Association of microbiome vs brain in GIMA dataset

Kai Xia

14 January 2019

Warning: package 'knitr' was built under R version 3.5.2

Spaghetti plot of behavior data

Microbiome neo vs brain volume

 $\mbox{\tt \#\#}$ Warning: package 'survival' was built under R version 3.5.2

Table 1: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.1	166903 -12964	2877 10385	58.01 -1.25	3.51e-28 2.23e-01			$0.0000 \\ 0.0565$

Table 2: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	166848	2969	56.1956	7.75e-28	160733	172963	0.00e+00
wunifrac.PC.2	1021	21317	0.0479	9.62 e-01	-42881	44924	8.83 e-05

Table 3: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.3	166808 5766	2965 24356	56.263 0.237	7.52e-28 8.15e-01			$0.00000 \\ 0.00215$

Table 4: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.4	166357 37029	2895 28700	57.46 1.29	4.46e-28 2.09e-01			$0.0000 \\ 0.0602$

Table 5: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	166986	2857	58.5	2.91e-28	161103	172869	0.0000
unifrac. $PC.1$	-26061	18582	-1.4	1.73e-01	-64331	12209	0.0703

Table 6: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	166939 -16703	2931 20975	56.965 -0.796	5.53e-28 4.33e-01			0.0000 0.0238

Table 7: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	166929 27763	2869 21244	58.18 1.31	3.28e-28 2.03e-01			0.0000 0.0616

Table 8: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	166809 -10128	2960 30561	56.357 -0.331	7.21e-28 7.43e-01			

Table 9: microbiome_vs_brain_neo: neo.WM vs chao1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1	176341.4 -96.9	9821.8 95.7		8.48e-16 3.21e-01		196570 100	0.0000 0.0379

Table 10: microbiome_vs_brain_neo: neo.WM vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed otus	176844 -169	10014 162	17.66 -1.04	1.25e-15 3.07e-01		197469 165	0.0000 0.0402

Table 11: microbiome_vs_brain_neo: neo.WM vs PD_whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	175926	14225	12.368	3.75e-12	146630	205222	0.0000
PD_whole_tree	-1877	2875	-0.653	5.20e-01	-7797	4044	0.0161

Table 12: microbiome_vs_brain_neo: neo.WM vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon		14764 5229	,	1.06e-11 6.26e-01			0.0000 0.0093

Table 13: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.1	276741 -43115	6869 24796	40.29 -1.74	2.91e-24 9.44e-02			0.000 0.104

Table 14: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	276524 -1069	7282 52284		1.25e-23 9.84e-01			0.00e+00 1.61e-05

Table 15: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.3		7275 59765	00.0-0	1.21e-23 8.60e-01			0.0000

Table 16: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	276026 38805	7291 72280	37.857 0.537	1.000 =0	261009 -110057	291043 187668	0.000

Table 17: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	276749 -38700	7178 46696		8.60e-24 4.15e-01			

Table 18: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	276904	7062	39.21	5.67e-24	262359	291449	0.0000
unifrac.PC.2	-62952	50547	-1.25	2.25e-01	-167056	41152	0.0563

Table 19: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	276754 69797	7025 52014	39.40 1.34	5.05e-24 1.92e-01			0.0000

Table 20: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.4	276503 -9559	7273 75094	38.018 -0.127	1.21e-23 9.00e-01			0.000000 0.000623

Table 21: microbiome_vs_brain_neo: neo.GM vs chao1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1		24420 238		9.10e-12 5.74e-01			0.0000 0.0123

Table 22: microbiome_vs_brain_neo: neo.GM vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed otus	285037 -144	25027 405		2.18e-11 7.26e-01		336582 690	0.00000 0.00483
observed_orus	-144	400	-0.555	1.200-01	-910	090	0.0040

Table 23: microbiome_vs_brain_neo: neo.GM vs PD_whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	292810	35026	8.360	1.04e-08	220672	364948	0.0000
PD_whole_tree	-3362	7079	-0.475	6.39 e-01	-17941	11217	0.0086

Table 24: microbiome_vs_brain_neo: neo.GM vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon	269091 2690	36355 12876	7.402 0.209	9.40e-08 8.36e-01		0 - 0 0 0 -	$0.00000 \\ 0.00168$

Table 25: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	65604 -6732	3409 12306	19.244 -0.547	1.67e-16 5.89e-01			0.0000 0.0114

Table 26: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	65415 -20778	3385 24302		1.52e-16 4.01e-01			0.0000 0.0273

Table 27: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.3	65751 -31155	3348 27503	19.64 -1.13	1.04e-16 2.68e-01			0.000 0.047

Table 28: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	64881 52900	3289 32606	19.73 1.62	9.36e-17 1.17e-01			0.0000 0.0919

Table 29: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	65701 -23111	3357 21836	19.57 -1.06	1.13e-16 3.00e-01			

Table 30: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	65914	3025	21.79	8.89e-18	59684	72145	0.000
unifrac.PC.2	-58000	21652	-2.68	1.29e-02	-102593	-13406	0.216

Table 31: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	65566 -1915	3429 25392		1.95e-16 9.40e-01			0.000000 0.000219

Table 32: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	65387 -59328	3232 33376		5.18e-17 8.76e-02		72044 9411	0.000 0.108

Table 33: microbiome_vs_brain_neo: neo.CSF vs chao1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1	73446.1 -80.3	11472 112	6.402 -0.719	1.06e-06 4.79e-01			0.0000 0.0195

Table 34: microbiome_vs_brain_neo: neo.CSF vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed_otus	68878.0 -55.9	11811 191	5.832 -0.292	4.42e-06 7.72e-01		00-00	0.00000 0.00328

Table 35: microbiome_vs_brain_neo: neo.CSF vs PD_whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	67175	16588	4.0497	0.000436	33012	101338	0.000000
PD_whole_tree	-331	3352	-0.0988	0.922089	-7236	6573	0.000375

Table 36: microbiome_vs_brain_neo: neo.CSF vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept shannon	49583 5780	16845 5966	2.944 0.969	0.00691 0.34196	14891 -6508	0 1 0	$0.0000 \\ 0.0348$

Table 37: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.1	509248 -62812	11606 41895	43.9 -1.5	0.0.0	485345 -149096		$0.0000 \\ 0.0796$

Table 38: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	508787 -20826	12119 87009		1.05e-24 8.13e-01			

Table 39: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	509152 -36043	12097 99373		9.88e-25 7.20e-01	-000	00-000	0.0000

Table 40: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	507264	11938	42.49	7.83e-25	482677	531851	0.0000
wunifrac.PC.4	128734	118345	1.09	2.87e-01	-115003	372471	0.0435

Table 41: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	509436 -87871	11818 76876	43.11 -1.14	00	485096 -246201		0.0000 0.0478

Table 42: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	509757 -137655	11499 82305	44.33 -1.67		486074 -307165		0.0000 0.0971

Table 43: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	509249 95645	11840 87661	43.01 1.09	5.79e-25 2.86e-01			

Table 44: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	508698 -79015	12024 124150	42.307 -0.636	8.71e-25 5.30e-01	483934 -334707		

Table 45: microbiome_vs_brain_neo: neo.ICV vs chao1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1	539607 -313	40442 394		7.16e-13 4.35e-01			0.0000 0.0237

Table 46: microbiome_vs_brain_neo: neo.ICV vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed_otus	530760 -369	41552 672		1.86e-12 5.88e-01			0.0000 0.0114

Table 47: microbiome_vs_brain_neo: neo.ICV vs PD_whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	535911	58358	9.183	1.74e-09	415720	656102	0.00000
PD_whole_tree	-5570	11794	-0.472	6.41 e-01	-29861	18721	0.00851

Table 48: microbiome_vs_brain_neo: neo.ICV vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon	492661 5886	60530 21439	8.139 0.275	1.71e-08 7.86e-01			0.00000 0.00289

Table 49: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	879.4	20.6	42.62	7.26e-25	837	921.8	0.0000
wunifrac.PC.1	-94.5	74.5	-1.27	2.16e-01	-248	58.9	0.0583

Table 50: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.2	878 -146	20.9 150.2		1.07e-24 3.41e-01		921 163	0.000 0.035

