Association of microbiome vs brain in GIMA dataset

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Spaghetti plot of behavior data

Microbiome neo vs brain volume

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	166903.26	2876.962	58.014	0.000	160978.04	172828.469	0.000
wunifrac.PC.1	-12964.25	10385.071	-1.248	0.223	-34352.71	8424.198	0.057

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	166848.38	2969.064	56.196	0.000	160733.48	172963.28	0
wunifrac.PC.2	1021.33	21316.803	0.048	0.962	-42881.45	44924.11	0

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	166807.558	2964.805	56.263	0.000	160701.43	172913.69	0.000
wunifrac.PC.3	5766.237	24355.889	0.237	0.815	-44395.66	55928.13	0.002

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	166357.20	2895.138	57.461	0.000	160394.6	172319.85	0.00
wunifrac.PC.4	37028.98	28699.720	1.290	0.209	-22079.2	96137.16	0.06

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	166986.33	2856.539	58.458	0.000	161103.2	172869.48	0.00
unifrac.PC.1	-26060.92	18581.920	-1.402	0.173	-64331.1	12209.26	0.07

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	166939.26	2930.54	56.965	0.000	160903.70	172974.82	0.000
unifrac.PC.2	-16703.01	20974.86	-0.796	0.433	-59901.54	26495.53	0.024

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	166928.90	2869.257	58.178	0.000	161019.56	172838.25	0.000
unifrac.PC.3	27763.47	21244.284	1.307	0.203	-15989.95	71516.89	0.062

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	166809.03	2959.872	56.357	0.000	160713.06	172905.00	0.000
unifrac.PC.4	-10128.17	30560.967	-0.331	0.743	-73069.66	52813.31	0.004

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	176341.418	9821.759	17.954	0.000	156113.128	196569.709	0.000
chao1	-96.945	95.734	-1.013	0.321	-294.113	100.223	0.038

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	176844.227	10014.064	17.660	0.000	156219.88	197468.578	0.00
observed_otus	-169.117	162.028	-1.044	0.307	-502.82	164.587	0.04

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	175925.889	14224.726	12.368	0.00	146629.517	205222.261	0.000
PD_whole_tree	-1876.652	2874.833	-0.653	0.52	-7797.482	4044.177	0.016

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	173987.264	14763.840	11.785	0.000	143580.57	204393.962	0.000
shannon	-2583.315	5229.095	-0.494	0.626	-13352.84	8186.209	0.009

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	276740.59	6869.174	40.287	0.000	262593.26	290887.914	0.000
wunifrac.PC.1	-43114.77	24795.898	-1.739	0.094	-94182.88	7953.337	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	276524.33	7282.251	37.972	0.000	261526.2	291522.4	0
wunifrac.PC.2	-1068.87	52283.921	-0.020	0.984	-108749.6	106611.9	0

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	276593.57	7275.056	38.019	0.00	261610.3	291576.8	0.000
wunifrac.PC.3	-10654.35	59764.623	-0.178	0.86	-133741.9	112433.2	0.001

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	276025.76	7291.348	37.857	0.000	261008.9	291042.6	0.000
wunifrac.PC.4	38805.39	72279.682	0.537	0.596	-110057.4	187668.2	0.011

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	276748.73	7178.451	38.553	0.000	261964.4	291533.03	0.000
unifrac.PC.1	-38699.86	46696.151	-0.829	0.415	-134872.4	57472.67	0.026

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	276904.04	7062.297	39.209	0.000	262359.0	291449.11	0.000
unifrac.PC.2	-62952.11	50547.243	-1.245	0.225	-167056.1	41151.89	0.056

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	276754.25	7025.00	39.396	0.000	262285.99	291222.5	0.000
unifrac.PC.3	69796.76	52013.85	1.342	0.192	-37327.76	176921.3	0.065

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	276502.558	7273.006	38.018	0.0	261523.5	291481.6	0.000
unifrac.PC.4	-9559.209	75094.485	-0.127	0.9	-164219.2	145100.8	0.001

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	289819.700	24420.141	11.868	0.000	239525.478	340113.923	0.000
chao1	-135.583	238.026	-0.570	0.574	-625.807	354.642	0.012

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	285037.353	25027.07	11.389	0.000	233493.146	336581.560	0.000
observed_otus	-143.782	404.94	-0.355	0.726	-977.771	690.208	0.005

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	292809.905	35026.200	8.360	0.000	220672.10	364947.71	0.000
PD_whole_tree	-3362.293	7078.834	-0.475	0.639	-17941.42	11216.84	0.009

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	269090.594	36354.65	7.402	0.000	194216.79	343964.39	0.000
shannon	2690.025	12876.18	0.209	0.836	-23828.97	29209.02	0.002

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	65604.300	3409.067	19.244	0.000	58583.19	72625.40	0.000
wunifrac.PC.1	-6732.491	12305.829	-0.547	0.589	-32076.82	18611.84	0.011

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	65414.73	3384.823	19.326	0.000	58443.56	72385.9	0.000
wunifrac.PC.2	-20778.09	24301.797	-0.855	0.401	-70828.58	29272.4	0.027

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	65750.63	3347.865	19.640	0.000	58855.57	72645.69	0.000
wunifrac.PC.3	-31155.06	27502.732	-1.133	0.268	-87798.00	25487.88	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	64881.12	3289.156	19.726	0.000	58106.98	71655.27	0.000
wunifrac.PC.4	52899.73	32605.650	1.622	0.117	-14252.86	120052.32	0.092

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	65700.98	3356.785	19.573	0.0	58787.55	72614.4	0.000
unifrac.PC.1	-23110.56	21836.038	-1.058	0.3	-68082.73	21861.6	0.041

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	65914.19	3025.167	21.789	0.000	59683.74	72144.63	0.000
unifrac.PC.2	-57999.83	21652.144	-2.679	0.013	-102593.26	-13406.41	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	65565.707	3429.453	19.118	0.00	58502.62	72628.8	0
unifrac.PC.3	-1914.775	25392.037	-0.075	0.94	-54210.65	50381.1	0

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	65386.54	3232.475	20.228	0.000	58729.13	72043.943	0.000
unifrac.PC.4	-59327.74	33375.616	-1.778	0.088	-128066.11	9410.626	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	73446.060	11471.871	6.402	0.000	49819.299	97072.822	0.000
chao1	-80.348	111.818	-0.719	0.479	-310.642	149.945	0.019

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	68877.980	11810.973	5.832	0.000	44552.826	93203.13	0.000
observed_otus	-55.893	191.102	-0.292	0.772	-449.476	337.69	0.003

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	67175.177	16587.625	4.050	0.000	33012.322	101338.031	0
PD_whole_tree	-331.196	3352.378	-0.099	0.922	-7235.547	6573.155	0

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	49583.075	16844.651	2.944	0.007	14890.866	84275.28	0.000
shannon	5779.511	5966.083	0.969	0.342	-6507.866	18066.89	0.035

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	509248.14	11606.12	43.878	0.000	485344.9	533151.39	0.00
wunifrac.PC.1	-62811.52	41895.02	-1.499	0.146	-149095.9	23472.88	0.08

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	508787.44	12118.81	41.983	0.000	483828.3	533746.6	0.000
wunifrac.PC.2	-20825.63	87008.68	-0.239	0.813	-200023.4	158372.1	0.002

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	509151.75	12096.52	42.091	0.00	484238.5	534065.0	0.000
wunifrac.PC.3	-36043.17	99372.96	-0.363	0.72	-240705.6	168619.3	0.005

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	507264.1	11938.31	42.490	0.000	482676.7	531851.5	0.000
wunifrac.PC.4	128734.1	118345.41	1.088	0.287	-115002.8	372471.0	0.044

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	509436.04	11817.96	43.107	0.000	485096.5	533775.57	0.000
unifrac.PC.1	-87871.34	76876.35	-1.143	0.264	-246201.1	70458.46	0.048

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	509757.5	11499.36	44.329	0.000	486074.1	533440.85	0.000
unifrac.PC.2	-137654.9	82304.79	-1.673	0.107	-307164.8	31854.96	0.097

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	509248.86	11839.56	43.012	0.000	484864.84	533632.9	0.000
unifrac.PC.3	95645.46	87661.34	1.091	0.286	-84896.44	276187.4	0.044

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	508698.12	12024.09	42.307	0.00	483934.0	533462.2	0.000
unifrac.PC.4	-79015.12	124149.91	-0.636	0.53	-334706.7	176676.4	0.015

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	539607.179	40441.937	13.343	0.000	456315.451	622898.907	0.000
chao1	-312.876	394.193	-0.794	0.435	-1124.731	498.979	0.024

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	530759.561	41552.020	12.773	0.000	445181.57	616337.548	0.000
observed_otus	-368.792	672.315	-0.549	0.588	-1753.45	1015.867	0.011

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	535910.970	58358.34	9.183	0.000	415719.72	656102.21	0.000
PD_whole_tree	-5570.141	11794.29	-0.472	0.641	-29860.93	18720.64	0.009

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	492660.933	60530.29	8.139	0.000	367996.46	617325.41	0.000
shannon	5886.221	21438.78	0.275	0.786	-38267.77	50040.21	0.003

