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

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166903.25	2876.962	00.0-00	0.000000
wunifrac.PC.1	-12964.26	10385.071	-1.248355	0.2234661

Table 2: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166848.38	2969.064	56.195609	0.0000000
wunifrac.PC.2	1021.33	21316.803	0.047912	0.9621671

Table 3: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.3	$166807.558 \\ 5766.237$	$2964.805 \\ 24355.889$	$\begin{array}{c} 56.2625735 \\ 0.2367492 \end{array}$	$0.0000000 \\ 0.8147805$

Table 4: microbiome_vs_brain_neo: neo.WM vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166357.20	2895.138	57.460892	0.0000000
wunifrac.PC.4	37028.98	28699.720	1.290221	0.2087808

Table 5: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166986.33	2856.539	58.457562	0.00000
unifrac.PC.1	-26060.92	18581.920	-1.402488	

Table 6: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166939.26	2930.54	56.9653668	0.0000000

	Estimate	Std. Error	t value	$\Pr(> t)$
unifrac.PC.2	-16703.01	20974.86	-0.7963344	0.4333351

Table 7: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166928.90	$2869.257 \\ 21244.284$	58.178445	0.0000000
unifrac.PC.3	27763.47		1.306868	0.2031519

Table 8: microbiome_vs_brain_neo: neo.WM vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	166809.03	2959.872	56.3568348	0.0000000
unifrac.PC.4	-10128.18	30560.967	-0.3314089	0.7430978

Table 9: microbiome_vs_brain_neo: neo.WM vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	176341.41843	9821.75873	17.954159	0.0000000
chao1	-96.94511	95.73393	-1.012652	0.3209277

Table 10: microbiome_vs_brain_neo: neo.WM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	176844.2274	10014.0640	17.659586	0.0000000
$observed_otus$	-169.1168	162.0283	-1.043748	0.3065902

Table 11: microbiome_vs_brain_neo: neo.WM vs PD_whole_tree

	Estimate	Std. Error	t value	Pr(> t)
Intercept	175925.889	14224.726	12.3676116	0.0000000
PD_whole_tree	-1876.652	2874.833	-0.6527866	0.5198522

Table 12: microbiome_vs_brain_neo: neo.WM vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	173987.264	14763.840	11.7846890	0.0000000
shannon	-2583.315	5229.095	-0.4940271	0.6255999

Table 13: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	276740.59	6869.174	40.287316	0.000000
wunifrac.PC.1	-43114.77	24795.898	-1.738786	

Table 14: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	276524.33	7282.251	37.9723673	0.0000000
wunifrac.PC.2	-1068.87	52283.921	-0.0204436	0.9838518

Table 15: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	276593.57	7275.056	38.0194432	0.000000
wunifrac.PC.3	-10654.35	59764.623	-0.1782718	0.8599462

Table 16: microbiome_vs_brain_neo: neo.GM vs wunifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	276025.76	7291.348	37.8566165	
wunifrac.PC.4	38805.39	72279.682	0.5368783	

Table 17: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	276748.73	7178.451	38.5527097	0.0000000
unifrac.PC.1	-38699.86	46696.151	-0.8287591	0.4150835

Table 18: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	276904.04	7062.297	39.208780	0.000000
unifrac.PC.2	-62952.11	50547.243	-1.245411	

Table 19: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	276754.25	7025.00	39.395625	0.0000000
unifrac.PC.3	69796.76	52013.85	1.341888	0.1916938

Table 20: microbiome_vs_brain_neo: neo.GM vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	276502.558	7273.006	38.0176469	0.000000
unifrac.PC.4	-9559.209	75094.485	-0.1272958	0.8997247

Table 21: microbiome_vs_brain_neo: neo.GM vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept chao1	289819.7003 -135.5826	24420.1414 238.0262		

Table 22: microbiome_vs_brain_neo: neo.GM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	285037.3532	25027.0657	11.3891639	0.000000
$observed_otus$	-143.7816	404.9399	-0.3550689	0.725516

