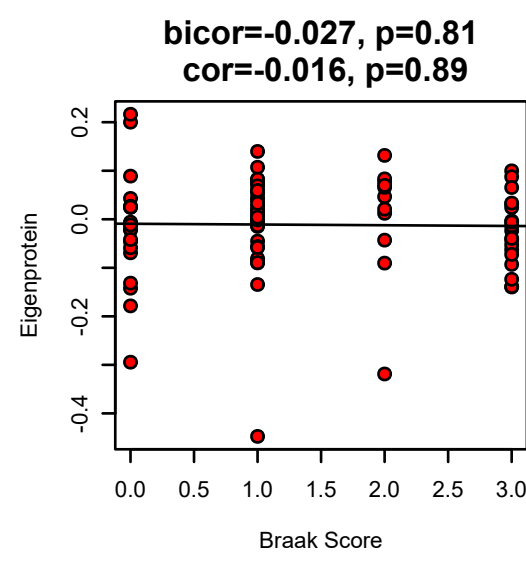
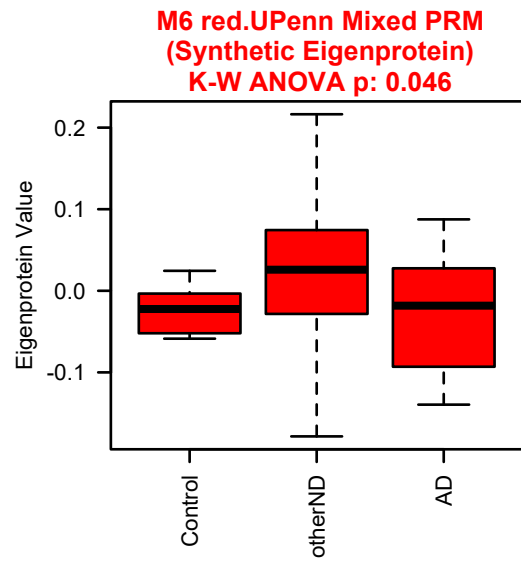
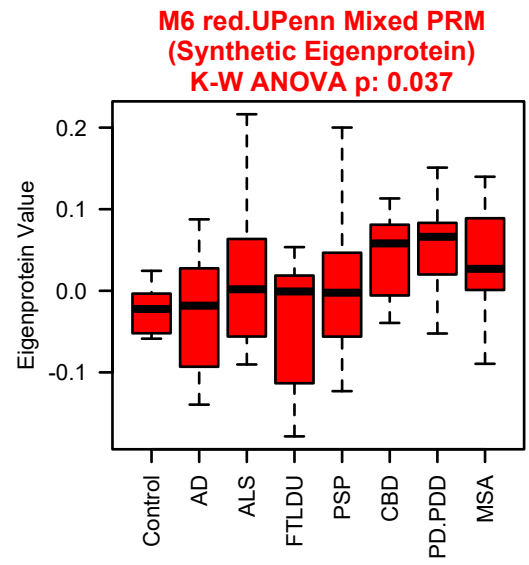
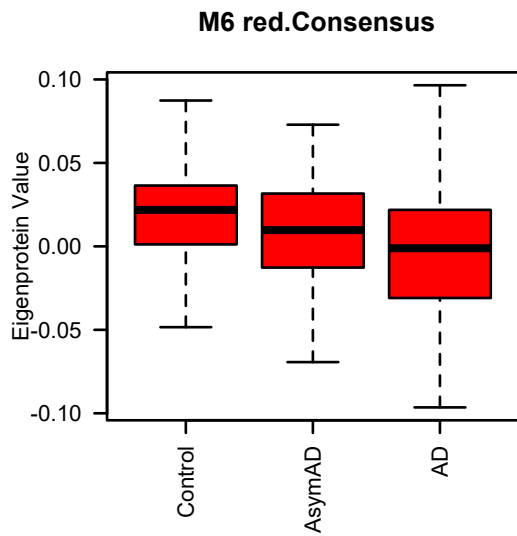
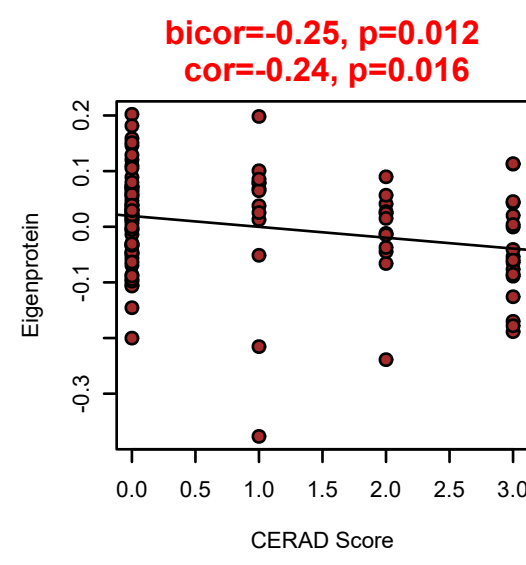
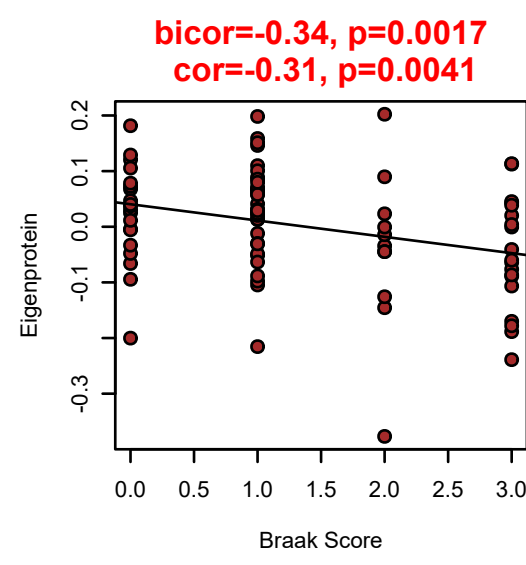
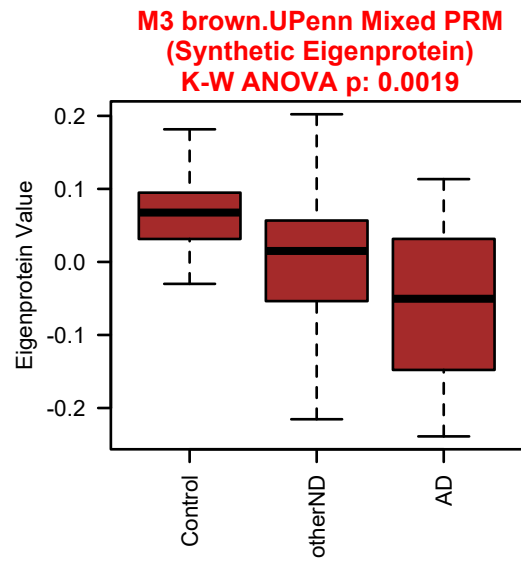
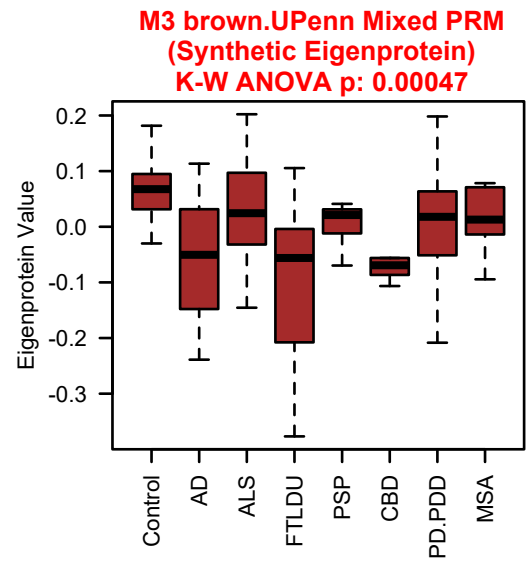
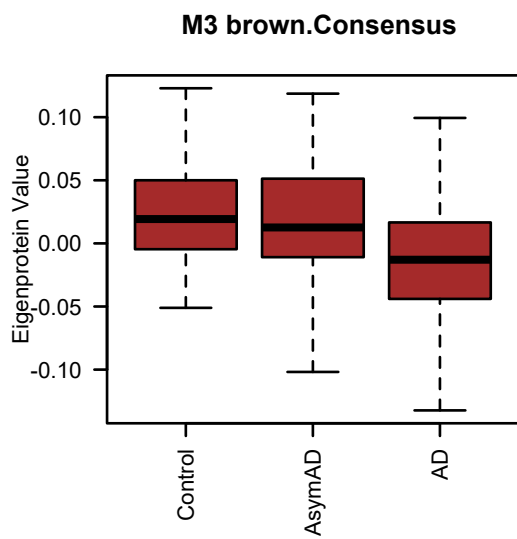


bicor=0.27, p=0.012
cor=0.25, p=0.022

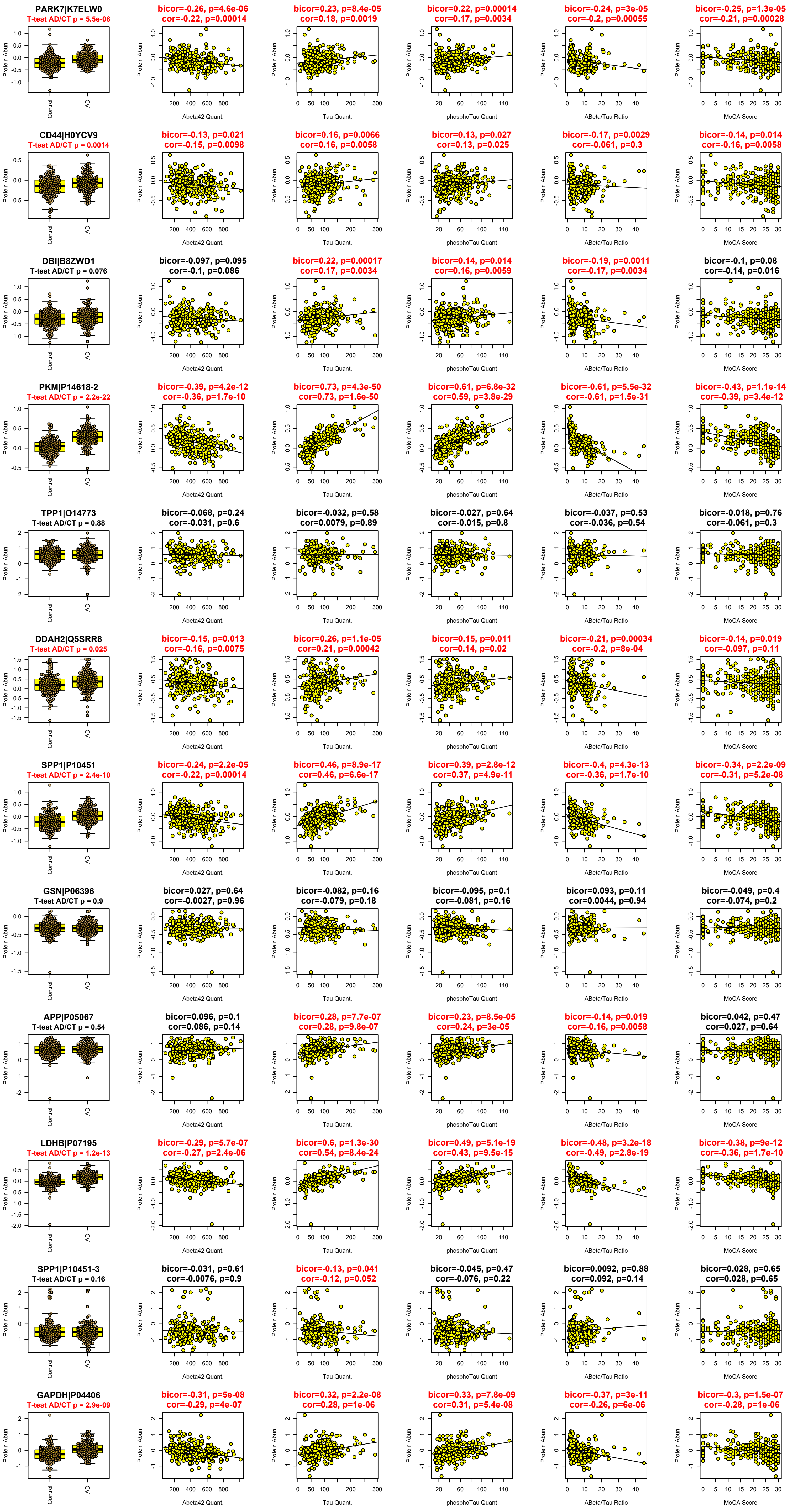


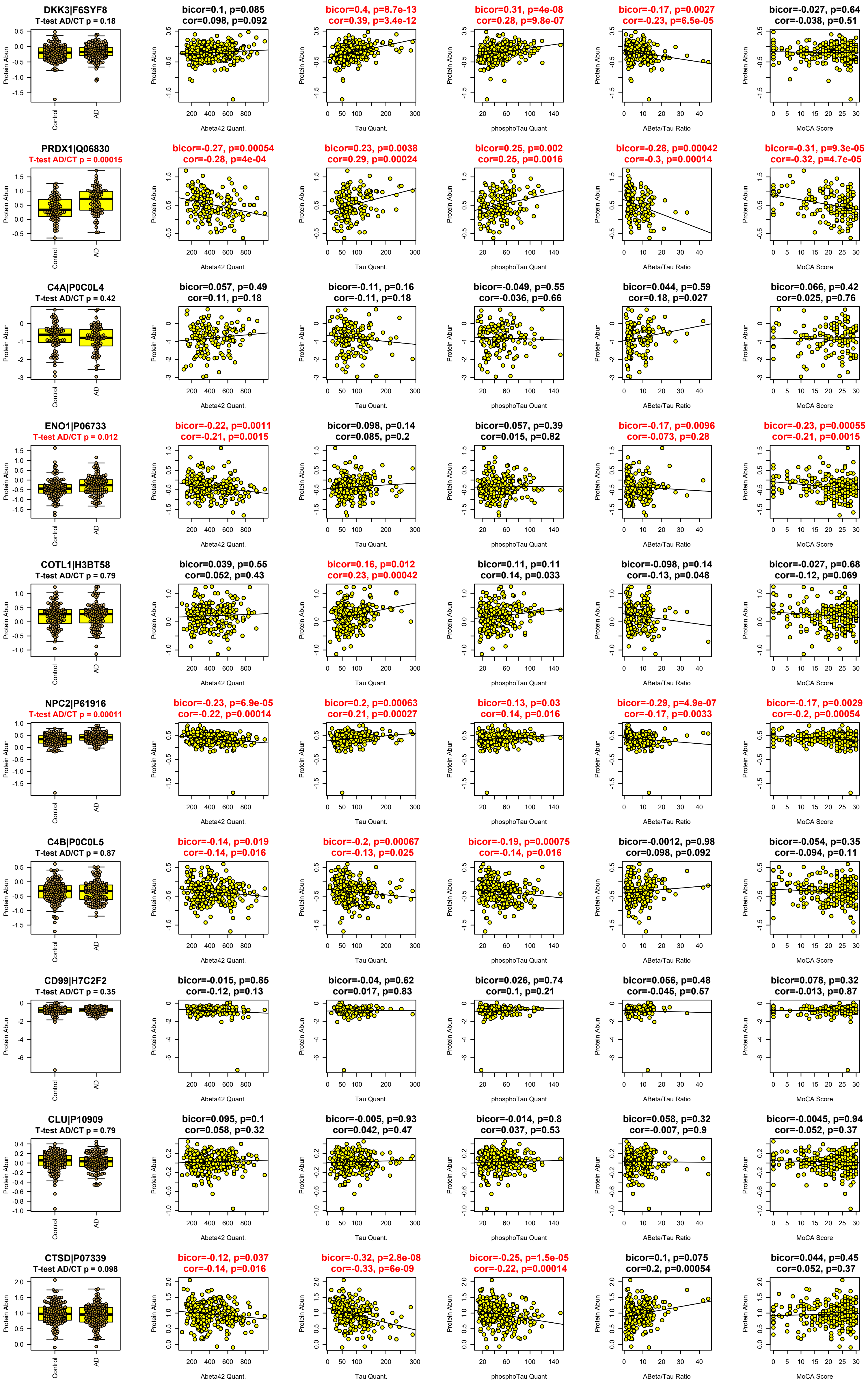
bicor=0.0052, p=0.96
cor=-0.012, p=0.91



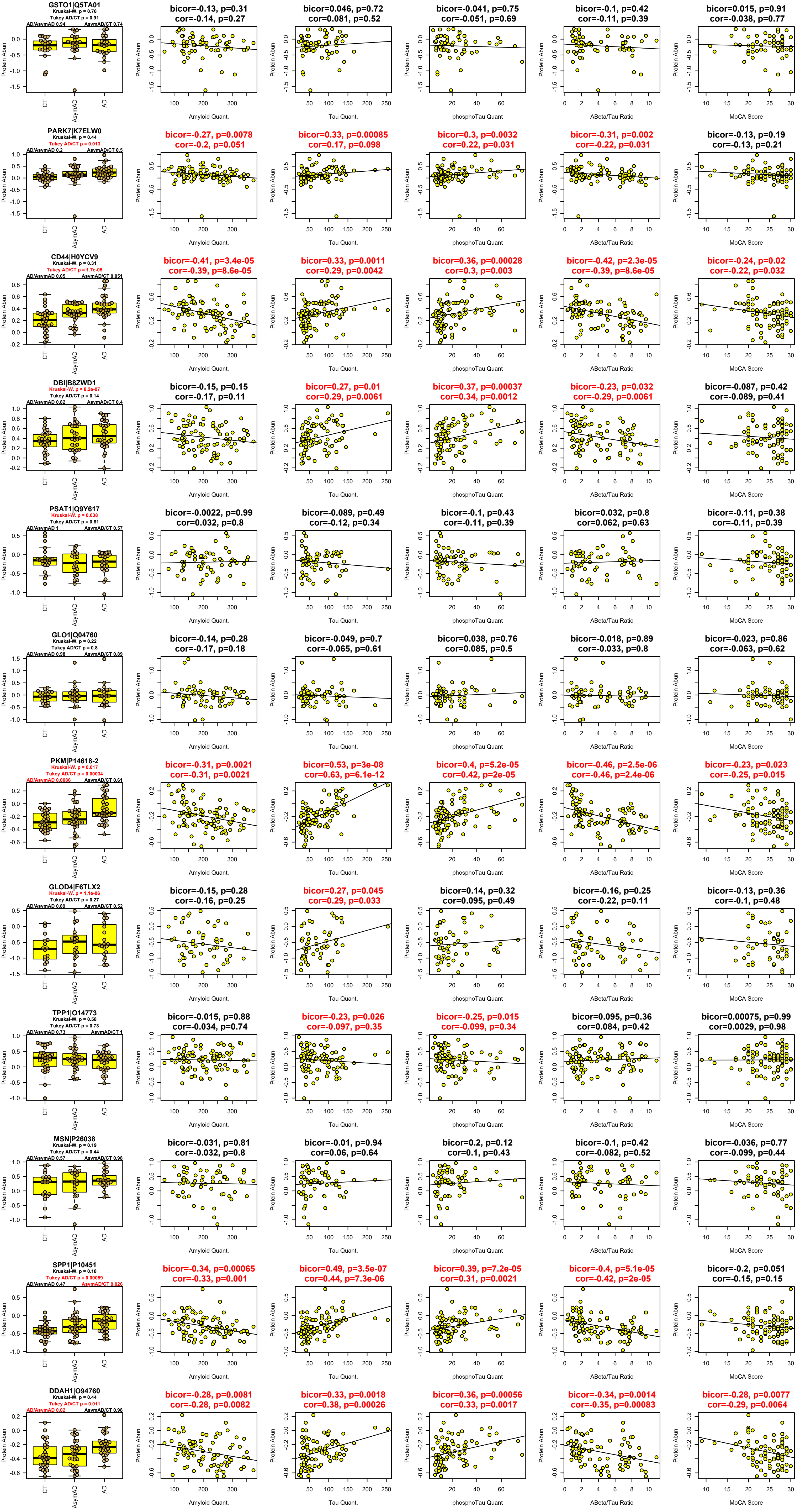


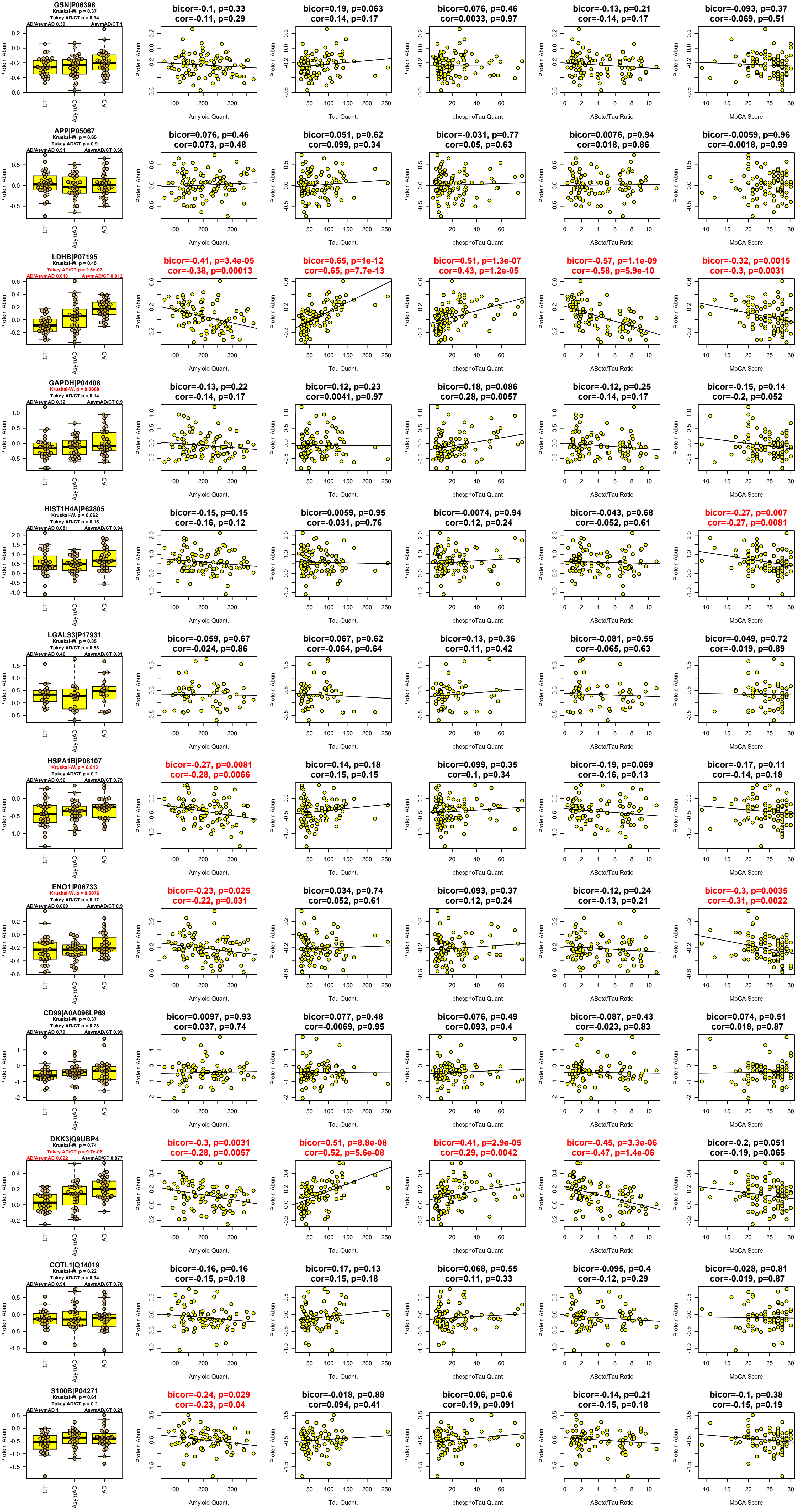