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	879.352	20.632	42.621	0.000	836.860	921.844	0.000
wunifrac.PC.1	-94.494	74.476	-1.269	0.216	-247.879	58.891	0.058

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	877.792	20.923	41.954	0.000	834.701	920.883	0.000
wunifrac.PC.2	-145.940	150.217	-0.972	0.341	-455.318	163.437	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	878.989	21.303	41.262	0.000	835.116	922.862	0
wunifrac.PC.3	-16.307	175.000	-0.093	0.927	-376.727	344.113	0

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	876.398	21.113	41.509	0.00	832.915	919.882	0.000
wunifrac.PC.4	191.255	209.298	0.914	0.37	-239.802	622.313	0.031

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	879.830	20.667	42.572	0.000	837.266	922.394	0.000
unifrac.PC.1	-167.215	134.438	-1.244	0.225	-444.096	109.665	0.056

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	879.747	20.916	42.060	0.000	836.669	922.825	0.000
unifrac.PC.2	-144.324	149.705	-0.964	0.344	-452.647	164.000	0.035

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	879.698	20.167	43.622	0.000	838.164	921.232	0.000
unifrac.PC.3	252.464	149.315	1.691	0.103	-55.057	559.985	0.099

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	878.671	21.248	41.353	0.000	834.91	922.433	0.000
unifrac.PC.4	-71.717	219.390	-0.327	0.746	-523.56	380.125	0.004

Table 57: microbiome_vs_brain_neo: neo.Hippocampus_LR vs chao1, df=25

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	947.119	70.503	13.434	0.000	801.915	1092.322	0.000
chao1	-0.696	0.687	-1.013	0.321	-2.111	0.719	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	907.204	73.195	12.394	0.00	756.456	1057.953	0.000
observed_otus	-0.479	1.184	-0.404	0.69	-2.918	1.961	0.006

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	938.542	102.252	9.179	0.000	727.949	1149.134	0.000
PD_whole_tree	-12.321	20.665	-0.596	0.556	-54.882	30.240	0.013

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	817.828	105.764	7.733	0.000	600.003	1035.653	0.000
shannon	22.074	37.460	0.589	0.561	-55.076	99.224	0.013

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	900.697	22.191	40.588	0.000	854.993	946.401	0.000
wunifrac.PC.1	-214.825	80.105	-2.682	0.013	-379.804	-49.846	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	899.374	25.193	35.699	0.000	847.488	951.260	0.000
wunifrac.PC.2	-37.841	180.878	-0.209	0.836	-410.365	334.684	0.002

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	899.765	25.202	35.702	0.00	847.860	951.670	0
wunifrac.PC.3	-18.338	207.036	-0.089	0.93	-444.736	408.059	0

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	900.902	25.319	35.582	0.000	848.756	953.047	0.000
wunifrac.PC.4	-95.104	250.989	-0.379	0.708	-612.025	421.818	0.005

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
Intercept	901.285	23.555	38.263	0.000	852.773	949.798	0.000
unifrac.PC.1	-290.794	153.226	-1.898	0.069	-606.370	24.781	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	900.033	25.139	35.803	0.000	848.259	951.807	0.000
unifrac.PC.2	-63.173	179.926	-0.351	0.728	-433.737	307.391	0.005

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	900.897	22.887	39.363	0.00	853.760	948.033	0.000
unifrac.PC.3	389.114	169.457	2.296	0.03	40.111	738.116	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	899.650	25.191	35.713	0.00	847.768	951.532	0
unifrac.PC.4	-3.229	260.100	-0.012	0.99	-538.915	532.456	0

Table 69: microbiome_vs_brain_neo: neo.Amygdala_LR vs chao1, df=25

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1011.948	81.790	12.372	0.000	843.497	1180.398	0.000
chao1	-1.146	0.797	-1.437	0.163	-2.788	0.496	0.074

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	978.235	85.309	11.467	0.000	802.538	1153.933	0.000
observed_otus	-1.328	1.380	-0.962	0.345	-4.171	1.514	0.034

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	1039.592	118.419	8.779	0.000	795.702	1283.481	0.000
PD_whole_tree	-28.904	23.933	-1.208	0.238	-78.195	20.386	0.053

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	936.925	125.759	7.450	0.000	677.920	1195.931	0.000
shannon	-13.471	44.542	-0.302	0.765	-105.206	78.265	0.004

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	26101.948	658.227	39.655	0.000	24746.305	27457.592	0.000
wunifrac.PC.1	-4051.702	2376.025	-1.705	0.101	-8945.216	841.813	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	26080.902	696.354	37.454	0.000	24646.74	27515.07	0
wunifrac.PC.2	-196.093	4999.569	-0.039	0.969	-10492.90	10100.71	0

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	26085.853	695.968	37.481	0.000	24652.48	27519.23	0
wunifrac.PC.3	-604.268	5717.381	-0.106	0.917	-12379.43	11170.90	0

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	26019.355	694.45	37.468	0.00	24589.108	27449.60	0.000
wunifrac.PC.4	4827.568	6884.14	0.701	0.49	-9350.583	19005.72	0.019

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	26111.789	676.752	38.584	0.000	24717.99	27505.59	0.000
unifrac.PC.1	-5260.308	4402.306	-1.195	0.243	-14327.03	3806.41	0.052

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	26119.272	673.713	38.769	0.000	24731.73	27506.809	0.000
unifrac.PC.2	-6248.478	4821.989	-1.296	0.207	-16179.55	3682.595	0.061

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	26106.251	665.311	39.239	0.00	24736.02	27476.48	0.000
unifrac.PC.3	7508.854	4926.033	1.524	0.14	-2636.50	17654.21	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	26080.636	695.626	37.492	0.000	24647.97	27513.31	0
unifrac.PC.4	-559.928	7182.408	-0.078	0.938	-15352.37	14232.52	0

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	27565.587	2329.689	11.832	0.000	22767.504	32363.671	0.000
chao1	-15.134	22.708	-0.666	0.511	-61.902	31.633	0.017

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	27532.78	2380.034	11.568	0.00	22631.014	32434.556	0.000
observed_otus	-24.52	38.509	-0.637	0.53	-103.831	54.791	0.015

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	28171.898	3337.258	8.442	0.000	21298.687	35045.109	0.000
PD_whole_tree	-431.612	674.464	-0.640	0.528	-1820.695	957.472	0.016

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	26396.516	3478.877	7.588	0.000	19231.635	33561.398	0
shannon	-113.551	1232.158	-0.092	0.927	-2651.227	2424.126	0

Table 85: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	298745.55	11538.39	25.891	0.000	272643.9	324847.20	0.000
wunifrac.PC.1	-68740.57	57630.29	-1.193	0.263	-199109.4	61628.21	0.125

Table 86: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	293407.0	11442.57	25.642	0.000	267522.1	319291.9	0
wunifrac.PC.2	4157.2	100467.85	0.041	0.968	-223116.9	231431.3	0

Table 87: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	291031.6	11013.6	26.425	0.000	266117.2	315946.1	0.000
wunifrac.PC.3	134912.5	126846.6	1.064	0.315	-152034.4	421859.5	0.102

Table 88: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	291443.81	13346.92	21.836	0.000	261251.0	321636.7	0.000
wunifrac.PC.4	36457.49	129363.08	0.282	0.784	-256182.1	329097.1	0.008

Table 89: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	292025.90	11920.78	24.497	0.000	265059.2	318992.6	0.000
unifrac.PC.1	27790.85	73344.93	0.379	0.714	-138126.9	193708.6	0.014

Table 90: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	292280.99	11038.20	26.479	0.000	267310.85	317251.1	0.000
unifrac.PC.2	61249.33	68504.63	0.894	0.395	-93718.91	216217.6	0.074

Table 91: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	299820.6	9605.896	31.212	0.000	278090.518	321550.6	0.000
unifrac.PC.3	174789.5	78020.733	2.240	0.052	-1705.669	351284.7	0.334

Table 92: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	293357.244	11455.64	25.608	0.000	267442.8	319271.7	0.000
unifrac.PC.4	8851.687	116665.00	0.076	0.941	-255062.9	272766.2	0.001

Table 93: microbiome_vs_brain_neo: yr1.WM vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	237375.23	32062.561	7.404	0.0	164844.678	309905.783	0.000
chao1	554.22	302.099	1.835	0.1	-129.174	1237.615	0.252

Table 94: microbiome_vs_brain_neo: yr1.WM vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	245315.764	38767.044	6.328	0.00	157618.62	333012.911	0.000
observed_otus	800.002	620.771	1.289	0.23	-604.28	2204.285	0.142

Table 95: microbiome_vs_brain_neo: yr1.WM vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	269602.688	67949.00	3.968	0.003	115891.37	423314.01	0.000
PD_whole_tree	4749.646	13368.98	0.355	0.731	-25493.08	34992.38	0.012

Table 96: microbiome_vs_brain_neo: yr1.WM vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	228935.70	63237.12	3.620	0.006	85883.39	371988.01	0.000
shannon	23529.75	22740.45	1.035	0.328	-27912.73	74972.22	0.097