Table 23: microbiome_vs_brain_neo: neo.GM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	292809.905 -3362.293	$35026.200 \\ 7078.834$	8.3597395 -0.4749783	0.000000

Table 24: microbiome_vs_brain_neo: neo.GM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	269090.594	36354.65	7.4018209	0.0000001
shannon	2690.025	12876.18	0.2089147	0.8362077

Table 25: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	65604.300	3409.067	19.2440623	0.000000
wunifrac.PC.1	-6732.491	12305.829	-0.5470977	0.5891625

Table 26: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	65414.73	3384.823	19.3258964	0.000000
wunifrac.PC.2	-20778.09	24301.797	-0.8550022	

Table 27: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	65750.63	3347.865	19.639568	0.000000
wunifrac.PC.3	-31155.06	27502.732	-1.132799	

Table 28: microbiome_vs_brain_neo: neo.CSF vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.4	64881.12 52899.73	$3289.156 \\ 32605.650$	10	$\begin{array}{c} 0.0000000 \\ 0.1172605 \end{array}$

Table 29: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	65700.98	3356.785	19.572591	0.000000
unifrac.PC.1	-23110.56	21836.038	-1.058368	0.3000074

Table 30: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.2	65914.19 -57999.83	$3025.167 \\ 21652.144$	21.788609 -2.678711	0.000000

Table 31: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	65565.707	3429.453	19.1184147	0.0000000
unifrac.PC.3	-1914.775	25392.037	-0.0754085	0.9404899

Table 32: microbiome_vs_brain_neo: neo.CSF vs unifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	65386.54	3232.475	20.228010	0.00000
unifrac.PC.4	-59327.74	33375.616	-1.777577	

Table 33: microbiome_vs_brain_neo: neo.CSF vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	73446.06045	11471.8712	6.4022738	0.0000011
chao1	-80.34848	111.8178	-0.7185663	0.4790708

Table 34: microbiome_vs_brain_neo: neo.CSF vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	68877.98036	11810.9729	5.8316940	0.0000044
$observed_otus$	-55.89323	191.1025	-0.2924778	0.7723350

Table 35: microbiome_vs_brain_neo: neo.CSF vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	67175.1765 -331.1962	16587.625 3352.378	4.0497163 -0.0987944	0.000 = 000

Table 36: microbiome_vs_brain_neo: neo.CSF vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	49583.075	16844.651	2.943550	0.0069123
shannon	5779.511	5966.083	0.968728	0.3419602

Table 37: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	509248.14	11606.12	43.87755	0.0000000 0.1463293
wunifrac.PC.1	-62811.52	41895.02	-1.49926	

Table 38: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	508787.44	12118.81	41.9832709	0.0000000
wunifrac.PC.2	-20825.63	87008.68	-0.2393512	0.8127847

Table 39: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.3	509151.75 -36043.17	$12096.52 \\ 99372.96$	42.090772 -0.362706	0.000000

Table 40: microbiome_vs_brain_neo: neo.ICV vs wunifrac.PC.4

E	stimate	Std. Error	t value	$\Pr(> t)$
	07264.1 28734.1	11938.31 118345.41	42.490430	0.0000000 0.2870673

Table 41: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	509436.04	11817.96	43.106947	0.000000
unifrac.PC.1	-87871.34	76876.35	-1.143022	

Table 42: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	509757.5	11499.36	44.329210	0.00000
unifrac.PC.2	-137654.9	82304.80	-1.672502	

Table 43: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	509248.86	11839.56	43.012497	0.0000000
unifrac.PC.3	95645.46	87661.34	1.091079	0.2856425

Table 44: microbiome_vs_brain_neo: neo.ICV vs unifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	508698.12	12024.09	42.3065729	0.000000
unifrac.PC.4	-79015.13	124149.91	-0.6364493	