Table 51: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	879.0	21.3	41.2622	1.61e-24	835	923	0.000000
wunifrac.PC.3	-16.3	175.0	-0.0932	9.27e-01	-377	344	0.000334

Table 52: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	876 191	21.1 209.3		1.39e-24 3.70e-01		920 622	0.0000 0.0311

Table 53: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	880	20.7	42.57	7.47e-25	837	922	0.0000
unifrac.PC.1	-167	134.4	-1.24	2.25 e-01	-444	110	0.0562

Table 54: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	880 -144	20.9 149.7		1.01e-24 3.44e-01		923 164	$0.0000 \\ 0.0345$

Table 55: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	880	20.2	43.62	4.09e-25		921	0.0000
unifrac.PC.3	252	149.3	1.69	1.03e-01		560	0.0991

Table 56: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.4	878.7 -71.7	21.2 219.4		1.53e-24 7.46e-01		922 380	0.00000 0.00409

Table 57: microbiome_vs_brain_neo: neo. Hippocampus_LR vs chao
1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	947.119 -0.696	70.503 0.687		6.16e-13 3.21e-01		1092.322 0.719	$0.000 \\ 0.038$

Table 58: microbiome_vs_brain_neo: neo. Hippocampus_LR vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	0010-	73.20 1.18		3.58e-12 6.90e-01			$0.00000 \\ 0.00624$

Table 59: microbiome_vs_brain_neo: neo. Hippocampus_LR vs PD_whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	938.5	102.3	9.179	1.76e-09	727.9	1149.1	0.0000
PD_whole_tree	-12.3	20.7	-0.596	$5.56\mathrm{e}\text{-}01$	-54.9	30.2	0.0135

Table 60: microbiome_vs_brain_neo: neo. Hippocampus_LR vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept shannon	817.8 22.1	105.8 37.5	7.733 0.589	4.34e-08 5.61e-01		1035.7 99.2	$0.0000 \\ 0.0132$

Table 61: microbiome_vs_brain_neo: neo. Amygdala_LR vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	901	22.2	40.59	2.42e-24		946.4	0.000
wunifrac.PC.1	-215	80.1	-2.68	1.28e-02		-49.8	0.217

Table 62: microbiome_vs_brain_neo: neo. Amygdala_LR vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	899.4	25.2	35.699	5.69e-23	847	951	0.00000
wunifrac. $PC.2$	-37.8	180.9	-0.209	8.36e-01	-410	335	0.00168

Table 63: microbiome_vs_brain_neo: neo. Amygdala_LR vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	899.8	25.2	35.7020	5.68e-23	848	952	0.000000
wunifrac.PC.3	-18.3	207.0	-0.0886	9.30e-01	-445	408	0.000302

Table 64: microbiome_vs_brain_neo: neo. Amygdala_LR vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.4	900.9 -95.1	25.3 251.0	00.00=	6.16e-23 7.08e-01	0 -0	953 422	0.00000 0.00549

Table 65: microbiome_vs_brain_neo: neo.Amygdala_LR vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
	901	23.6	38.3	1.03e-23		949.8	0.000
unifrac.PC.1	-291	153.2	-1.9	6.93e-02	-606	24.8	0.122

Table 66: microbiome_vs_brain_neo: neo. Amygdala_LR vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	900.0 -63.2	25.1 179.9	00.000	5.30e-23 7.28e-01	0 -0	952 307	$0.00000 \\ 0.00472$

Table 67: microbiome_vs_brain_neo: neo. Amygdala_LR vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	901	22.9	39.4	5.15e-24		948	0.000
unifrac.PC.3	389	169.5	2.3	3.03e-02		738	0.169

Table 68: microbiome_vs_brain_neo: neo. Amygdala_LR vs unifrac.
PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.4	899.65 -3.23	25.2 260.1		5.63e-23 9.90e-01		952 532	0.00e+00 5.93e-06

Table 69: microbiome_vs_brain_neo: neo. Amygdala_LR vs chao
1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	1011.95	81.790	12.37	3.72e-12		1180.398	0.0000
chao1	-1.15	0.797	-1.44	1.63e-01		0.496	0.0736

Table 70: microbiome_vs_brain_neo: neo. Amygdala_LR vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	978.24 -1.33	85.31 1.38		1.89e-11 3.45e-01			$0.0000 \\ 0.0344$

Table 71: microbiome_vs_brain_neo: neo. Amygdala_LR vs PD whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1039.6	118.4	8.78	4.15e-09	795.7	1283.5	0.0000
PD_whole_tree	-28.9	23.9	-1.21	2.38e-01	-78.2	20.4	0.0531

Table 72: microbiome_vs_brain_neo: neo. Amygdala_LR vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon		125.8 44.5		8.39e-08 7.65e-01		1195.9 78.3	$0.00000 \\ 0.00351$

Table 73: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	26102 -4052	658 2376	39.65 -1.71	4.30e-24 1.01e-01			0.000 0.101

Table 74: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.2	26081 -196	696 5000		1.75e-23 9.69e-01			0.00e+00 5.92e-05

Table 75: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	26086	696	37.481	1.72e-23	24652	27519	0.000000
wunifrac.PC.3	-604	5717	-0.106	9.17e-01	-12379	11171	0.000429

Table 76: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.4	26019 4828	694 6884	37.468 0.701	1.73e-23 4.90e-01			0.0000 0.0186

Table 77: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	26112 -5260	677 4402	38.58 -1.19	8.43e-24 2.43e-01			$0.0000 \\ 0.0521$

Table 78: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.2, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	26119 -6248	674 4822	38.8 -1.3	7.49e-24 2.07e-01			0.0000

Table 79: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.3, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	26106 7509	665 4926	39.24 1.52	5.57e-24 1.40e-01			$0.000 \\ 0.082$

Table 80: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.4, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.4	26081 -560	696 7182		1.71e-23 9.38e-01			0.000000 0.000234

Table 81: microbiome_vs_brain_neo: neo.mPFC vs chao1, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept chao1		2329.7 22.7		9.71e-12 5.11e-01			0.0000 0.0168

Table 82: microbiome_vs_brain_neo: neo.mPFC vs observed_otus, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	27532.8	2380.0	11.568	1.57e-11	22631	32434.6	0.0000
$observed_otus$	-24.5	38.5	-0.637	5.30 e-01	-104	54.8	0.0154

Table 83: microbiome_vs_brain_neo: neo.mPFC vs PD_whole_tree, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	28172	3337	8.44	8.70e-09	21299	35045	0.0000
PD_whole_tree	-432	674	-0.64	5.28 e-01	-1821	957	0.0155

Table 84: microbiome_vs_brain_neo: neo.mPFC vs shannon, df=25

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon	26397 -114	3479 1232		6.08e-08 9.27e-01			0.000000 0.000327

Table 85: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	301810	10435	28.922	1.82e-12	279073	324547	0.0000
wunifrac.PC.1	-18448	40580	-0.455	6.57 e-01	-106864	69968	0.0156

Table 86: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	300173 44823	10177 97264	29.496 0.461	1.44e-12 6.53e-01	278000 -167097	$322347 \\ 256743$	0.0000

Table 87: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.3	300393 50649	10147 114834	29.603 0.441	1.38e-12 6.67e-01	278284 -199552		

Table 88: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	299305	10860	27.561	3.21e-12	275643	322966	0.0000
wunifrac.PC.4	35582	100768	0.353	7.30e-01	-183974	255137	0.0095

Table 89: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.1	298974 28386	10996 71400		3.77e-12 6.98e-01			

Table 90: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	300651 1505	10218 62905	29.4250 0.0239		278389 -135552		0.00e+00 4.41e-05

Table 91: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	302874 121435	9339 74530	32.43 1.63	4.67e-13 1.29e-01			

Table 92: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.4	300477 -52770	10012 75336	30.0 -0.7		278663 -216913		

Table 93: microbiome_vs_brain_neo: yr1.WM vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	268589	31448	8.54	1.91e-06		337108	0.0000
chao1	336	313	1.07	3.04e-01		1018	0.0813

Table 94: microbiome_vs_brain_neo: yr1.WM vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept	287934	34180	8.42	2.21e-06		362406	0.0000
observed_otus	228	585	0.39	7.03e-01		1504	0.0116