Table 97: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	136657.876	4676.97	29.219	0.000	126077.8	147237.92	0.000
wunifrac.PC.1	5664.265	23359.86	0.242	0.814	-47179.4	58507.93	0.006

Table 98: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	137135.03	4045.055	33.902	0.000	127984.5	146285.6	0.000
wunifrac.PC.2	40277.72	35516.328	1.134	0.286	-40065.8	120621.2	0.114

Table 99: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	138492.14	3772.34	36.713	0.000	129958.5	147025.8	0.00
wunifrac.PC.3	-79304.63	43447.08	-1.825	0.101	-177588.8	18979.5	0.25

Table 100: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	138255.25	5011.445	27.588	0.000	126918.6	149591.93	0.000
wunifrac.PC.4	-21531.01	48572.684	-0.443	0.668	-131410.1	88348.04	0.019

Table 101: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	134648.36	3666.682	36.722	0.000	126353.750	142943.0	0.000
unifrac.PC.1	49430.87	22559.974	2.191	0.056	-1603.338	100465.1	0.324

Table 102: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	137568.96	4127.835	33.327	0.000	128231.15	146906.77	0.000
unifrac.PC.2	-25699.98	25617.930	-1.003	0.342	-83651.76	32251.81	0.091

Table 103: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	137856.8	4450.33	30.977	0.000	127789.4	147924.1	0.000
unifrac.PC.3	20664.1	36146.34	0.572	0.582	-61104.6	102432.8	0.032

Table 104: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	137316.13	4106.185	33.441	0.000	128027.3	146604.97	0.000
unifrac.PC.4	-42014.32	41817.664	-1.005	0.341	-136612.4	52583.81	0.092

Table 105: microbiome_vs_brain_neo: yr1.GM vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	127642.328	13811.10	9.242	0.000	96399.45	158885.21	0.000
chao1	93.535	130.13	0.719	0.491	-200.84	387.91	0.049

Table 106: microbiome_vs_brain_neo: yr1.GM vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	123610.944	15244.62	8.108	0.000	89125.227	158096.661	0.000
observed_otus	224.378	244.11	0.919	0.382	-327.837	776.593	0.078

Table 107: microbiome_vs_brain_neo: yr1.GM vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	131808.962	25794.664	5.110	0.001	73457.38	190160.55	0.000
PD_whole_tree	1055.503	5075.105	0.208	0.840	-10425.18	12536.19	0.004

Table 108: microbiome_vs_brain_neo: yr1.GM vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	97803.38	21499.800	4.549	0.001	49167.458	146439.3	0.000
shannon	14342.03	7731.458	1.855	0.097	-3147.744	31831.8	0.256

Table 109: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	653172.7	12442.40	52.496	0.000	625026.0	681319.35	0.000
wunifrac.PC.1	-110836.4	62145.51	-1.783	0.108	-251419.3	29746.54	0.241

Table 110: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	644554.205	13339.18	48.320	0.000	614378.9	674729.5	0
wunifrac.PC.2	-4920.591	117120.49	-0.042	0.967	-269865.5	260024.4	0

Table 111: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	641360.5	12563.23	51.051	0.00	612940.5	669780.5	0.000
wunifrac.PC.3	181942.4	144694.13	1.257	0.24	-145378.5	509263.3	0.137

Table 112: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	634863.1	14343.38	44.262	0.000	602416.1	667310.1	0.000
wunifrac.PC.4	180403.4	139021.11	1.298	0.227	-134084.2	494891.0	0.144

Table 113: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	647313.01	13679.67	47.319	0.000	616367.5	678258.6	0.000
unifrac.PC.1	-55576.25	84166.81	-0.660	0.526	-245974.8	134822.3	0.042

Table 114: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	643198.45	12821.35	50.166	0.000	614194.5	672202.3	0.00
unifrac.PC.2	74243.62	79571.10	0.933	0.375	-105758.7	254246.0	0.08

Table 115: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	651002.3	11977.03	54.354	0.000	623908.34	678096.2	0.000
unifrac.PC.3	175502.4	97279.53	1.804	0.105	-44559.17	395564.0	0.246

Table 116: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	644683.69	13335.46	48.344	0.000	614516.8	674850.6	0.000
unifrac.PC.4	-24081.65	135809.20	-0.177	0.863	-331303.4	283140.1	0.003

Table 117: microbiome_vs_brain_neo: yr1.CSF vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	630529.317	43535.965	14.483	0.000	532044.122	729014.51	0.000
chao1	138.777	410.203	0.338	0.743	-789.166	1066.72	0.011

Table 118: microbiome_vs_brain_neo: yr1.CSF vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	653519.438	49088.240	13.313	0.000	542474.125	764564.751	0.000
observed_otus	-149.074	786.043	-0.190	0.854	-1927.228	1629.079	0.004

Table 119: microbiome_vs_brain_neo: yr1.CSF vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	643269.513	79764.17	8.065	0.000	462830.42	823708.6	0
PD_whole_tree	257.275	15693.62	0.016	0.987	-35244.15	35758.7	0

Table 120: microbiome_vs_brain_neo: yr1.CSF vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	644820.085	77980.46	8.269	0.000	468416.03	821224.14	0
shannon	-95.395	28042.24	-0.003	0.997	-63531.36	63340.57	0

Table 121: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1088576.1	23794.79	45.749	0.000	1034748.6	1142403.66	0.000
wunifrac.PC.1	-173912.7	118846.79	-1.463	0.177	-442762.8	94937.44	0.176

Table 122: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1075096.23	24353.26	44.146	0.000	1020005.3	1130187.1	0.000
wunifrac.PC.2	39514.33	213826.07	0.185	0.857	-444193.8	523222.5	0.003

Table 123: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1070884.2	23947.18	44.719	0.000	1016712.0	1125056.5	0.000
wunifrac.PC.3	237550.3	275806.29	0.861	0.411	-386366.9	861467.5	0.069

Table 124: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1064562.2	27782.11	38.318	0.000	1001714.7	1127409.7	0.00
wunifrac.PC.4	195329.8	269273.95	0.725	0.487	-413810.2	804469.8	0.05

Table 125: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1073987.27	25591.78	41.966	0.000	1016094.6	1131879.9	0.000
unifrac.PC.1	21645.47	157458.43	0.137	0.894	-334550.2	377841.2	0.002

Table 126: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1073048	23839.38	45.012	0.000	1019120.0	1126976.8	0.000
unifrac.PC.2	109793	147950.56	0.742	0.477	-224894.4	444480.4	0.052

Table 127: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1088680	20533.55	53.020	0.000	1042229.497	1135129.7	0.000
unifrac.PC.3	370956	166777.01	2.224	0.053	-6319.796	748231.8	0.331

Table 128: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1075357.07	24360.83	44.143	0.000	1020249.1	1130465.1	0.000
unifrac.PC.4	-57244.28	248092.31	-0.231	0.823	-618468.1	503979.5	0.005

Table 129: microbiome_vs_brain_neo: yr1.ICV vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	995546.875	75144.471	13.248	0.000	825558.271	1165535.479	0.00
chao1	786.532	708.023	1.111	0.295	-815.128	2388.191	0.11

Table 130: microbiome_vs_brain_neo: yr1.ICV vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1022446.146	88095.758	11.606	0.00	823159.696	1221732.596	0.000
observed_otus	875.306	1410.665	0.620	0.55	-2315.841	4066.453	0.037

Table 131: microbiome_vs_brain_neo: yr1.ICV vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1044681.163	145526.79	7.179	0.000	715476.70	1373885.63	0.000
PD_whole_tree	6062.423	28632.42	0.212	0.837	-58708.62	70833.46	0.004

Table 132: microbiome_vs_brain_neo: yr1.ICV vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	971559.17	138259.00	7.027	0.000	658795.59	1284323	0.000
shannon	37776.38	49718.77	0.760	0.467	-74695.29	150248	0.055

Table 133: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2443.369	82.426	29.643	0.000	2256.908	2629.829	0.000
wunifrac.PC.1	-272.035	411.689	-0.661	0.525	-1203.340	659.271	0.042

Table 134: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2422.160	77.737	31.158	0.000	2246.307	2598.014	0.000
wunifrac.PC.2	-72.571	682.546	-0.106	0.918	-1616.597	1471.455	0.001

Table 135: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2403.084	72.907	32.961	0.000	2238.157	2568.011	0.000
wunifrac.PC.3	1089.016	839.690	1.297	0.227	-810.496	2988.528	0.144

Table 136: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2410.259	90.800	26.545	0.000	2204.856	2615.663	0.000
wunifrac.PC.4	222.675	880.066	0.253	0.806	-1768.172	2213.522	0.006

Table 137: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2446.196	77.356	31.623	0.000	2271.205	2621.186	0.000
unifrac.PC.1	-483.645	475.945	-1.016	0.336	-1560.308	593.018	0.094

Table 138: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2408.784	67.650	35.606	0.000	2255.748	2561.820	0.000
unifrac.PC.2	733.698	419.849	1.748	0.114	-216.066	1683.461	0.234

Table 139: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2421.600	81.488	29.717	0.00	2237.261	2605.938	0
unifrac.PC.3	-17.086	661.860	-0.026	0.98	-1514.317	1480.145	0