Supplementary Figure 12. AD Network Module Changes in Other Neurodegenerative Diseases by Targeted Mass Spectrometry Measurements. A synthetic eigenprotein for each AD network module was created from proteins measured by parallel reaction monitoring mass spectrometry (PRM) that mapped to an AD network module (see **Supplementary Table 4**). Individual protein measurements by disease group are provided in **Supplementary Figure 11**. The first boxplot for each module is the AD network eigenprotein by case status, given as reference for the second and third boxplots (control $n=46$, AD $n=49$, amyotrophic lateral sclerosis (ALS) $n=59$, frontotemporal lobar degeneration with TAR DNA-binding protein 43 inclusions (FTLD-TDP) $n=29$, progressive supranuclear palsy (PSP) $n=27$, corticobasal degeneration (CBD) $n=17$, Parkinson's disease and Parkinson's disease dementia (PD/PDD) $n=80$, and multiple system atrophy (MSA) $n=23$). Other neurodegenerative diseases (otherND) include these non-AD diseases. Synthetic eigenproteins were correlated with CERAD and Braak scores, using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Synthetic eigenprotein differences by case status were assessed by Kruskal-Wallis (K-W) one-way ANOVA. Differences between AD and other case groups were assessed by two-sided Dunnett's test and are provided in **Supplementary Table 4**. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles.

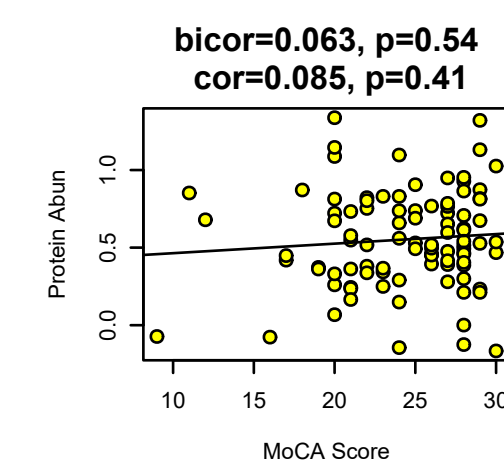
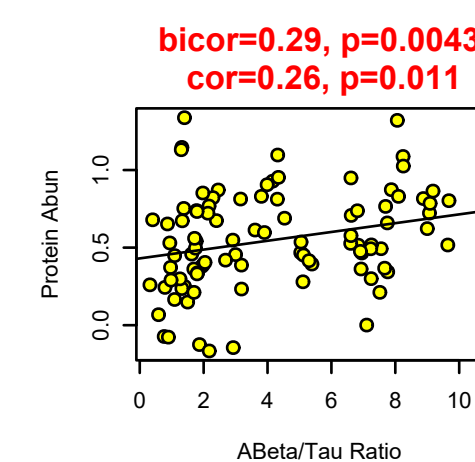
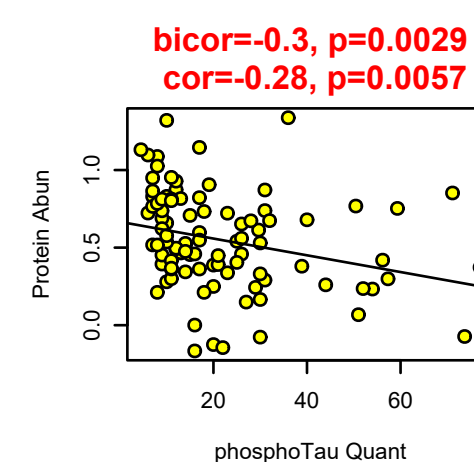
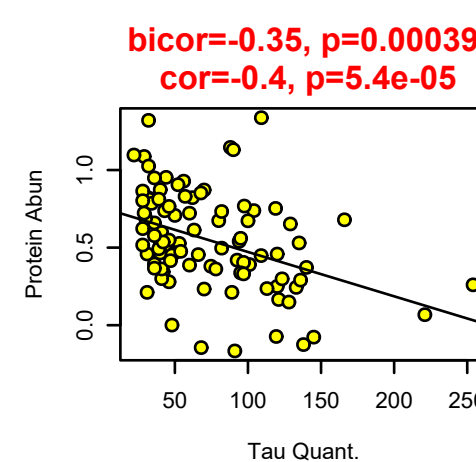
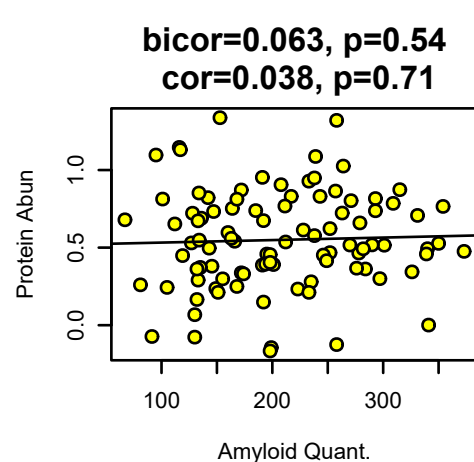
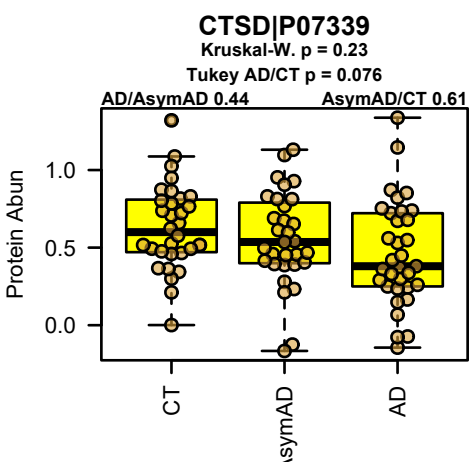
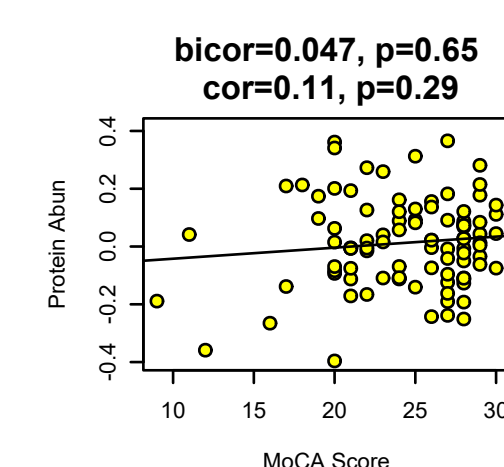
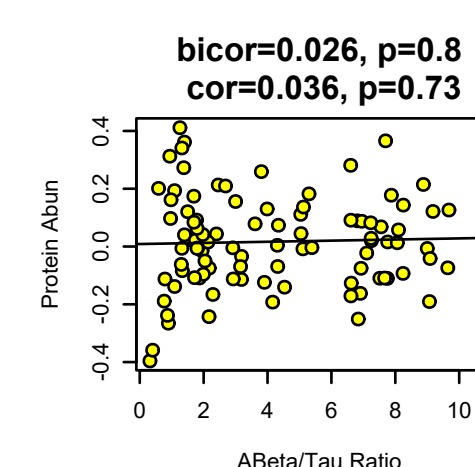
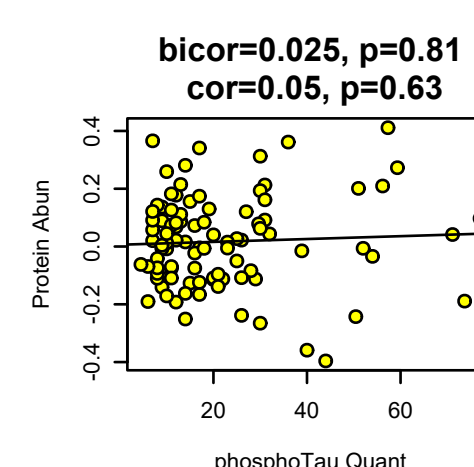
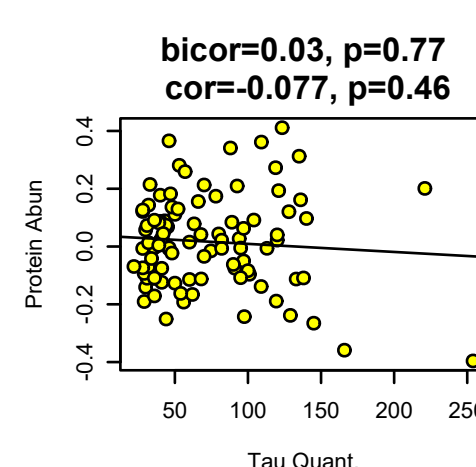
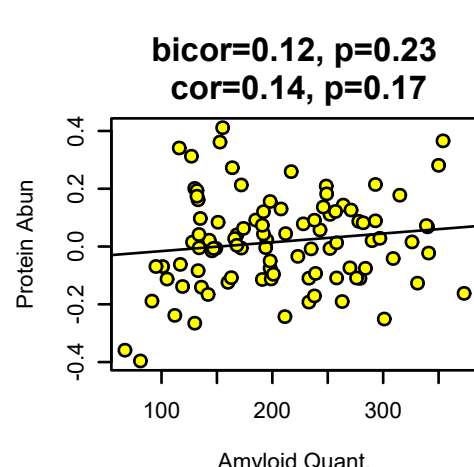
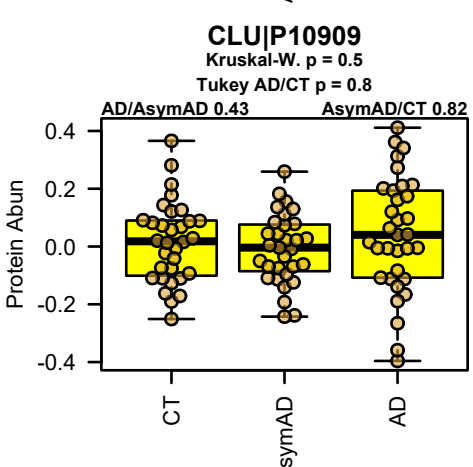