Table 95: microbiome_vs_brain_neo: yr1.WM vs PD_whole_tree, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	313986	50543	6.212	0.000045	203863	424108	0.00000
PD_whole_tree	-2821	10482	-0.269	0.792379	-25659	20016	0.00554

Table 96: microbiome_vs_brain_neo: yr1.WM vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon	271848 10975	48823 18199	5.568 0.603	0.000122 0.557685		0.0	$0.0000 \\ 0.0272$

Table 97: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.1	140280 -802	3878 15080		1.28e-13 9.58e-01			0.000000 0.000218

Table 98: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.2	139669 51599	3447 32947	40.52 1.57	3.31e-14 1.43e-01			0.000

Table 99: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.3	140655 -80520	3161 35769	44.50 -2.25		133768 -158455		0.00 0.28

Table 100: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	141120	3956	35.669	1.51e-13	132500	149740	0.0000
wunifrac.PC.4	-23367	36711	-0.637	5.36e-01	-103354	56620	0.0302

Table 101: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.1		3427 22252	40.06 2.24	3.79e-14 4.52e-02		144741 98229	

Table 102: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	140395 -27974	3529 21729	39.78 -1.29	4.11e-14 2.22e-01			

Table 103: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	140723 27067	3675 29328	38.291 0.923	6.48e-14 3.74e-01			0.0000 0.0615

Table 104: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	140122 -30843	3573 26888	39.21 -1.15	4.88e-14 2.74e-01			

Table 105: microbiome_vs_brain_neo: yr1.CSF vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1	139252.8 10.2	12128 121		7.89e-08 9.34e-01			$\begin{array}{c} 0.000000 \\ 0.000552 \end{array}$

Table 106: microbiome_vs_brain_neo: yr1.CSF vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept	140387.21			1.17e-07 9.90e-01		168004 470	0.0e+00 1.3e-05
observed_otus	-2.83	217	-0.013	9.90e-01	-470	470	1.5e-05

Table 107: microbiome_vs_brain_neo: yr1.CSF vs PD_whole_tree, df=12

	Estimate	Std. Error	t value	Pr(> t)	2.5 %	97.5 %	R2
Intercept	153425	18272	8.397	2.28e-06	113614	193237	0.0000
PD_whole_tree	-2794	3789	-0.737	4.75e-01	-11050	5462	0.0401

Table 108: microbiome_vs_brain_neo: yr1.CSF vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon		17974 6700	7.192 0.623	0.000011 0.544972			0.000 0.029

Table 109: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	652361	13510	48.288	4.07e-15	622925	681796	0.00000
wunifrac.PC.1	13938	52535	0.265	7.95e-01	-100526	128402	0.00539

Table 110: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	652803	13163	49.592	2.96e-15	624122	681484	0.00000
wunifrac.PC.2	39244	125807	0.312	7.60e-01	-234867	313355	0.00743

Table 111: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	652292 177552	12365 139934	52.75 1.27	1.42e-15 2.29e-01	625350 -127338		0.00

Table 112: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.4	651022 57927	13937 129321	46.712 0.448	6.05e-15 6.62e-01	620656 -223838	00-000	0.000

Table 113: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.1	654503	14217 92313		7.2e-15 8.2e-01			

Table 114: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	653190 6696	13150 80960		2.91e-15 9.35e-01			$\begin{array}{c} 0.000000 \\ 0.000526 \end{array}$

Table 115: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	654729 82273	12949 103335	50.562 0.796	2.35e-15 4.41e-01	626516 -142876		0.000

Table 116: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4	653274 13002	13140 98876		2.88e-15 8.98e-01		00-000	0.0000

Table 117: microbiome_vs_brain_neo: yr1.GM vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	646140.6	42327	15.266	3.18e-09		738362	0.00000
chao1	74.2	421	0.176	8.63e-01		992	0.00238

Table 118: microbiome_vs_brain_neo: yr1.GM vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed_otus	675387 -397	43770 750	15.43 -0.53	2.81e-09 6.06e-01			0.0000 0.0212

Table 119: microbiome_vs_brain_neo: yr1.GM vs PD_whole_tree, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept PD whole tree	668702 -3276	65103 13501		2.68e-07 8.12e-01			0.00000 0.00451

Table 120: microbiome_vs_brain_neo: yr1.GM vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon		63423 23641	$9.931 \\ 0.377$	3.86e-07 7.13e-01			0.0000 0.0108

Table 121: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	1094450 -5312	23988 93281		8.02e-15 9.56e-01			0.000000 0.000249

Table 122: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.2	1092645 135667	23040 220206	47.423 0.616	5.05e-15 5.49e-01	1042444 -344120		$0.0000 \\ 0.0284$

Table 123: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1093340	23011	47.514			1143476	
wunifrac.PC.3	147681	260404	0.567	5.81e-01	-419690	715053	0.0241

Table 124: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(>\! t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4		24787 229997	44.033 0.305	1.22e-14 7.66e-01	1037441 -430979		0.0000 0.0071

Table 125: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.1	1090751 56693	25103 163001	43.452 0.348	1.44e-14 7.34e-01	1036057 -298455		

Table 126: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	1094236	23272 143278		5.60e-15 8.93e-01		_	
umirac.PC.2	-19773	143278	-0.138	8.93e-01	-331948	292402	0.0014

Table 127: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept		21995	49.94			1146249	
unifrac.PC.3	230775	175523	1.31	2.13e-01	-151656	613207	0.117

Table 128: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4		23125 174011		5.21e-15 6.92e-01			0.0000 0.0125

Table 129: microbiome_vs_brain_neo: yr1.ICV vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	1053983	74046	14.23	7.07e-09		1215314	0.0000
chao1	420	737	0.57	5.79e-01		2026	0.0244

Table 130: microbiome_vs_brain_neo: yr1.ICV vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept	1103708	78350	14.087	7.95e-09	932997	1274419	0.00000
$observed_otus$	-172	1342	-0.128	9.00e-01	-3095	2751	0.00126

Table 131: microbiome_vs_brain_neo: yr1.ICV vs PD_whole_tree, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept PD_whole_tree	1136113 -8891	114892 23827	9.889 -0.373			1386441 43023	0.0000 0.0106

Table 132: microbiome_vs_brain_neo: yr1.ICV vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon	1030961 24059	111416 41530	9.253 0.579	8.23e-07 5.73e-01		1273714 114545	0.000

Table 133: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2439.58	70.1	34.78691	2.03e-13	2287	2592	0.00e+00
wunifrac.PC.1	2.17	272.7	0.00794	9.94 e-01	-592	596	4.85 e-06

Table 134: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	2440.5 -74.7	68.4 653.4		1.49e-13 9.11e-01		2589 1349	0.000 0.001

Table 135: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2434	61.2	39.73	4.17e-14	2300	2567	0.00
wunifrac. PC. 3	1172	693.1	1.69	1.17e-01	-338	2683	0.18

Table 136: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	2459 -508	71 659		2.14e-13 4.56e-01		-	0.0000 0.0437

Table 137: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2455	72.9	33.669	2.99e-13	2296	2613	0.0000
unifrac.PC.1	-250	473.4	-0.529	6.07e-01	-1282	781	0.0211

Table 138: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac. PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2436	59.7	40.77	3.07e-14		2566	0.000
unifrac.PC.2	696	367.8	1.89	8.27e-02		1498	0.216

Table 139: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac. PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2440.5	68.8	35.4974	1.60e-13		2590	0.000000
unifrac.PC.3	43.7	548.7	0.0797	9.38e-01		1239	0.000489

Table 140: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac. PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2441	67.3	36.262	1.24e-13	2294	2587	0.0000
unifrac.PC.4	264	506.4	0.521	6.12e-01	-840	1367	0.0205

Table 141: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	2511.880 -0.756	218.26 2.17		7.70e-08 7.34e-01		2987.44 3.98	$0.00000 \\ 0.00922$

Table 142: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2580.53	225.20	11.459	8.07e-08	2089.9	3071.20	0.0000
$observed_otus$	-2.53	3.86	-0.655	5.25 e-01	-10.9	5.88	0.0319