Table 140: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2425.919	74.330	32.637	0.000	2257.774	2594.065	0.000
unifrac.PC.4	-711.480	756.978	-0.940	0.372	-2423.885	1000.924	0.081

Table 141: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2518.725	253.217	9.947	0.000	1945.908	3091.542	0.000
chao1	-0.955	2.386	-0.400	0.698	-6.352	4.443	0.016

Table 142: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2602.103	279.949	9.295	0.000	1968.815	3235.391	0.000
observed_otus	-2.992	4.483	-0.668	0.521	-13.133	7.148	0.043

Table 143: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2727.470	453.503	6.014	0.000	1701.576	3753.364	0.000
PD_whole_tree	-60.915	89.227	-0.683	0.512	-262.759	140.930	0.045

Table 144: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2556.186	452.425	5.650	0.000	1532.729	3579.643	0.000
shannon	-48.893	162.695	-0.301	0.771	-416.935	319.148	0.009

Table 145: microbiome_vs_brain_neo: yr1.Amygdala_LR vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1958.633	42.151	46.467	0.000	1863.281	2053.985	0.000
wunifrac.PC.1	267.117	210.529	1.269	0.236	-209.134	743.367	0.139

Table 146: microbiome_vs_brain_neo: yr1.Amygdala_LR vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1980.044	32.435	61.046	0.000	1906.671	2053.418	0.000
wunifrac.PC.2	710.210	284.786	2.494	0.034	65.980	1354.440	0.383

Table 147: microbiome_vs_brain_neo: yr1.Amygdala_LR vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1987.872	40.743	48.790	0.000	1895.704	2080.040	0.000
wunifrac.PC.3	-482.375	469.253	-1.028	0.331	-1543.899	579.149	0.096

Table 148: microbiome_vs_brain_neo: yr1.Amygdala_LR vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1985.850	49.237	40.333	0.000	1874.468	2097.231	0.000
wunifrac.PC.4	-120.144	477.221	-0.252	0.807	-1199.693	959.405	0.006

Table 149: microbiome_vs_brain_neo: yr1.Amygdala_LR vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1990.378	42.627	46.693	0.00	1893.949	2086.806	0.000
unifrac.PC.1	-221.648	262.270	-0.845	0.42	-814.945	371.649	0.067

Table 150: microbiome_vs_brain_neo: yr1.Amygdala_LR vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1977.597	42.125	46.946	0.000	1882.304	2072.890	0.000
unifrac.PC.2	98.012	261.432	0.375	0.716	-493.388	689.412	0.014

Table 151: microbiome_vs_brain_neo: yr1.Amygdala_LR vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1984.316	43.843	45.259	0.000	1885.135	2083.497	0.000
unifrac.PC.3	134.095	356.104	0.377	0.715	-671.468	939.658	0.014

Table 152: microbiome_vs_brain_neo: yr1.Amygdala_LR vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1981.431	40.232	49.250	0.000	1890.420	2072.443	0.000
unifrac.PC.4	-392.754	409.727	-0.959	0.363	-1319.621	534.114	0.084

Table 153: microbiome_vs_brain_neo: yr1.Amygdala_LR vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1918.054	136.846	14.016	0.000	1608.487	2227.621	0.000
chao1	0.607	1.289	0.471	0.649	-2.310	3.524	0.022

Table 154: microbiome_vs_brain_neo: yr1.Amygdala_LR vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1901.082	153.128	12.415	0.000	1554.682	2247.481	0.000
observed_otus	1.303	2.452	0.531	0.608	-4.244	6.850	0.027

Table 155: microbiome_vs_brain_neo: yr1.Amygdala_LR vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1954.396	252.051	7.754	0.000	1384.217	2524.575	0.000
PD_whole_tree	4.988	49.591	0.101	0.922	-107.194	117.171	0.001

Table 156: microbiome_vs_brain_neo: yr1.Amygdala_LR vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2232.835	231.159	9.659	0.000	1709.917	2755.753	0.00
shannon	-92.503	83.126	-1.113	0.295	-280.547	95.541	0.11

Table 157: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	79458.630	2037.398	39.000	0.000	74849.71	84067.54	0.000
wunifrac.PC.1	-5603.475	10176.104	-0.551	0.595	-28623.42	17416.47	0.029

Table 158: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	79027.968	1898.576	41.625	0.000	74733.09	83322.85	0.00
wunifrac.PC.2	5264.634	16669.843	0.316	0.759	-32445.17	42974.44	0.01

Table 159: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	78694.06	1872.564	42.025	0.000	74458.03	82930.10	0.00
wunifrac.PC.3	18720.66	21566.835	0.868	0.408	-30066.91	67508.23	0.07

Table 160: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	78456.33	2206.77	35.553	0.000	73464.27	83448.39	0.000
wunifrac.PC.4	10546.51	21388.79	0.493	0.634	-37838.29	58931.32	0.024

Table 161: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	79559.39	1916.824	41.506	0.000	75223.23	83895.55	0.000
unifrac.PC.1	-10820.48	11793.632	-0.917	0.383	-37499.53	15858.57	0.078

Table 162: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	78872.677	1870.156	42.174	0.000	74642.09	83103.26	0.000
unifrac.PC.2	8212.279	11606.451	0.708	0.497	-18043.34	34467.90	0.048

Table 163: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	79512.61	1923.71	41.333	0.000	75160.87	83864.34	0.000
unifrac.PC.3	13331.56	15624.70	0.853	0.416	-22013.97	48677.08	0.068

Table 164: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	78956.35	1864.683	42.343	0.000	74738.14	83174.55	0.000
unifrac.PC.4	12870.65	18990.058	0.678	0.515	-30087.85	55829.14	0.044

Table 165: microbiome_vs_brain_neo: yr1.mPFC vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	75000.861	6109.572	12.276	0.000	61180.048	88821.67	0.000
chao1	39.788	57.565	0.691	0.507	-90.434	170.01	0.046

Table 166: microbiome_vs_brain_neo: yr1.mPFC vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	76592.121	6988.175	10.960	0.000	60783.769	92400.47	0.000
observed_otus	40.443	111.901	0.361	0.726	-212.694	293.58	0.013

Table 167: microbiome_vs_brain_neo: yr1.mPFC vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	71328.951	11114.304	6.418	0.0	46186.649	96471.253	0.000
PD_whole_tree	1535.458	2186.741	0.702	0.5	-3411.294	6482.211	0.047

Table 168: microbiome_vs_brain_neo: yr1.mPFC vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	87944.281	10743.347	8.186	0.000	63641.14	112247.421	0.000
shannon	-3256.094	3863.372	-0.843	0.421	-11995.65	5483.461	0.066
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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	299858.153	10678.62	28.080	0.000	276354.68	323361.6	0.000
wunifrac.PC.1	4383.518	25957.00	0.169	0.869	-52747.46	61514.5	0.002

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	299206.05	10500.96	28.493	0.000	276093.6	322318.5	0.000
wunifrac.PC.2	42026.06	65073.75	0.646	0.532	-101200.3	185252.4	0.034

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	296751.0	9439.55	31.437	0.00	275974.68	317527.3	0.000
wunifrac.PC.3	189312.1	101763.99	1.860	0.09	-34668.97	413293.1	0.224

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	299819.9	9900.296	30.284	0.000	278029.45	321610.3	0.000
wunifrac.PC.4	141833.6	106669.962	1.330	0.211	-92945.44	376612.6	0.128

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	299720.834	10663.88	28.106	0.000	276249.8	323191.9	0.000
unifrac.PC.1	-5351.421	67947.01	-0.079	0.939	-154901.8	144198.9	0.001

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	303808.7	9945.116	30.549	0.000	281919.62	325697.7	0.000
unifrac.PC.2	116967.9	73296.471	1.596	0.139	-44356.52	278292.4	0.175

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	302377.72	11124.95	27.18	0.000	277891.9	326863.6	0.000
unifrac.PC.3	61356.71	88949.35	0.69	0.505	-134419.5	257132.9	0.038

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	298167.09	10446.09	28.543	0.00	275175.4	321158.8	0.000
unifrac.PC.4	90429.19	101153.88	0.894	0.39	-132209.0	313067.4	0.062

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	345769.68	29397.893	11.762	0.000	281065.352	410474.005	0.000
chao1	-179.12	108.184	-1.656	0.126	-417.232	58.991	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	351167.209	30752.511	11.419	0.000	283481.39	418853.029	0.000
observed_otus	-335.372	190.864	-1.757	0.107	-755.46	84.716	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	351094.494	50478.103	6.955	0.000	239992.94	462196.050	0.000
PD_whole_tree	-5109.185	4918.023	-1.039	0.321	-15933.68	5715.311	0.083

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	383200.64	51156.00	7.491	0.000	270607.04	495794.233	0.000
shannon	-19417.52	11691.83	-1.661	0.125	-45151.06	6316.024	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	137584.89	3418.467	40.248	0.000	130060.89	145108.882	0.000
wunifrac.PC.1	-11978.14	8309.425	-1.442	0.177	-30267.07	6310.778	0.148