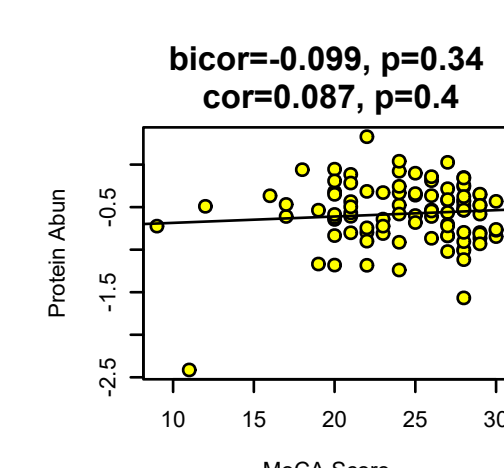
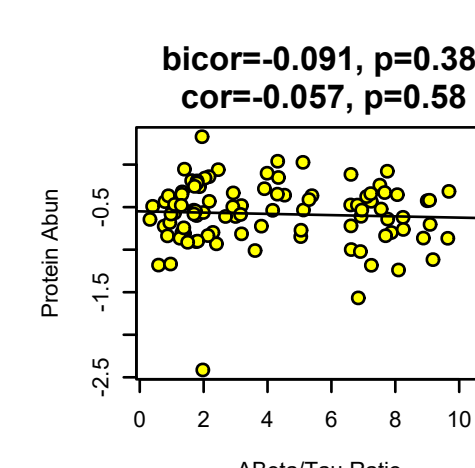
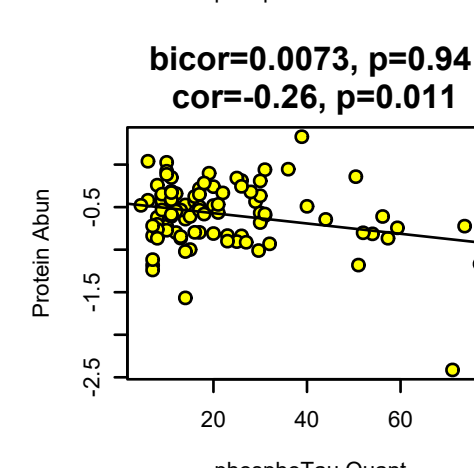
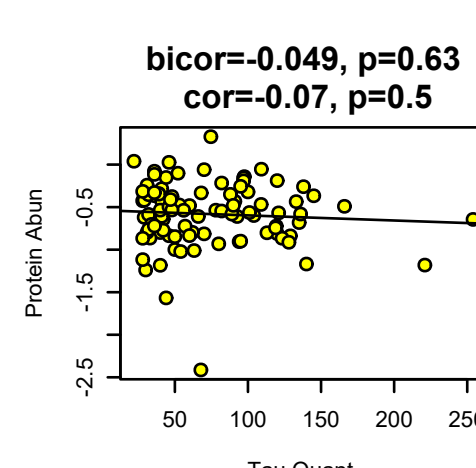
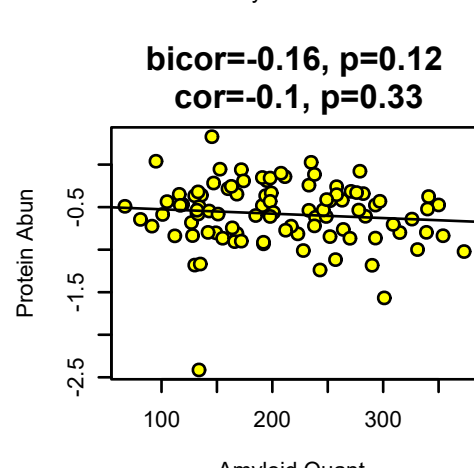
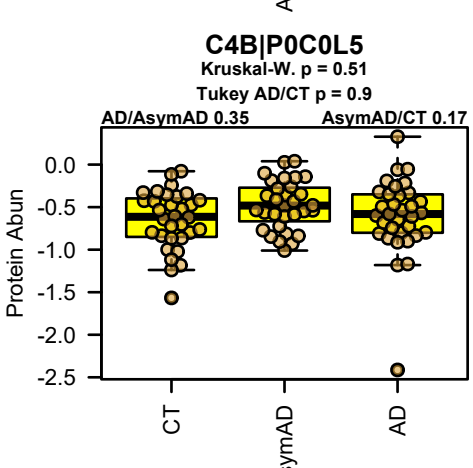
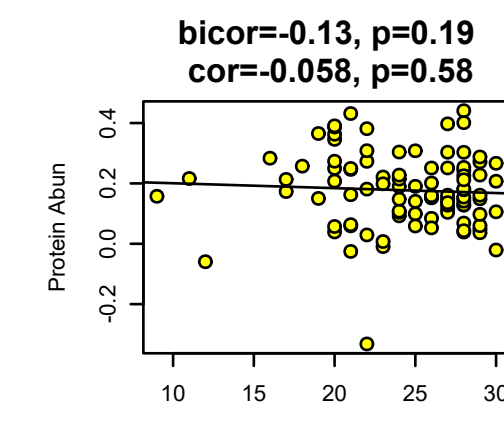
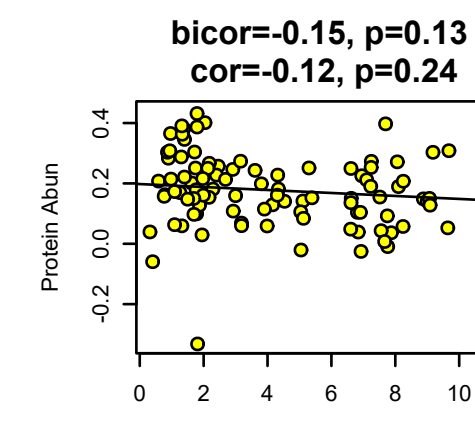
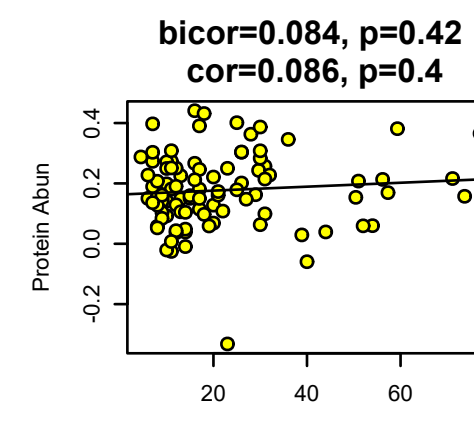
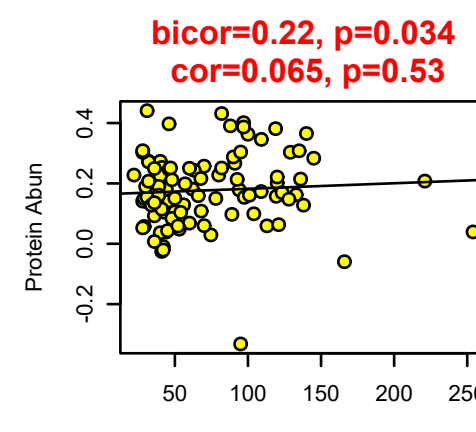
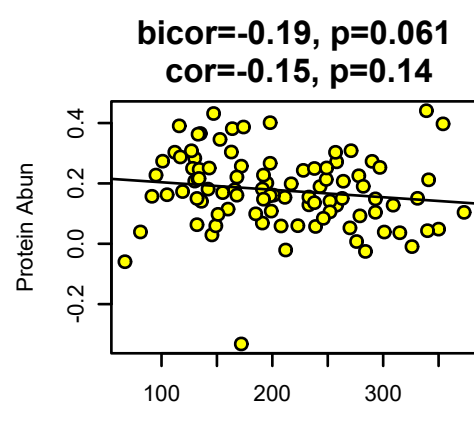
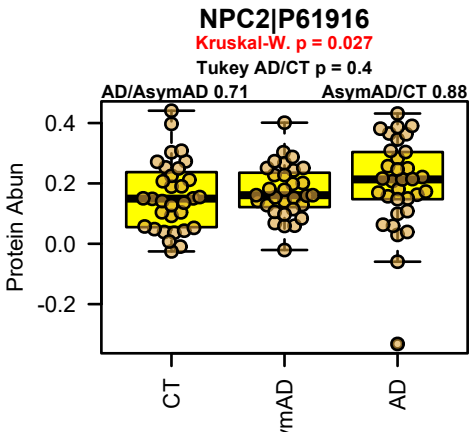




Supplementary Figure 13. Relative Levels and Trait Correlations of Module M4 Proteins in AD CSF Cohort 1. Relative levels