Table 143: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs PD_whole_tree, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2686.9	329.8	8.146	3.12e-06	1968	3405.6	0.0000
PD_whole_tree	-52.3	68.4	-0.765	4.59 e-01	-201	96.7	0.0431

Table 144: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon	2521 -31	329 123		5.88e-06 8.05e-01		3239 236	$0.00000 \\ 0.00489$

Table 145: microbiome_vs_brain_neo: yr1. Amygdala_LR vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1999.6	38.5	51.996	1.68e-15		2083	0.0000
wunifrac.PC.1	89.5	149.5	0.599	5.60e-01		415	0.0268

Table 146: microbiome_vs_brain_neo: yr1. Amygdala_LR vs wunifrac.
PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.2	1997 726	31.1 297.5	64.16 2.44	1.36e-16 3.12e-02		2065 1374	0.000

Table 147: microbiome_vs_brain_neo: yr1. Amygdala_LR vs wunifrac.
PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	2007 -363	36.8 416.3	54.561 -0.871	9.46e-16 4.01e-01		2087 544	$0.0000 \\ 0.0552$

Table 148: microbiome_vs_brain_neo: yr1. Amygdala_LR vs wunifrac.
PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.4	2023 -477	37.7 349.5	53.72 -1.36	1.14e-15 1.97e-01	-		0.000 0.125

Table 149: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2010.7	40.8	49.246	3.22e-15	1922	2100	0.00000
unifrac.PC.1	-93.5	265.1	-0.353	7.30e-01	-671	484	0.00948

Table 150: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.
PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	2004 144	37.3 229.5	53.759 0.627	1.13e-15 5.43e-01			0.0000 0.0293

Table 151: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.
PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.3	2010 275	37 295	0 0 0 -	9.82e-16 3.70e-01			0.0000 0.0626

Table 152: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.
PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2005.3	37.9	52.979	1.35e-15	1923	2088	0.00000
unifrac.PC.4	36.4	284.8	0.128	9.00e-01	-584	657	0.00125

Table 153: microbiome_vs_brain_neo: yr1. Amygdala_LR vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	2.00e+03 3.73e-02			1.40e-09 9.76e-01		2267.54 2.68	0.00e+00 7.23e-05

Table 154: microbiome_vs_brain_neo: yr1. Amygdala_LR vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	2018.766 -0.244	127.48 2.18		2.09e-09 9.13e-01		2296.51 4.51	0.000000 0.000963

Table 155: microbiome_vs_brain_neo: yr1. Amygdala_LR vs PD whole tree, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2147	183	11.711	6.34e-08	1747	2546.0	0.0000
PD_whole_tree	-30	38	-0.788	4.46e-01	-113	52.9	0.0456

Table 156: microbiome_vs_brain_neo: yr1. Amygdala_LR vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	2265	167.0	13.56	1.22e-08	1901	2628.9	$0.000 \\ 0.163$
shannon	-99	62.2	-1.59	1.38e-01	-235	36.6	

Table 157: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.1	78876 12136	1988 7730	39.68 1.57	4.24e-14 1.42e-01		00-00	0.000 0.159

Table 158: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	79541	2114	37.633	7.97e-14	74936	84146	0.0000
wunifrac.PC.2	8422	20201	0.417	6.84 e-01	-35591	52436	0.0132

Table 159: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	79454 33854	1937 21925	41.01 1.54	2.86e-14 1.49e-01			$0.000 \\ 0.155$

Table 160: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	79749	2262	35.262	1.73e-13	74821	84676	0.00000
wunifrac.PC.4	-3041	20985	-0.145	8.87e-01	-48765	42682	0.00161

Table 161: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	79888 -4301	2287 14851	34.93 -0.29	1.93e-13 7.77e-01		0-0	0.0000

Table 162: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.2, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	79632.5	2119		8.09e-14		84249	0.00e+00
unifrac.PC.2	41.9	13044	0.00322	9.97e-01	-28379	28463	7.95e-07

Table 163: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.3, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.3	79562 -3867	2136 17042	0	8.98e-14 8.24e-01		00	0.0000

Table 164: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.4, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	79697 18346	1998 15032	39.89 1.22	3.98e-14 2.46e-01		0 -0 -0	$0.000 \\ 0.103$

Table 165: microbiome_vs_brain_neo: yr1.mPFC vs chao1, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept chao1	74598.8 52.7	6653.2 66.2		1.03e-07 4.42e-01			$0.0000 \\ 0.0465$

Table 166: microbiome_vs_brain_neo: yr1.mPFC vs observed_otus, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	77453.6 39.1	7102 122	10.906 0.321	1.39e-07 7.53e-01	0-000		0.00000 0.00788

Table 167: microbiome_vs_brain_neo: yr1.mPFC vs PD whole tree, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	72459	10297	7.037	1.36e-05	50023	94895	0.0000
PD_whole_tree	1519	2136	0.711	4.91e-01	-3134	6172	0.0375

Table 168: microbiome_vs_brain_neo: yr1.mPFC vs shannon, df=12

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon pdf 2	75407 1610	10200 3802	7.393 0.423	8.36e-06 6.80e-01			0.0000 0.0136

Microbiome yr1 vs brain volume

Table 169: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	299858 4384	10679 25957	28.080 0.169	1.37e-11 8.69e-01			$0.00000 \\ 0.00237$

Table 170: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	299206	10501	28.493	1.17e-11	276094	322319	0.0000
wunifrac.PC.2	42026	65074	0.646	5.32e-01	-101200	185252	0.0336

Table 171: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	296751 189312	9440 101764	31.44 1.86	4.01e-12 8.98e-02			

Table 172: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.4	299820 141834	9900 106670	30.28 1.33	6.02e-12 2.11e-01			

Table 173: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	299721	10664	28.1062	1.35e-11	276250	323192	0.000000
unifrac.PC.1	-5351	67947	-0.0788	9.39 e-01	-154902	144199	0.000517

Table 174: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	303809 116968	9945 73296	30.5 1.6	5.47e-12 1.39e-01		0-000	0.000

Table 175: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	302378 61357	11125 88949	27.18 0.69		277892 -134419	326864 257133	0.000

Table 176: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	298167 90429	10446 101154	28.543 0.894	1.15e-11 3.90e-01	275175 -132209		0.000

Table 177: microbiome_vs_brain_yr1: yr1.WM vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1	345770 -179	29398 108	11.76 -1.66	1.43e-07 1.26e-01			0.000 0.186

Table 178: microbiome_vs_brain_yr1: yr1.WM vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(>\! t)$	2.5~%	97.5~%	R2
Intercept observed_otus	351167 -335	30753 191	11.42 -1.76	1.93e-07 1.07e-01		418853.0 84.7	$0.000 \\ 0.205$

Table 179: microbiome_vs_brain_yr1: yr1.WM vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	351094	50478	6.96	2.41e-05	239993	462196	0.0000
PD_whole_tree	-5109	4918	-1.04	3.21 e-01	-15934	5715	0.0825

Table 180: microbiome_vs_brain_yr1: yr1.WM vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon		51156 11692	7.49 -1.66	1.21e-05 1.25e-01			0.000 0.187

Table 181: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	137585 -11978	3418 8309	40.25 -1.44	2.70e-13 1.77e-01			0.000

Table 182: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	137345 46864	2951 18288	46.54 2.56	5.52e-14 2.64e-02		143841 87116	

Table 183: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	138425 -31390	3669 39558		5.49e-13 4.44e-01			

Table 184: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.4	$137951 \\ 31335$	3613 38932	$38.178 \\ 0.805$	4.81e-13 4.38e-01			

Table 185: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	137938 3496	3715 23670	37.132 0.148	6.52e-13 8.85e-01			

Table 186: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	138136 5883	3840 28300	$35.975 \\ 0.208$	9.21e-13 8.39e-01			0.00000 0.00359

Table 187: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	138496 13099	3930 31424	35.239 0.417	1.15e-12 6.85e-01			0.0000 0.0143

Table 188: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	138510 -33480	3625 35098		4.76e-13 3.61e-01			$0.0000 \\ 0.0705$

Table 189: microbiome_vs_brain_yr1: yr1.CSF vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept chao1	151236.8 -51.8	10639.9 39.2				174655.0 34.4	0.000 0.127