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	137345.18	2951.129	46.540	0.000	130849.789	143840.57	0.000
wunifrac.PC.2	46864.24	18287.954	2.563	0.026	6612.726	87115.76	0.354

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	138425.3	3669.364	37.725	0.000	130349	146501.48	0.00
wunifrac.PC.3	-31389.6	39557.941	-0.794	0.444	-118456	55676.84	0.05

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	137950.61	3613.39	38.178	0.000	129997.59	145903.6	0.000
wunifrac.PC.4	31335.03	38932.19	0.805	0.438	-54354.14	117024.2	0.051

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	137938.019	3714.799	37.132	0.000	129761.8	146114.24	0.000
unifrac.PC.1	3495.589	23669.576	0.148	0.885	-48600.8	55591.97	0.002

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	138136.141	3839.775	35.975	0.000	129684.85	146587.43	0.000
unifrac.PC.2	5882.918	28299.511	0.208	0.839	-56403.89	68169.72	0.004

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	138496.03	3930.228	35.239	0.000	129845.66	147146.41	0.000
unifrac.PC.3	13099.22	31424.081	0.417	0.685	-56064.72	82263.16	0.014

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	138510.26	3624.545	38.215	0.000	130532.7	146487.83	0.00
unifrac.PC.4	-33479.72	35097.994	-0.954	0.361	-110729.9	43770.44	0.07

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	151236.833	10639.860	14.214	0.000	127818.660	174655.01	0.000
chao1	-51.769	39.155	-1.322	0.213	-137.947	34.41	0.127

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	152692.625	11194.649	13.640	0.000	128053.367	177331.882	0.000
observed_otus	-96.248	69.479	-1.385	0.193	-249.171	56.674	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	147986.490	18178.065	8.141	0.000	107976.839	187996.141	0.000
PD_whole_tree	-1000.232	1771.068	-0.565	0.584	-4898.327	2897.862	0.026

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	143723.036	19864.461	7.235	0.000	100001.65	187444.419	0.000
shannon	-1347.389	4540.072	-0.297	0.772	-11340.02	8645.241	0.007

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	655448.20	13692.67	47.869	0.000	625310.82	685585.57	0.000
wunifrac.PC.1	-22029.34	33283.41	-0.662	0.522	-95285.63	51226.95	0.035

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	654752.0	12971.38	50.477	0.000	626202.17	683301.8	0.000
wunifrac.PC.2	106615.3	80382.78	1.326	0.212	-70306.05	283536.6	0.128

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	650236.1	9580.814	67.869	0.000	629148.8	671323.3	0.000
wunifrac.PC.3	371503.2	103286.903	3.597	0.004	144170.3	598836.2	0.519

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	656131.06	13773.27	47.638	0.000	625816.3	686445.8	0.00
wunifrac.PC.4	74096.63	148399.08	0.499	0.627	-252527.5	400720.8	0.02

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	656150.9	13840.23	47.409	0.000	625688.8	686613.0	0.000
unifrac.PC.1	33233.2	88185.72	0.377	0.713	-160862.3	227328.7	0.012

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	660574.7	13414.02	49.245	0.000	631050.59	690098.7	0.000
unifrac.PC.2	128803.4	98862.63	1.303	0.219	-88791.83	346398.5	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	661187.7	14151.65	46.722	0.000	630040.1	692335.2	0.000
unifrac.PC.3	118314.0	113149.31	1.046	0.318	-130725.9	367354.0	0.084

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	652217.6	12294.11	53.051	0.000	625158.48	679276.8	0.000
unifrac.PC.4	223547.9	119049.07	1.878	0.087	-38477.33	485573.1	0.227

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	685681.899	41856.589	16.382	0.00	593556.167	777807.631	0.000
chao1	-115.153	154.032	-0.748	0.47	-454.175	223.869	0.045

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	689476.620	44197.68	15.600	0.000	592198.189	786755.052	0.00
observed_otus	-217.721	274.31	-0.794	0.444	-821.474	386.032	0.05

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	736834.455	64446.819	11.433	0.000	594987.96	878680.947	0.00
PD_whole_tree	-8032.323	6278.979	-1.279	0.227	-21852.26	5787.617	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	734560.93	70720.46	10.387	0.000	578906.24	890215.6	0.000
shannon	-18255.96	16163.34	-1.129	0.283	-53831.23	17319.3	0.096

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	1092891.24	24026.64	45.487	0.000	1040009.0	1145773.51	0.000
wunifrac.PC.1	-29623.97	58402.65	-0.507	0.622	-158167.3	98919.39	0.021

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	1091303.2	22381.51	48.759	0.000	1042041.8	1140565	0.000
wunifrac.PC.2	195505.6	138696.74	1.410	0.186	-109763.9	500775	0.142

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	1085412.3	19648.33	55.242	0.00	1042166.6	1128658.0	0.000
wunifrac.PC.3	529425.7	211820.78	2.499	0.03	63211.3	995640.1	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	1093901.5	23238.19	47.073	0.000	1042754.6	1145048.4	0.000
wunifrac.PC.4	247265.2	250378.06	0.988	0.345	-303813.2	798343.6	0.075

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	1093809.74	24202.39	45.194	0.000	1040540.6	1147078.8	0.000
unifrac.PC.1	31377.36	154210.28	0.203	0.842	-308037.2	370791.9	0.003

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	1102519.5	22878.27	48.191	0.000	1052164.7	1152874.2	0.000
unifrac.PC.2	251654.2	168615.09	1.492	0.164	-119465.1	622773.5	0.157

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	1102061	24786.31	44.463	0.000	1047507.1	1156616	0.000
unifrac.PC.3	192770	198178.55	0.973	0.352	-243418.1	628958	0.073

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	1088895.0	22990.42	47.363	0.000	1038293	1139496.6	0.000
unifrac.PC.4	280497.4	222625.95	1.260	0.234	-209499	770493.8	0.117

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	1182688.410	69101.146	17.115	0.000	1030597.813	1334779.008	0.000
chao1	-346.041	254.292	-1.361	0.201	-905.733	213.651	0.134

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1193336.454	72549.739	16.449	0.000	1033655.554	1353017.353	0.000
observed_otus	-649.342	450.276	-1.442	0.177	-1640.392	341.709	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	1235915.44	111996.81	11.035	0.000	989412.13	1482418.748	0.000
PD_whole_tree	-14141.74	10911.72	-1.296	0.222	-38158.27	9874.792	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	1261484.61	119430.40	10.563	0.000	998620.06	1524349.15	0.000
shannon	-39020.87	27296.11	-1.430	0.181	-99099.21	21057.47	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	2460.6	70.924	34.693	0.000	2304.496	2616.704	0.000
wunifrac.PC.1	-127.9	172.399	-0.742	0.474	-507.349	251.548	0.044

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2466.776	72.073	34.226	0.000	2308.145	2625.408	0.000
wunifrac.PC.2	-198.353	446.631	-0.444	0.666	-1181.381	784.675	0.016

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	2443.331	63.441	38.514	0.000	2303.700	2582.963	0.00
wunifrac.PC.3	1331.653	683.928	1.947	0.078	-173.662	2836.969	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	2464.036	71.547	34.439	0.000	2306.561	2621.511	0.000
wunifrac.PC.4	-418.441	770.882	-0.543	0.598	-2115.140	1278.258	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	2464.345	72.494	33.994	0.000	2304.787	2623.904	0
unifrac.PC.1	24.593	461.910	0.053	0.958	-992.065	1041.251	0

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	2458.715	74.729	32.902	0.000	2294.238	2623.192	0.000
unifrac.PC.2	-160.119	550.759	-0.291	0.777	-1372.331	1052.092	0.007

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	2467.989	77.168	31.982	0.000	2298.144	2637.834	0.000
unifrac.PC.3	85.612	616.992	0.139	0.892	-1272.377	1443.602	0.002

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	2448.980	68.174	35.922	0.000	2298.930	2599.030	0.00
unifrac.PC.4	885.359	660.158	1.341	0.207	-567.638	2338.357	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	2508.877	222.882	11.257	0.000	2018.317	2999.436	0.000
chao1	-0.173	0.820	-0.211	0.836	-1.979	1.632	0.004

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	2490.230	236.407	10.534	0.00	1969.902	3010.558	0.000
observed_otus	-0.169	1.467	-0.115	0.91	-3.398	3.060	0.001

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	2838.224	340.616	8.333	0.000	2088.532	3587.915	0.000
PD_whole_tree	-37.195	33.186	-1.121	0.286	-110.237	35.846	0.095

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	2656.136	384.385	6.910	0.000	1810.111	3502.161	0.000
shannon	-44.628	87.852	-0.508	0.621	-237.989	148.733	0.021

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	1987.291	29.632	67.066	0.000	1922.071	2052.51	0.000
wunifrac.PC.1	-210.492	72.028	-2.922	0.014	-369.024	-51.96	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	1993.113	39.502	50.456	0.000	1906.170	2080.056	0.000
wunifrac.PC.2	20.892	244.791	0.085	0.934	-517.889	559.673	0.001

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	1990.685	39.690	50.156	0.000	1903.328	2078.041	0.000
wunifrac.PC.3	170.822	427.879	0.399	0.697	-770.933	1112.577	0.013