of each protein were measured in control ($n=150$ independent case samples) and AD ($n=147$ independent case samples) CSF by tandem mass tag mass spectrometry (TMT-MS), and correlated with ELISA measurements of A β 42, Tau, and phosphorylated tau, as well as A β 42/Tau ratio and MoCA score. The number of missing values for each protein measurement is provided at <https://www.synapse.org/consensus>. ELISA measurements are given in pg/mL. Differences in protein levels were assessed by two-sided Welch's t test. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation ($bicor$), which is more robust to outliers. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles. MoCA, Montreal Cognitive Assessment (higher scores represent better cognitive function).







Supplementary Figure 14. Relative Levels and Trait Correlations of Module M4 Proteins in AsymAD and AD CSF Cohort 2. Relative levels of each protein were measured in control ($n=32$ independent case samples), AsymAD ($n=31$ independent case samples), and AD ($n=33$ independent case samples) CSF by tandem mass tag mass spectrometry (TMT-MS), and correlated with ELISA measurements of A β 42, Tau, and phosphorylated tau, as well as A β 42/Tau ratio and MoCA score. The number of missing values for each protein measurement is provided at <https://www.synapse.org/consensus>. ELISA measurements are given in pg/mL. Differences in protein levels were assessed by Kruskal-Wallis (K-W) one-way ANOVA with Tukey test. Correlations were performed using both Pearson correlation (cor) and biweight midcorrelation (bicor), which is more robust to outliers. Statistical significance at $p < 0.05$ is highlighted in red. Boxplots represent the median, 25th, and 75th percentiles, and whiskers represent measurements to the 5th and 95th percentiles. MoCA, Montreal Cognitive Assessment (higher scores represent better cognitive function).