Table 190: microbiome_vs_brain_yr1: yr1.CSF vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept	152692.6	11194.6	13.64	3.09e-08		177331.9	0.000
observed_otus	-96.2	69.5	-1.39	1.93e-01		56.7	0.138

Table 191: microbiome_vs_brain_yr1: yr1.CSF vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	147986	18178	8.141	5.53e-06	107977	187996	0.0000
PD_whole_tree	-1000	1771	-0.565	5.84 e-01	-4898	2898	0.0259

Table 192: microbiome_vs_brain_yr1: yr1.CSF vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon		19864 4540	7.235 -0.297	1.68e-05 7.72e-01			$0.00000 \\ 0.00729$

Table 193: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	655448	13693 33283	47.869 -0.662	4.05e-14 5.22e-01			0.0000

Table 194: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	654752 106615	12971 80383	50.48 1.33	2.27e-14 2.12e-01			

Table 195: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	650236 371503	9581 103287	67.9 3.6	8.82e-16 4.19e-03			

Table 196: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5~%	R2
Intercept	656131	13773	47.638	4.27e-14	625816	686446	0.000
wunifrac.PC.4	74097	148399	0.499	6.27e-01	-252528	400721	

Table 197: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	656151	13840	47.409	4.51e-14	625689	686613	0.0000
unifrac.PC.1	33233	88186	0.377	7.13e-01	-160862	227329	0.0117

Table 198: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	660575	13414	49.2	2.97e-14			
unifrac.PC.2	128803	98863	1.3	2.19e-01	-88792	346399	0.124

Table 199: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	661188	14152	46.72	5.29e-14	630040	692335	0.000
unifrac.PC.3	118314	113149	1.05	3.18e-01	-130726	367354	

Table 200: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4	00===0	12294 119049	53.05 1.88	1.31e-14 8.72e-02			

Table 201: microbiome_vs_brain_yr1: yr1.GM vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept chao1	685682 -115	41857 154		4.49e-09 4.70e-01		777808 224	0.0000 0.0445

Table 202: microbiome_vs_brain_yr1: yr1.GM vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed_otus	689477 -218	44198 274		7.54e-09 4.44e-01		786755 386	0.0000 0.0499

Table 203: microbiome_vs_brain_yr1: yr1.GM vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	736834	64447	11.43	1.91e-07	594988	878681	0.00
PD_whole_tree	-8032	6279	-1.28	2.27e-01	-21852	5788	0.12

Table 204: microbiome_vs_brain_yr1: yr1.GM vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon		70720 16163	10.39 -1.13	5.05e-07 2.83e-01	0.0000	000=-0	0.0000 0.0961

Table 205: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	1092891	24027	45.487	7.09e-14	1040009	1145774	$0.000 \\ 0.021$
wunifrac.PC.1	-29624	58403	-0.507	6.22e-01	-158167	98919	

Table 206: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	-00-00	22382 138697	48.76 1.41		1042042 -109764		

Table 207: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	1085412 529426	19648 211821	55.2 2.5	8.44e-15 2.95e-02	1042167 63211		$0.000 \\ 0.342$

Table 208: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	Pr(> t)	2.5 %	97.5 %	R2
Intercept	1093902	23238	47.073	4.87e-14	1042755	1145048	0.0000
wunifrac.PC.4	247265	250378	0.988	3.45 e-01	-303813	798344	0.0752

Table 209: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1093810	24202	45.194	7.61e-14	1040541	1147079	0.00000
unifrac.PC.1	31377	154210	0.203	8.42e-01	-308037	370792	0.00344

Table 210: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2		22878 168615	48.19 1.49			1152874 622774	

Table 211: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3		24786 198179		9.10e-14 3.52e-01			$0.0000 \\ 0.0731$

Table 212: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4	1088895 280497	22990 222626	47.36 1.26			1139497 770494	0.000

Table 213: microbiome_vs_brain_yr1: yr1.ICV vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1182688	69101	17.12	2.82e-09		1334779	0.000
chao1	-346	254	-1.36	2.01e-01		214	0.134

Table 214: microbiome_vs_brain_yr1: yr1.ICV vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept	1193336	72550	16.45	4.30e-09		1353017	0.000
observed_otus	-649	450	-1.44	1.77e-01		342	0.148

Table 215: microbiome_vs_brain_yr1: yr1.ICV vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	Pr(> t)	2.5 %	97.5 %	R2
Intercept	1235915	111997	11.0	2.74e-07	989412	1482419	0.000
PD_whole_tree	-14142	10912	-1.3	2.22e-01	-38158	9875	0.123

Table 216: microbiome_vs_brain_yr1: yr1.ICV vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	1261485	119430	10.56	4.27e-07		1524349	0.000
shannon	-39021	27296	-1.43	1.81e-01		21057	0.146

Table 217: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2461	70.9	34.693	1.37e-12	2304	2617	0.0000
wunifrac.PC.1	-128	172.4	-0.742	4.74e-01	-507	252	0.0439

Table 218: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	2467 -198	72.1 446.6	34.226 -0.444	1.59e-12 6.66e-01		2625 785	$0.0000 \\ 0.0162$

Table 219: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2443	63.4	38.51	4.38e-13	2304	2583	0.00
wunifrac.PC.3	1332	683.9	1.95	7.75e-02	-174	2837	0.24

Table 220: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	2464	71.5	0 0 0	1.48e-12			0.000
wumirac.PC.4	-410	770.9	-0.343	5.98e-01	-2113	1218	0.024

Table 221: microbiome_vs_brain_yr1: yr1.Hippocampus_LR vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2464.3	72.5	33.9937	1.71e-12	2305	2624	0.000000
unifrac.PC.1	24.6	461.9	0.0532	9.58 e- 01	-992	1041	0.000236

Table 222: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac. PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.2	2459 -160	74.7 550.8		2.44e-12 7.77e-01	-		0.00000 0.00699

Table 223: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	2468.0 85.6	77.2 617.0	31.982 0.139	3.32e-12 8.92e-01			0.0000 0.0016

Table 224: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac. PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2449	68.2	35.92	9.36e-13	2299	2599	0.00
unifrac.PC.4	885	660.2	1.34	2.07e-01	-568	2338	0.13

Table 225: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	2508.877 -0.173	222.88 0.82		2.24e-07 8.36e-01		2999.44 1.63	$0.00000 \\ 0.00371$

Table 226: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	2490.230 -0.169	236.41 1.47		4.39e-07 9.10e-01		3010.56 3.06	0.00000 0.00111

Table 227: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs PD whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2838.2	340.6	8.33	4.43e-06	2089	3587.9	0.0000
PD_whole_tree	-37.2	33.2	-1.12	2.86e-01	-110	35.8	0.0948

Table 228: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2656.1	384.4	6.910	2.55e-05		3502	0.0000
shannon	-44.6	87.9	-0.508	6.21e-01		149	0.0211

Table 229: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1987	29.6	67.07	1.00e-15	-	2053	0.000
wunifrac.PC.1	-210	72.0	-2.92	1.39e-02		-52	0.416

Table 230: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1993.1	39.5	50.4561	2.28e-14	1906	2080	0.000000
wunifrac.PC.2	20.9	244.8	0.0853	9.34 e-01	-518	560	0.000607

Table 231: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1991	39.7	50.156	2.43e-14	1903	2078	0.0000
wunifrac.PC.3	171	427.9	0.399	6.97 e-01	-771	1113	0.0131

Table 232: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.
PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.4	1993 -553	36.2 390.4	55.00 -1.42	8.84e-15 1.85e-01			0.000 0.143

Table 233: microbiome_vs_brain_yr1: yr1.Amygdala_LR vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1993	39.4	50.64	2.19e-14	1907	2080	0.00000
unifrac.PC.1	-35	250.8	-0.14	8.92e-01	-587	517	0.00162

Table 234: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.2	1988 -164	40.2 296.4		2.85e-14 5.92e-01		2076 489	0.0000 0.0248

Table 235: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2010	39.2	51.26	1.92e-14		2097	0.000
unifrac.PC.3	396	313.6	1.26	2.33e-01		1086	0.117

Table 236: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1999	38.6	51.848	1.69e-14	1914	2084	0.0000
unifrac.PC.4	-337	373.4	-0.902	3.86 e- 01	-1159	485	0.0636