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	1993.030	36.234	55.004	0.000	1913.279	2072.780	0.000
wunifrac.PC.4	-552.704	390.401	-1.416	0.185	-1411.972	306.563	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	1993.305	39.365	50.637	0.000	1906.664	2079.946	0.000
unifrac.PC.1	-34.995	250.819	-0.140	0.892	-587.044	517.054	0.002

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	1987.666	40.210	49.432	0.000	1899.164	2076.169	0.000
unifrac.PC.2	-163.747	296.353	-0.553	0.592	-816.016	488.521	0.025

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	2010.459	39.222	51.258	0.000	1924.131	2096.786	0.000
unifrac.PC.3	396.119	313.602	1.263	0.233	-294.114	1086.352	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	1999.204	38.559	51.848	0.000	1914.336	2084.071	0.000
unifrac.PC.4	-336.966	373.382	-0.902	0.386	-1158.774	484.843	0.064

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	0.000	1640.299	2157.896	0.000
chao1	0.367	0.433	0.848	0.415	-0.586	1.319	0.056

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	0.000	1612.846	2158.380	0.000
observed_otus	0.703	0.769	0.913	0.381	-0.990	2.396	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	1823.869	188.283	9.687	0.000	1409.462	2238.277	0.000
PD_whole_tree	16.861	18.344	0.919	0.378	-23.514	57.236	0.066

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	1902.428	209.465	9.082	0.000	1441.399	2363.457	0.000
shannon	21.157	47.874	0.442	0.667	-84.212	126.526	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	80613.050	1926.314	41.848	0.000	76373.26	84852.839	0.000
wunifrac.PC.1	-6951.272	4682.380	-1.485	0.166	-17257.12	3354.577	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	80678.35	2044.602	39.459	0.00	76178.21	85178.48	0.000
wunifrac.PC.2	10846.97	12670.264	0.856	0.41	-17040.09	38734.03	0.058

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	80009.87	1588.475	50.369	0.000	76513.66	83506.08	0.000
wunifrac.PC.3	51073.31	17124.711	2.982	0.012	13382.07	88764.54	0.426

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	80815.411	2104.302	38.405	0.00	76183.87	85446.95	0.000
wunifrac.PC.4	2336.652	22672.634	0.103	0.92	-47565.48	52238.78	0.001

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	80836.84	2033.587	39.751	0.000	76360.95	85312.74	0.000
unifrac.PC.1	11524.40	12957.400	0.889	0.393	-16994.64	40043.45	0.062

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	81047.189	2161.116	37.502	0.000	76290.60	85803.77	0.000
unifrac.PC.2	6691.063	15927.635	0.420	0.683	-28365.42	41747.55	0.014

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	81766.46	2082.48	39.264	0.000	77182.95	86349.97	0.000
unifrac.PC.3	22085.06	16650.44	1.326	0.212	-14562.31	58732.42	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	80454.61	2035.141	39.533	0.000	75975.29	84933.92	0.000
unifrac.PC.4	20772.30	19707.124	1.054	0.314	-22602.78	64147.39	0.085

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	84149.519	6397.681	13.153	0.000	70068.317	98230.721	0.000
chao1	-12.978	23.543	-0.551	0.593	-64.796	38.841	0.025

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	83738.626	6806.444	12.303	0.00	68757.744	98719.508	0.000
observed_otus	-19.069	42.244	-0.451	0.66	-112.047	73.908	0.017

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	87588.42	10230.359	8.562	0.000	65071.552	110105.290	0.000
PD_whole_tree	-673.87	996.732	-0.676	0.513	-2867.662	1519.923	0.037

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	91690.846	10787.747	8.500	0.000	67947.175	115434.517	0.000
shannon	-2530.302	2465.566	-1.026	0.327	-7956.977	2896.372	0.081
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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	320844.905	16345.848	19.629	0.000	284424.086	357265.724	0.00
chao1	-157.938	84.644	-1.866	0.092	-346.536	30.659	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	322789.999	17117.883	18.857	0.00	284648.978	360931.020	0.000
observed_otus	-286.178	152.232	-1.880	0.09	-625.373	53.017	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	324787.893	26451.021	12.279	0.000	265851.3	383724.441	0.000
PD_whole_tree	-5696.365	4781.137	-1.191	0.261	-16349.4	4956.673	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	321784.2	16224.863	19.833	0.00	285632.97	357935.471	0.000
shannon	-16724.6	8592.714	-1.946	0.08	-35870.36	2421.158	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	145183.084	6701.118	21.666	0.000	130252.063	160114.105	0.00
chao1	-44.532	34.700	-1.283	0.228	-121.849	32.786	0.13

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	146024.058	6979.074	20.923	0.000	130473.71	161574.404	0.000
observed_otus	-83.768	62.066	-1.350	0.207	-222.06	54.524	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	143390.667	10615.949	13.507	0.0	119736.859	167044.475	0.000
PD_whole_tree	-1039.464	1918.879	-0.542	0.6	-5314.993	3236.065	0.026

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	143561.742	6950.246	20.656	0.000	128075.6	159047.855	0.000
shannon	-3511.128	3680.862	-0.954	0.363	-11712.6	4690.343	0.076

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	664244.968	25573.374	25.974	0.000	607263.941	721225.995	0.000
chao1	-74.871	132.426	-0.565	0.584	-369.935	220.193	0.028

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	663031.258	26959.800	24.593	0.000	602961.081	723101.436	0.00
observed_otus	-113.189	239.758	-0.472	0.647	-647.404	421.026	0.02

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	688343.751	36679.360	18.767	0.000	606617.04	770070.46	0.000
PD_whole_tree	-7037.799	6629.954	-1.062	0.313	-21810.26	7734.66	0.093

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	670057.36	25181.35	26.609	0.000	613949.81	726164.90	0.000
shannon	-11355.64	13336.08	-0.851	0.414	-41070.29	18359.01	0.062

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	1130272.957	41081.529	27.513	0.000	1038737.605	1221808.309	0.000
chao1	-277.341	212.732	-1.304	0.222	-751.337	196.655	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	1131845.315	43344.261	26.113	0.000	1035268.284	1228422.346	0.000
observed_otus	-483.135	385.468	-1.253	0.239	-1342.012	375.742	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	1156522.31	61636.00	18.764	0.000	1019188.74	1293855.88	0.000
PD_whole_tree	-13773.63	11140.98	-1.236	0.245	-38597.27	11050.01	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	1135403.32	40420.92	28.089	0.000	1045339.9	1225466.74	0.000
shannon	-31591.37	21406.98	-1.476	0.171	-79289.1	16106.37	0.165

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

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	2452.565	139.700	17.556	0.000	2141.294	2763.836	0
chao1	0.012	0.723	0.017	0.987	-1.600	1.624	0

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	146.362	16.623	0.000	2106.880	2759.110	0.000
observed_otus	0.227	1.302	0.174	0.865	-2.674	3.127	0.003

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	2577.010	203.816	12.644	0.000	2122.879	3031.141	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
PD_whole_tree	-23.898	36.841	-0.649	0.531	-105.984	58.188	0.037

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	2482.916	139.818	17.758	0.000	2171.382	2794.450	0.000
shannon	-18.127	74.048	-0.245	0.812	-183.116	146.862	0.005

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	26.144	0.000	1795.941	2130.578	0.000
chao1	0.214	0.389	0.550	0.594	-0.652	1.080	0.027

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	1952.797	78.210	24.969	0.000	1778.535	2127.06	0.00
observed_otus	0.470	0.696	0.676	0.514	-1.080	2.02	0.04

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	1890.784	107.518	17.586	0.000	1651.220	2130.348	0.000
PD_whole_tree	20.819	19.434	1.071	0.309	-22.483	64.121	0.094

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	1948.102	74.161	26.268	0.000	1782.861	2113.344	0.000
shannon	31.534	39.276	0.803	0.441	-55.979	119.046	0.055

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	81984.465	3955.707	20.726	0.000	73170.602	90798.329	0.000
chao1	-10.018	20.484	-0.489	0.635	-55.659	35.623	0.021

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	81453.398	4180.758	19.483	0.000	72138.090	90768.706	0.000
observed_otus	-11.266	37.180	-0.303	0.768	-94.109	71.577	0.008

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	83857.094	5842.169	14.354	0.000	70839.93	96874.258	0.000
PD_whole_tree	-677.911	1055.998	-0.642	0.535	-3030.82	1674.998	0.036

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	81887.868	3976.852	20.591	0.000	73026.890	90748.846	0.000
shannon	-961.127	2106.147	-0.456	0.658	-5653.915	3731.662	0.019
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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=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	73981.837	23484.590	3.150	0.012	20856.005	127107.670	0.000
chao1	519.509	221.276	2.348	0.043	18.949	1020.069	0.355

Table 282: neo_div_vs_diff_brain: diff.WM vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	78368.944	29034.971	2.699	0.024	12687.276	144050.612	0.000
observed_otus	800.741	464.933	1.722	0.119	-251.011	1852.492	0.229

Table 283: neo_div_vs_diff_brain: diff.WM vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	111321.565	54050.60	2.060	0.070	-10949.39	233592.5	0.000
PD_whole_tree	3029.167	10634.47	0.285	0.782	-21027.67	27086.0	0.008