Table 237: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	1899.097	117.583	16.151	5.22e-09	1640.299	2157.90	$0.0000 \\ 0.0565$
chao1	0.367	0.433	0.848	4.15e-01	-0.586	1.32	

Table 238: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1885.613	123.929	15.215	9.81e-09	1612.85	2158.4	0.000
$observed_otus$	0.703	0.769	0.913	3.81e-01	-0.99	2.4	0.065

Table 239: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs PD whole tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1823.9	188.3	9.687	1.02e-06	1409.5	2238.3	0.0000
PD_whole_tree	16.9	18.3	0.919	3.78e-01	-23.5	57.2	0.0658

Table 240: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1902.4	209.5	9.082	1.92e-06		2363	0.000
shannon	21.2	47.9	0.442	6.67e-01		127	0.016

Table 241: microbiome_vs_brain_yr1: yr1.mPFC vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.1	80613 -6951	1926 4682	41.85 -1.48	1.77e-13 1.66e-01			$0.000 \\ 0.155$

Table 242: microbiome_vs_brain_yr1: yr1.mPFC vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	80678	2045	39.459	3.36e-13	76178	85178	0.0000
wunifrac.PC.2	10847	12670	0.856	4.10e-01	-17040	38734	0.0576

Table 243: microbiome_vs_brain_yr1: yr1.mPFC vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	80010	1588	50.37	2.32e-14			0.000
wunifrac.PC.3	51073	17125	2.98	1.25e-02	13382	88765	0.426

Table 244: microbiome_vs_brain_yr1: yr1.mPFC vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	80815 2337	2104 22673	38.405 0.103	4.51e-13 9.20e-01			0.000000 0.000884

Table 245: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.1	80837 11524	2034 12957	39.751 0.889	3.10e-13 3.93e-01		000-0	0.0000 0.0618

Table 246: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	81047	2161	37.50	5.85e-13			0.0000
unifrac.PC.2	0091	15928	0.42	6.83e-01	-28365	41748	0.0145

Table 247: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	81766 22085	2082 16650	39.26 1.33	3.54e-13 2.12e-01			0.000 0.128

Table 248: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4	80455 20772	2035 19707	39.53 1.05	3.29e-13 3.14e-01			$0.0000 \\ 0.0847$

Table 249: microbiome_vs_brain_yr1: yr1.mPFC vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept chao1		6397.7 23.5		4.51e-08 5.93e-01		98230.7 38.8	$0.0000 \\ 0.0247$

Table 250: microbiome_vs_brain_yr1: yr1.mPFC vs observed_otus, df=11

	se sta. Eller	t varue	11(/[6])	2.3 70	97.5 %	R2
Intercept 83738.6 observed otus -19.1	6806.4 42.2		9.0e-08 6.6e-01			0.0000 0.0167

Table 251: microbiome_vs_brain_yr1: yr1.mPFC vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept PD whole tree	87588 -674	10230 997	8.562 -0.676	3.41e-06 5.13e-01			$0.0000 \\ 0.0367$

Table 252: microbiome_vs_brain_yr1: yr1.mPFC vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon pdf 2	91691 -2530	10788 2466	8.50 -1.03	3.66e-06 3.27e-01			0.0000 0.0807

Microbiome alpha diversity difference (yr1 vs neo) vs brain volume

Table 253: div_diff_vs_brain_yr1: WM vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	320845 -158	16345.8 84.6	19.63 -1.87		-	357265.7 30.7	0.00 0.24

Table 254: div_diff_vs_brain_yr1: WM vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	322790	17118	18.86	3.81e-09	284649	360931	0.000
$observed_otus$	-286	152	-1.88	8.95 e-02	-625	53	0.243

Table 255: div_diff_vs_brain_yr1: WM vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	324788	26451	12.28	2.35e-07	265851	383724	0.000
PD_whole_tree	-5696	4781	-1.19	2.61e-01	-16349	4957	0.114

Table 256: div_diff_vs_brain_yr1: WM vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	321784	16225	19.83	2.33e-09	285633	357935	0.000
shannon	-16725	8593	-1.95	8.02e-02	-35870	2421	0.256

Table 257: div_diff_vs_brain_yr1: CSF vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	145183.1 -44.5	6701.1 34.7		9.80e-10 2.28e-01		160114.1 32.8	0.00

Table 258: div_diff_vs_brain_yr1: CSF vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	146024.1 -83.8			1.38e-09 2.07e-01		$161574.4 \\ 54.5$	$0.000 \\ 0.142$

Table 259: div_diff_vs_brain_yr1: CSF vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept PD whole tree	143391 -1039	10616 1919		9.53e-08 6.00e-01			0.000

Table 260: div_diff_vs_brain_yr1: CSF vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon		6950 3681	_0.00	1.57e-09 3.63e-01			$0.0000 \\ 0.0764$

Table 261: div_diff_vs_brain_yr1: GM vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	664245.0	25573	25.974	1.65e-10	607264	721226	0.0000
chao1	-74.9	132	-0.565	5.84e-01	-370	220	0.0282

Table 262: div_diff_vs_brain_yr1: GM vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	663031	26960		2.82e-10		723101	0.0000
$observed_otus$	-113	240	-0.472	6.47e-01	-647	421	0.0199

Table 263: div_diff_vs_brain_yr1: GM vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept PD_whole_tree	688344 -7038	36679 6630	18.77 -1.06	4.00e-09 3.13e-01			$0.0000 \\ 0.0929$

Table 264: div_diff_vs_brain_yr1: GM vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	670057	25181	26.609	1.30e-10	613950	726165	0.0000
shannon	-11356	13336	-0.851	4.14e-01	-41070	18359	0.0618

Table 265: div_diff_vs_brain_yr1: ICV vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1130273	41082	27.5	9.32e-11	1038738	1221808	0.000
chao1	-277	213	-1.3	2.22e-01	-751	197	0.134

Table 266: div_diff_vs_brain_yr1: ICV vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	1131845 -483	43344 385	26.11 -1.25	1.56e-10 2.39e-01		1228422 376	$0.000 \\ 0.125$

Table 267: div_diff_vs_brain_yr1: ICV vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept PD_whole_tree	1156522 -13774	61636 11141	18.76 -1.24		1019189 -38597	$\frac{1293856}{11050}$	$0.000 \\ 0.122$

Table 268: div_diff_vs_brain_yr1: ICV vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept shannon		40421 21407	28.09 -1.48		1045340 -79289	1225467 16106	$0.000 \\ 0.165$

Table 269: div_diff_vs_brain_yr1: Hippocampus_LR vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept chao1	2.45e+03 1.23e-02		17.556 0.017	7.64e-09 9.87e-01	_	2763.84 1.62	0.00e+00 2.62e-05

Table 270: div_diff_vs_brain_yr1: Hippocampus_LR vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2432.995	146.4	16.623	1.30e-08	2106.88	2759.11	0.00000
$observed_otus$	0.227	1.3	0.174	8.65 e-01	-2.67	3.13	0.00275

Table 271: div_diff_vs_brain_yr1: Hippocampus_LR vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	2577.0	203.8	12.644	1.78e-07	2123	3031.1	0.0000
PD_whole_tree	-23.9	36.8	-0.649	5.31e-01	-106	58.2	0.0368

Table 272: div_diff_vs_brain_yr1: Hippocampus_LR vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept		140		6.84e-09			0.00000
shannon	-18.1	74	-0.245	8.12e-01	-183	147	0.00542

Table 273: div_diff_vs_brain_yr1: Amygdala_LR vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1963.260	75.093	26.14	1.54e-10	1795.941	2130.58	0.0000
chao1	0.214	0.389	0.55	5.94 e-01	-0.652	1.08	0.0268

Table 274: div_diff_vs_brain_yr1: Amygdala_LR vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	1952.80 0.47	78.210 0.696	24.969 0.676	2.43e-10 5.14e-01		2127.06 2.02	0.0000 0.0399

Table 275: div_diff_vs_brain_yr1: Amygdala_LR vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	1890.8	107.5	17.59	7.52e-09			
PD_whole_tree	20.8	19.4	1.07	3.09e-01	-22.5	64.1	0.0945

Table 276: div_diff_vs_brain_yr1: Amygdala_LR vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept		74.2 39.3	26.268 0.803	1.47e-10 4.41e-01		2113 119	$0.0000 \\ 0.0554$

Table 277: div_diff_vs_brain_yr1: mPFC vs chao1, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	81984 -10	3955.7 20.5		1.51e-09 6.35e-01		90798.3 35.6	$0.0000 \\ 0.0213$

Table 278: div_diff_vs_brain_yr1: mPFC vs observed_otus, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept observed_otus	81453.4 -11.3			2.77e-09 7.68e-01			$0.00000 \\ 0.00828$

Table 279: div_diff_vs_brain_yr1: mPFC vs PD_whole_tree, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept PD_whole_tree	83857 -678	5842 1056		5.33e-08 5.35e-01			0.0000 0.0361

Table 280: div_diff_vs_brain_yr1: mPFC vs shannon, df=10

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon pdf 2	81888 -961	3977 2106	20.591 -0.456	1.61e-09 6.58e-01			0.0000 0.0186

Microbiome alpha diversity at neo to predict change of brain volume from neo to yr1

Table 281: neo_div_vs_diff_brain: diff.WM vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	98957	24912	3.97	0.00219	-	153789	0.000
chao1	336	246	1.36	0.20008		878	0.134

Table 282: neo_div_vs_diff_brain: diff.WM vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed_otus	111825 342	27946 472	4.001 0.725			173333 1381	0.0000 0.0419

Table 283: neo_div_vs_diff_brain: diff.WM vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	141830	42240	3.358	0.00639	48860	234799	0.00000
PD_whole_tree	-2240	8664	-0.259	0.80078	-21310	16830	0.00554

Table 284: neo_div_vs_diff_brain: diff.WM vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept shannon		38826 14476	2.492 0.907	0.0299 0.3840	11294 -18736	$182205 \\ 44985$	0.0000 0.0641

Table 285: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.1	131798 -18922	8587 35741	15.348 -0.529	8.95e-09 6.07e-01			$0.0000 \\ 0.0228$

Table 286: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	130936 23797	8596 79622	15.233 0.299	9.69e-09 7.71e-01	112017 -151449		0.0000

Table 287: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.3	131148 24334	8579 96378	15.287 0.252	9.33e-09 8.05e-01	112265 -187793		0.0000

Table 288: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	131051	9874	13.2726	4.10e-08	109319	152783	0.00e+00
wunifrac.PC.4	1674	93895	0.0178	9.86 e - 01	-204987	208336	2.65 e - 05

Table 289: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.1	129036 42206	8905 58816	14.491 0.718	1.64e-08 4.88e-01			0.0000

Table 290: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	131069 11110	8591 50967	15.257 0.218	9.53e-09 8.31e-01	112161 -101069		0.00000

Table 291: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.3	132660 85600	8013 61699	16.56 1.39	4.02e-09 1.93e-01			

Table 292: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	129421 -80888	8207 66898	15.77 -1.21	6.72e-09 2.52e-01			0.000

Table 293: neo_div_vs_diff_brain: diff.GM vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept chao1	362282 106	31008 307	11.683 0.347	1.53e-07 7.35e-01		430530 781	$0.00000 \\ 0.00991$

Table 294: neo_div_vs_diff_brain: diff.GM vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept observed_otus	381339 -157	32992 557		1.71e-07 7.83e-01			$0.00000 \\ 0.00658$

Table 295: neo_div_vs_diff_brain: diff.GM vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	353020	48675	7.253	1.64 e-05	245886	460154	0.0000
PD_whole_tree	4073	9984	0.408	6.91 e-01	-17902	26049	0.0137

Table 296: neo_div_vs_diff_brain: diff.GM vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept shannon		46437 17313	7.757 0.271	8.75e-06 7.92e-01			

Table 297: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.1	371462 28734	9848 40989	37.718 0.701	5.50e-13 4.98e-01	0 -0 . 0 0	000-00	0.000

Table 298: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	373254 -93096	9519 88178	39.21 -1.06	3.60e-13 3.14e-01	352302 -287174		

Table 299: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	372512	9512	39.16	3.65e-13	351576	393449	0.000
wunifrac.PC.3	109896	106864	1.03	3.26e-01	-125310	345101	0.081

Table 300: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	366888	10903	33.65	1.91e-12	342890	390887	0.0000
wunifrac.PC.4	108096	103686	1.04	3.20 e-01	-120114	336307	0.0831

Table 301: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	376359	9923	37.93	5.17e-13	354518	398200	0.000
unifrac.PC.1	-78195	65544	-1.19	2.58e-01	-222457	66068	0.106

Table 302: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.2	371949 84616	8990 53335	41.37 1.59	2.00e-13 1.41e-01			

Table 303: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	372145	10029	37.106	6.57e-13	350071	394219	0.00000
unifrac.PC.3	-17999	77224	-0.233	8.20e-01	-187968	151970	0.00451

Table 304: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	370801 -78436	9686 78956	000-	4.67e-13 3.42e-01	0 -0 -0-	00	0.000 0.076

Table 305: neo_div_vs_diff_brain: diff.CSF vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	64599	19493	3.314	0.0069	21696	107502	$0.0000 \\ 0.0234$
chao1	103	193	0.536	0.6028	-321	527	

Table 306: neo_div_vs_diff_brain: diff.CSF vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	70038.8	20923	3.347	0.00651	23988	116090	0.00000
$observed_otus$	78.9	353	0.223	0.82744	-699	857	0.00414

Table 307: neo_div_vs_diff_brain: diff.CSF vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept PD_whole_tree	92525 -3777	30560 6268	3.028 -0.603	$0.0115 \\ 0.5590$		$159786 \\ 10019$	

Table 308: neo_div_vs_diff_brain: diff.CSF vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept		29163	3.054	0.011		153245	
shannon	-5558	10873	-0.511	0.619	-29490	18373	0.0213

Table 309: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.1	75514 -29246	6013 25025	12.56 -1.17	7.27e-08 2.67e-01		000	0.000 0.102

Table 310: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	74331 19203	6296 58320	11.806 0.329	1.38e-07 7.48e-01	60473 -109159	00-00	$0.00000 \\ 0.00895$

Table 311: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	74481 -29297	6258 70306		1.27e-07 6.85e-01		88255 125445	$0.0000 \\ 0.0143$

Table 312: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	81266	5922	13.72	2.90e-08		94301	0.000
wunifrac.PC.4	-131265	56319	-2.33	3.98e-02		-7308	0.312

Table 313: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	71254	5982	11.91	1.26e-07	58087	84421	0.000
unifrac.PC.1	65064	39513	1.65	1.28e-01	-21903	152032	0.184

Table 314: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	74156 55247	5653 33535	13.12 1.65	4.63e-08 1.28e-01	0-1-0		0.000

Table 315: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3	75510 57143	5961 45902	12.67 1.24	6.66e-08 2.39e-01	0_000		0.000 0.114

Table 316: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	74669	6397	11.673	1.54e-07	60590	88748	0.0000
unifrac.PC.4	8288	52140	0.159	8.77e-01	-106472	123048	0.0021

Table 317: neo_div_vs_diff_brain: diff.ICV vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	525838 545	55005 544	9.56 1.00	1.16e-06 3.38e-01		646903 1742	$0.0000 \\ 0.0773$

Table 318: neo_div_vs_diff_brain: diff.ICV vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept observed_otus	563203 264	60846 1028	9.256 0.257	1.59e-06 8.02e-01		697125 2526	$0.00000 \\ 0.00546$

Table 319: neo_div_vs_diff_brain: diff.ICV vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept PD_whole_tree	587375 -1944	90346 18532		4.42e-05 9.18e-01			0.000000 0.000916

Table 320: neo_div_vs_diff_brain: diff.ICV vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept shannon	545999 12250	85300 31803	6.401 0.385	5.07e-05 7.07e-01			

Table 321: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.1	578775 -19434	18499 76995	00	4.22e-12 8.05e-01	00000	0-0-0-	0.0000

Table 322: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	578521 -50097	18340 169888	0 = 10 = 0	3.86e-12 7.74e-01	000-0-	0-0000	0.0000