Table 284: neo_div_vs_diff_brain: diff.WM vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	49680.67	46280.55	1.073	0.311	-55013.209	154374.55	0.000
shannon	28038.27	16642.76	1.685	0.126	-9610.281	65686.82	0.221

Table 285: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	129397.22	9533.62	13.573	0.000	107830.7	150963.77	0.000
wunifrac.PC.1	-37269.24	47617.16	-0.783	0.454	-144986.7	70448.25	0.058

Table 286: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	126496.118	9078.432	13.934	0.000	105959.3	147033.0	0
wunifrac.PC.2	-5030.987	79710.294	-0.063	0.951	-185348.2	175286.2	0

Table 287: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	124741.2	8807.984	14.162	0.00	104816.2	144666.3	0.000
wunifrac.PC.3	100095.1	101443.977	0.987	0.35	-129387.2	329577.3	0.089

Table 288: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	128811.04	10534.06	12.228	0.000	104981.3	152640.7	0.000
wunifrac.PC.4	-42987.31	102099.80	-0.421	0.684	-273953.1	187978.5	0.017

Table 289: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	124144.50	9179.646	13.524	0.000	103378.70	144910.3	0.000
unifrac.PC.1	47544.33	56479.561	0.842	0.422	-80221.31	175310.0	0.066

Table 290: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	125436.78	8590.75	14.601	0.000	106003.15	144870.4	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
unifrac.PC.2	58070.53	53315.42	1.089	0.304	-62537.32	178678.4	0.106

Table 291: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	130831	8189.466	15.976	0.00	112305.14	149356.9	0.000
unifrac.PC.3	117943	66516.243	1.773	0.11	-32527.15	268413.2	0.239

Table 292: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	126554.45	9086.541	13.928	0.000	105999.3	147109.6	0.000
unifrac.PC.4	-10351.25	92537.943	-0.112	0.913	-219686.6	198984.1	0.001

Table 293: neo_div_vs_diff_brain: diff.GM vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-135379.763	52989.734	-2.555	0.031	-255250.869	-15508.657	0
chao1	11.519	499.278	0.023	0.982	-1117.926	1140.964	0

Table 294: neo_div_vs_diff_brain: diff.GM vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-137692.60	59479.436	-2.315	0.046	-272244.43	-3140.769	0
observed_otus	57.85	952.436	0.061	0.953	-2096.71	2212.410	0

Table 295: neo_div_vs_diff_brain: diff.GM vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-137554.078	96471.03	-1.426	0.188	-355786.71	80678.55	0
PD_whole_tree	666.295	18980.69	0.035	0.973	-42271.02	43603.61	0

Table 296: neo_div_vs_diff_brain: diff.GM vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-144928.389	94249.16	-1.538	0.158	-358134.79	68278.02	0.000
shannon	3910.141	33892.57	0.115	0.911	-72760.17	80580.45	0.001

Table 297: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-142648.6	15939.94	-8.949	0.000	-178707.27	-106590	0.000
wunifrac.PC.1	108512.4	79614.51	1.363	0.206	-71588.09	288613	0.157

Table 298: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-134272.21	15962.54	-8.412	0.000	-170382.0	-98162.43	0.000
wunifrac.PC.2	-62074.81	140154.05	-0.443	0.668	-379125.3	254975.69	0.019

Table 299: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-131729.7	15959.9	-8.254	0.000	-167833.5	-95625.87	0.000
wunifrac.PC.3	-141400.8	183814.6	-0.769	0.461	-557218.3	274416.78	0.056

Table 300: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-126338.7	18217.63	-6.935	0.000	-167549.8	-85127.55	0.000
wunifrac.PC.4	-146557.4	176571.67	-0.830	0.428	-545990.2	252875.48	0.064

Table 301: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-135913.09	16839.87	-8.071	0.000	-174007.5	-97818.65	0.000
unifrac.PC.1	34258.76	103610.60	0.331	0.748	-200124.7	268642.22	0.011

Table 302: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-135182.90	15990.73	-8.454	0.000	-171356.4	-99009.35	0.000
unifrac.PC.2	52812.96	99240.74	0.532	0.607	-171685.2	277311.11	0.028

Table 303: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-138454.3	16226.44	-8.533	0.000	-175161.1	-101747.6	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
unifrac.PC.3	-115459.2	131793.95	-0.876	0.404	-413597.9	182679.4	0.071

Table 304: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	-133730.96	15866.28	-8.429	0.000	-169623.0	-97838.95	0.000
unifrac.PC.4	-93322.12	161583.25	-0.578	0.578	-458848.8	272204.59	0.032

Table 305: neo_div_vs_diff_brain: diff.CSF vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	554785.032	44923.348	12.350	0.000	453161.358	656408.705	0.000
chao1	252.302	423.275	0.596	0.566	-705.213	1209.816	0.034

Table 306: neo_div_vs_diff_brain: diff.CSF vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	586308.785	51377.620	11.412	0.000	470084.534	702533.036	0.000
observed_otus	-100.114	822.703	-0.122	0.906	-1961.197	1760.969	0.001

Table 307: neo_div_vs_diff_brain: diff.CSF vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	579019.386	83386.55	6.944	0.000	390385.9	767652.87	0
PD_whole_tree	253.771	16406.32	0.015	0.988	-36859.9	37367.44	0

Table 308: neo_div_vs_diff_brain: diff.CSF vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	599347.101	81266.42	7.375	0.000	415509.68	783184.52	0.000
shannon	-6955.202	29223.90	-0.238	0.817	-73064.25	59153.84	0.006

Table 309: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	589540.5	12880.42	45.77	0.000	560402.9	618677.98	0.000
wunifrac.PC.1	-119012.7	64333.25	-1.85	0.097	-264544.7	26519.18	0.255

Table 310: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	580269.28	13917.2	41.694	0.00	548786.4	611752.2	0.000
wunifrac.PC.2	-23723.29	122195.6	-0.194	0.85	-300148.8	252702.3	0.004

Table 311: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	575769.1	12139.52	47.429	0.000	548307.57	603230.6	0.000
wunifrac.PC.3	257246.1	139814.20	1.840	0.099	-59035.58	573527.8	0.253

Table 312: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	575184.58	16007.3	35.933	0.000	538973.5	611395.6	0.000
wunifrac.PC.4	95014.47	155148.4	0.612	0.555	-255955.6	445984.5	0.036

Table 313: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	582532.78	14436.67	40.351	0.000	549874.8	615190.8	0.000
unifrac.PC.1	-45234.12	88824.45	-0.509	0.623	-246169.0	155700.8	0.025

Table 314: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	577620.7	11651.31	49.576	0.000	551263.56	603977.8	0.000
unifrac.PC.2	145749.6	72309.70	2.016	0.075	-17826.31	309325.5	0.289

Table 315: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	586889.7	12612.08	46.534	0.000	558359.22	615420.2	0.000
unifrac.PC.3	179727.7	102437.45	1.755	0.113	-52001.92	411457.3	0.235

Table 316: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	580259.587	13963.97	41.554	0.000	548670.9	611848.3	0

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
unifrac.PC.4	6059.906	142209.99	0.043	0.967	-315641.5	327761.3	0

Table 317: neo_div_vs_diff_brain: diff.ICV vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	493387.11	63594.535	7.758	0.000	349526.27	637247.939	0.000
chao1	783.33	599.198	1.307	0.224	-572.15	2138.809	0.146

Table 318: neo_div_vs_diff_brain: diff.ICV vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	526985.127	76262.524	6.910	0.00	354467.313	699502.941	0.000
observed_otus	758.477	1221.181	0.621	0.55	-2004.027	3520.981	0.037

Table 319: neo_div_vs_diff_brain: diff.ICV vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	552786.874	126120.39	4.383	0.002	267482.72	838091.03	0.000
PD_whole_tree	3949.233	24814.21	0.159	0.877	-52184.41	60082.88	0.003

Table 320: neo_div_vs_diff_brain: diff.ICV vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	504099.38	121278.74	4.157	0.002	229747.80	778451.0	0.000
shannon	24993.21	43612.57	0.573	0.581	-73665.27	123651.7	0.032

Table 321: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	576289.04	22696.59	25.391	0.000	524945.8	627632.3	0.000
wunifrac.PC.1	-47769.54	113361.65	-0.421	0.683	-304211.4	208672.3	0.017

Table 322: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	572493.19	20839.52	27.472	0.000	525350.9	619635.5	0.000
wunifrac.PC.2	-90829.08	182974.80	-0.496	0.632	-504746.8	323088.7	0.024

Table 323: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	568780.6	20643.55	27.552	0.000	522081.7	615479.6	0.000
wunifrac.PC.3	215940.4	237757.42	0.908	0.387	-321904.2	753785.0	0.076

Table 324: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	577656.93	24529.93	23.549	0.0	522166.4	633147.5	0.000
wunifrac.PC.4	-94530.22	237752.71	-0.398	0.7	-632364.2	443303.8	0.016

Table 325: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	570764.19	22089.71	25.838	0.000	520793.8	620734.6	0.000
unifrac.PC.1	36568.97	135911.23	0.269	0.794	-270883.6	344021.5	0.007