Table 323: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	578141 104932	18139 203773	00.0	3.45e-12 6.17e-01			0.000

Table 324: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	579205	21055	27.510	1.71e-11	532864	625546	0.000000
wunifrac.PC.4	-21494	200220	-0.107	9.16e-01	-462175	419187	0.000959

Table 325: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	576649	19392	29.737	7.34e-12	533967	619330	0.00000
unifrac.PC.1	29076	128085	0.227	8.25 e-01	-252837	310989	0.00428

Table 326: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	577174	16689	34.58	1.42e-12	540443	613906	0.000

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
unifrac.PC.2	150973	99009	1.52	1.56e-01	-66943	368889	0.162

Table 327: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.3		17875 137639	0=:-00	2.82e-12 3.84e-01	0 -00	0-0000	0.000

Table 328: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.4	574892 -151036	17780 144928	32.33 -1.04	2.95e-12 3.20e-01			

Table 329: neo_div_vs_diff_brain: diff. Hippocampus_LR vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	1579.75 -0.26	267.51 2.64		0.000102 0.923569			0.000000 0.000802

Table 330: neo_div_vs_diff_brain: diff. Hippocampus_LR vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	1647.62 -1.64	282.72 4.78	5.828 -0.344	0.000115 0.737328			$0.00000 \\ 0.00977$

Table 331: neo_div_vs_diff_brain: diff. Hippocampus_LR vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept PD_whole_tree	1648.0 -19.5	420.0 86.2	3.924 -0.226	0.00238 0.82504	. – –		$0.00000 \\ 0.00425$

Table 332: neo_div_vs_diff_brain: diff. Hippocampus_LR vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept	1612.3	400	4.035	0.00196	733	2492	0.0000
shannon	-21.9	149	-0.147	0.88571	-350	306	0.0018

Table 333: neo_div_vs_diff_brain: diff. Hippocampus_LR vs wunifrac. PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1560	85.8	18.181	1.48e-09	1371	1749	0.000
wunifrac. PC. 1	-142	357.1	-0.398	6.98 e- 01	-928	644	0.013

Table 334: neo_div_vs_diff_brain: diff. Hippocampus_LR vs wunifrac. PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept wunifrac.PC.2	1557 -300	85.2 789.2	18.28 -0.38	1.40e-09 7.11e-01			0.0000 0.0119

Table 335: neo_div_vs_diff_brain: diff. Hippocampus_LR vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1555	76.6	20.31	4.53e-10			0.000
wunifrac.PC.3	1416	860.3	1.65	1.28e-01	-478	3310	0.184

Table 336: neo_div_vs_diff_brain: diff. Hippocampus_LR vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1594	95.1	16.765	3.52e-09	1385	1803	0.0000
wunifrac.PC.4	-762	904.3	-0.843	4.17e-01	-2752	1228	0.0559

Table 337: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.1	1578 -474	87.9 580.6	17.958 -0.817	1.69e-09 4.31e-01			$0.0000 \\ 0.0527$

Table 338: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	1549 907	72.1 427.5	21.50 2.12	2.45e-10 5.73e-02		1708 1848	$0.000 \\ 0.273$

Table 339: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1550	85.6	18.113	1.54e-09	1361	1738	0.0000
unifrac.PC.3	-289	658.8	-0.439	6.69 e-01	-1739	1161	0.0158

Table 340: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept unifrac.PC.4	1554.0 -42.6	86.8 707.4		1.74e-09 9.53e-01			0.000000 0.000302

Table 341: neo_div_vs_diff_brain: diff.Amygdala_LR vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept chao1	1060.820 0.859	143.11 1.41		1.34e-05 5.56e-01			0.0000 0.0298

Table 342: neo_div_vs_diff_brain: diff.Amygdala_LR vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed_otus	1050.59 1.64	151.72 2.56	6.92 0.64	2.51e-05 5.36e-01		1384.52 7.28	$0.000 \\ 0.033$

Table 343: neo_div_vs_diff_brain: diff.Amygdala_LR vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept PD_whole_tree	1091.3 10.9	228.3 46.8	$4.780 \\ 0.232$	$\begin{array}{c} 0.000571 \\ 0.820914 \end{array}$			0.00000 0.00446

Table 344: neo_div_vs_diff_brain: diff.Amygdala_LR vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept		213.5 79.6		9.15e-05 5.34e-01			$0.0000 \\ 0.0332$

Table 345: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1137	45.2	25.153	4.51e-11	1037	1236	0.0000
wunifrac. PC. 1	176	188.1	0.938	3.69 e-01	-238	590	0.0683

Table 346: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.2	1139 483	43.9 406.5	25.96 1.19	3.21e-11 2.59e-01	-	1236 1378	$0.000 \\ 0.105$

Table 347: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept wunifrac.PC.3	1143 -158	46.3 519.9		5.50e-11 7.67e-01		1245 987	0.0000 0.0076

Table 348: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	1188 -878	45.5 432.6	26.12 -2.03	3.00e-11 6.73e-02		1288.6 74.2	$0.000 \\ 0.256$

Table 349: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	1156	47.8	24.20	6.86e-11	1051	1261	0.0000
unifrac.PC.1	-259	315.6	-0.82	4.30 e - 01	-953	436	0.0531

Table 350: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	1142 265	44.5 264.1	25.6 1.0	3.66e-11 3.38e-01			0.0000 0.0772

Table 351: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5 %	R2
Intercept	1140	46.4	24.59	5.76e-11	1038	1242	0.0000
unifrac.PC.3	-186	356.9	-0.52	6.13e-01	-971	600	0.0221

Table 352: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4	1142.0 -51.4	47.1 384.3		6.79e-11 8.96e-01		1246 795	0.00000 0.00149

Table 353: neo_div_vs_diff_brain: diff.mPFC vs chao1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept chao1	46974.8 56.6	4009.1 39.6	11.72 1.43	1.49e-07 1.81e-01		55799 144	$0.000 \\ 0.145$

Table 354: neo_div_vs_diff_brain: diff.mPFC vs observed_otus, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept observed otus	47638.3 84.3	4384.3 74.1	10.87 1.14	3.21e-07 2.79e-01		57288 247	$0.0000 \\ 0.0974$

Table 355: neo_div_vs_diff_brain: diff.mPFC vs PD_whole_tree, df=11

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$	2.5~%	97.5~%	R2
Intercept PD_whole_tree	39842 2630	5674 1164	7.02 2.26	$\begin{array}{c} 0.000022 \\ 0.045098 \end{array}$		52329 5191	0.000 0.299

Table 356: neo_div_vs_diff_brain: diff.mPFC vs shannon, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	48979	6436	7.610	1.05e-05	34812	63145	0.000
shannon	1304	2400	0.544	5.98e-01	-3977	6586	0.024

Table 357: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	51978	1110	46.83	5.15e-14	49535	54421	0.000
wunifrac.PC.1	11986	4619	2.59	2.49 e-02	1820	22153	0.359

Table 358: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.2	52450 -6262	1384 12816		5.20e-13 6.35e-01			

Table 359: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.3	52406 21787	1266 14218	41.41 1.53	1.98e-13 1.54e-01			0.000 0.164

Table 360: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept wunifrac.PC.4	51832 10943	1562 14853	00.200	2.22e-12 4.77e-01			0.0000 0.0433

Table 361: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.1, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.1	52959 -11295	1383 9137	000	4.67e-13 2.42e-01			0.000 0.113

Table 362: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.2, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5~%	97.5~%	R2
Intercept unifrac.PC.2	52354 6891	1350 8012	38.77 0.86	4.07e-13 4.08e-01			$0.0000 \\ 0.0581$

Table 363: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.3, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept	52143	1292	40.36	2.62e-13	49299	54986	0.000
unifrac. $PC.3$	-14267	9947	-1.43	1.79e-01	-36160	7626	0.146

Table 364: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.4, df=11

	Estimate	Std. Error	t value	$\Pr(> t)$	2.5 %	97.5 %	R2
Intercept unifrac.PC.4 pdf 2	52491 4431	1406 11461	37.333 0.387	6.15e-13 7.06e-01		55585 29655	0.0000 0.0123