Table 326: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	567874.5	16186.33	35.084	0.000	531258.51	604490.6	0.000
unifrac.PC.2	256633.1	100454.68	2.555	0.031	29388.82	483877.4	0.395

Table 327: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	579266.4	20827.24	27.813	0.000	532151.9	626380.9	0.000
unifrac.PC.3	182211.5	169162.43	1.077	0.309	-200460.5	564883.5	0.104

Table 328: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	573083.08	20909.07	27.408	0.000	525783.5	620382.7	0.000
unifrac.PC.4	-97613.46	212939.34	-0.458	0.658	-579315.7	384088.8	0.021

Table 329: neo_div_vs_diff_brain: diff.Hippocampus_LR vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1632.333	328.906	4.963	0.001	888.296	2376.370	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
chao1	-0.620	3.099	-0.200	0.846	-7.630	6.391	0.004

Table 330: neo_div_vs_diff_brain: diff.Hippocampus_LR vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1761.657	364.051	4.839	0.001	938.116	2585.199	0.000
observed_otus	-3.193	5.830	-0.548	0.597	-16.381	9.994	0.029

Table 331: neo_div_vs_diff_brain: diff.Hippocampus_LR vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1786.176	595.665	2.999	0.015	438.688	3133.665	0.000
PD_whole_tree	-43.200	117.197	-0.369	0.721	-308.319	221.919	0.013

Table 332: neo_div_vs_diff_brain: diff.Hippocampus_LR vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1640.478	586.227	2.798	0.021	314.34	2966.615	0.000
shannon	-25.833	210.811	-0.123	0.905	-502.72	451.054	0.001

Table 333: neo_div_vs_diff_brain: diff.Hippocampus_LR vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1582.989	108.309	14.615	0.000	1337.976	1828.002	0.00
wunifrac.PC.1	-170.988	540.969	-0.316	0.759	-1394.744	1052.767	0.01

Table 334: neo_div_vs_diff_brain: diff.Hippocampus_LR vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1569.520	100.094	15.680	0.000	1343.092	1795.948	0.000
wunifrac.PC.2	-196.736	878.843	-0.224	0.828	-2184.817	1791.346	0.005

Table 335: neo_div_vs_diff_brain: diff.Hippocampus_LR vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1540.997	90.945	16.944	0.000	1335.264	1746.729	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
wunifrac.PC.3	1632.891	1047.443	1.559	0.153	-736.589	4002.372	0.196

Table 336: neo_div_vs_diff_brain: diff.Hippocampus_LR vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1606.221	115.235	13.939	0.000	1345.540	1866.901	0.000
wunifrac.PC.4	-679.524	1116.902	-0.608	0.558	-3206.131	1847.083	0.036

Table 337: neo_div_vs_diff_brain: diff.Hippocampus_LR vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1594.940	101.712	15.681	0.000	1364.852	1825.028	0.000
unifrac.PC.1	-509.293	625.801	-0.814	0.437	-1924.953	906.367	0.062

Table 338: neo_div_vs_diff_brain: diff.Hippocampus_LR vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1552.005	86.689	17.903	0.000	1355.901	1748.109	0.000
unifrac.PC.2	965.814	538.004	1.795	0.106	-251.235	2182.863	0.244

Table 339: neo_div_vs_diff_brain: diff.Hippocampus_LR vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1551.119	103.081	15.048	0.00	1317.932	1784.305	0.000
unifrac.PC.3	-506.111	837.245	-0.604	0.56	-2400.091	1387.870	0.035

Table 340: neo_div_vs_diff_brain: diff.Hippocampus_LR vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1573.097	98.200	16.019	0.000	1350.952	1795.241	0.000
unifrac.PC.4	-654.456	1000.078	-0.654	0.529	-2916.790	1607.878	0.041

Table 341: neo_div_vs_diff_brain: diff.Amygdala_LR vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1043.324	173.657	6.008	0.000	650.485	1436.163	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
chao1	1.024	1.636	0.626	0.547	-2.677	4.726	0.038

Table 342: neo_div_vs_diff_brain: diff.Amygdala_LR vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1028.455	194.890	5.277	0.001	587.582	1469.327	0.000
observed_otus	1.970	3.121	0.631	0.544	-5.089	9.030	0.038

Table 343: neo_div_vs_diff_brain: diff.Amygdala_LR vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1023.541	320.273	3.196	0.011	299.033	1748.049	0.000
PD_whole_tree	24.614	63.014	0.391	0.705	-117.933	167.161	0.015

Table 344: neo_div_vs_diff_brain: diff.Amygdala_LR vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1290.032	312.013	4.135	0.003	584.209	1995.854	0.000
shannon	-52.248	112.202	-0.466	0.653	-306.066	201.570	0.021

Table 345: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1108.664	48.562	22.830	0.000	998.810	1218.519	0.000
wunifrac.PC.1	491.736	242.549	2.027	0.073	-56.949	1040.421	0.291

Table 346: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1147.40	49.554	23.154	0.000	1035.301	1259.500	0.000
wunifrac.PC.2	566.28	435.095	1.302	0.225	-417.974	1550.534	0.145

Table 347: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1151.006	54.737	21.028	0.000	1027.182	1274.831	0.000

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
wunifrac.PC.3	-234.680	630.426	-0.372	0.718	-1660.802	1191.442	0.014

Table 348: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1194.291	55.531	21.507	0.000	1068.671	1319.911	0.000
wunifrac.PC.4	-882.150	538.225	-1.639	0.136	-2099.700	335.400	0.212

Table 349: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1161.014	54.571	21.275	0.000	1037.565	1284.462	0.000
unifrac.PC.1	-285.169	335.759	-0.849	0.418	-1044.709	474.371	0.067

Table 350: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1143.225	53.301	21.449	0.000	1022.650	1263.800	0.000
unifrac.PC.2	199.531	330.793	0.603	0.561	-548.775	947.836	0.035

Table 351: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1131.984	54.084	20.930	0.00	1009.637	1254.330	0.000
unifrac.PC.3	-405.759	439.281	-0.924	0.38	-1399.480	587.963	0.079

Table 352: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	1148.957	52.482	21.893	0.000	1030.236	1267.679	0.000
unifrac.PC.4	-400.076	534.476	-0.749	0.473	-1609.145	808.992	0.053

Table 353: neo_div_vs_diff_brain: diff.mPFC vs chao1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	50243.335	3890.973	12.913	0.000	41441.344	59045.327	0.000
chao1	29.987	36.661	0.818	0.435	-52.947	112.921	0.063

Table 354: neo_div_vs_diff_brain: diff.mPFC vs observed_otus, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	51550.416	4488.165	11.486	0.000	41397.48	61703.350	0.000
observed_otus	28.688	71.868	0.399	0.699	-133.89	191.265	0.016

Table 355: neo_div_vs_diff_brain: diff.mPFC vs PD_whole_tree, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	46276.519	6950.938	6.658	0.000	30552.40	62000.633	0.000
PD_whole_tree	1396.582	1367.598	1.021	0.334	-1697.14	4490.304	0.094

Table 356: neo_div_vs_diff_brain: diff.mPFC vs shannon, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	63637.993	6263.824	10.160	0.000	49468.238	77807.747	0.00
shannon	-3782.424	2252.509	-1.679	0.127	-8877.953	1313.105	0.22

Table 357: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	52857.019	1283.267	41.189	0.000	49954.067	55759.97	0.000
wunifrac.PC.1	5375.573	6409.479	0.839	0.423	-9123.676	19874.82	0.066

Table 358: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53270.326	1213.996	43.880	0.000	50524.08	56016.57	0.00
wunifrac.PC.2	-4875.748	10659.108	-0.457	0.658	-28988.33	19236.83	0.02

Table 359: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53061.46	1203.757	44.080	0.000	50338.38	55784.55	0.000
wunifrac.PC.3	12136.09	13863.998	0.875	0.404	-19226.45	43498.63	0.071

Table 360: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53435.381	1434.899	37.240	0.000	50189.41	56681.35	0.000
wunifrac.PC.4	-2987.929	13907.545	-0.215	0.835	-34448.98	28473.12	0.005

Table 361: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.1, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53761.115	1174.688	45.766	0.000	51103.79	56418.444	0.000
unifrac.PC.1	-9812.957	7227.498	-1.358	0.208	-26162.69	6536.778	0.156

Table 362: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.2, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53005.51	951.063	55.733	0.000	50854.055	55156.96	0.000
unifrac.PC.2	14697.75	5902.433	2.490	0.034	1345.522	28049.98	0.383

Table 363: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.3, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53222.107	1285.173	41.412	0.000	50314.85	56129.37	0.000
unifrac.PC.3	-1435.125	10438.391	-0.137	0.894	-25048.41	22178.16	0.002

Table 364: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.4, df=9

	Estimate	Std. Error	t value	Pr(>|t|)	2.5 %	97.5 %	R2
Intercept	53237.128	1206.537	44.124	0.000	50507.75	55966.50	0.000
unifrac.PC.4	7258.558	12287.459	0.591	0.569	-20537.60	35054.72	0.034
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