Table 45: microbiome_vs_brain_neo: neo.ICV vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	539607.1792	40441.9369	13.3427630	0.0000000
chao1	-312.8762	394.1927	-0.7937139	0.4348314

Table 46: microbiome_vs_brain_neo: neo.ICV vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	530759.5609	41552.0200	12.7733757	0.0000000
$observed_otus$	-368.7916	672.3149	-0.5485399	0.5881869

Table 47: microbiome_vs_brain_neo: neo.ICV vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	535910.970 -5570.141	58358.34 11794.29	9.1831090 -0.4722746	0.000000

Table 48: microbiome_vs_brain_neo: neo.ICV vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	492660.933 5886.221	$60530.29 \\ 21438.78$	8.1390806 0.2745595	0.000000

Table 49: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.
PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept wunifrac.PC.1	879.35167 -94.49389	$20.63185 \\ 74.47552$	42.621071 -1.268791	0.000000

Table 50: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.
PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	877.7922	20.92264	41.9541859	
wunifrac.PC.2	-145.9404	150.21694	-0.9715306	

Table 51: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac. PC.3

-	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	878.9890	21.30254	41.2621767	0.0000000
wunifrac.PC.3	-16.3068	175.00045	-0.0931815	0.9265021

Table 52: microbiome_vs_brain_neo: neo. Hippocampus_LR vs wunifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	876.3983	21.11335	41.5091949	0.0000000 0.3695546
wunifrac.PC.4	191.2554	209.29828	0.9137936	

Table 53: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.
PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	879.8301	20.66676	42.572230	0.0000000
unifrac.PC.1	-167.2153	134.43823	-1.243808	0.2251073

Table 54: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.
PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	879.7474	20.91631	42.0603502	0.000000
unifrac.PC.2	-144.3236	149.70511	-0.9640528	0.3442528

Table 55: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.
PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	879.6978	20.16658	43.621577	0.0000000
unifrac.PC.3	252.4638	149.31548	1.690808	0.1033055

Table 56: microbiome_vs_brain_neo: neo. Hippocampus_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	878.67146	21.24824	41.3526707	0.000000
unifrac.PC.4	-71.71719	219.39013	-0.3268934	

Table 57: microbiome_vs_brain_neo: neo. Hippocampus_LR vs chao
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	Estimate	Std. Error	t value	Pr(> t)
Intercept	947.1185798	70.5029717	13.433740	0.00000
chao1	-0.6961445	0.6872014	-1.013014	

Table 58: microbiome_vs_brain_neo: neo. Hippocampus_LR vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	907.2044039	73.195264	12.3943047	0.0000000
$observed_otus$	-0.4785817	1.184305	-0.4041034	0.6895729

Table 59: microbiome_vs_brain_neo: neo. Hippocampus_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	938.54167	102.25220	9.1786940	0.00000
PD_whole_tree	-12.32058	20.66528	-0.5961969	0.556404

Table 60: microbiome_vs_brain_neo: neo. Hippocampus_LR vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	817.82845	105.76400	7.7325789	
shannon	22.07414	37.45977	0.5892759	

Table 61: microbiome_vs_brain_neo: neo.Amygdala_LR vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	900.6971	22.19134	40.587767	0.0000000
wunifrac.PC.1	-214.8247	80.10487	-2.681793	0.0127852

Table 62: microbiome_vs_brain_neo: neo.Amygdala_LR vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept wunifrac.PC.2	899.37381 -37.84053		35.6991462 -0.2092051	0.000000

Table 63: microbiome_vs_brain_neo: neo. Amygdala_LR vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	899.76512	25.20211	35.7019690	0.000000
wunifrac.PC.3	-18.33822	207.03551	-0.0885753	

Table 64: microbiome_vs_brain_neo: neo. Amygdala_LR vs wunifrac.
PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	900.90154	25.3190	35.582039	$0.0000000 \\ 0.7079501$
wunifrac.PC.4	-95.10355	250.9891	-0.378915	

Table 65: microbiome_vs_brain_neo: neo. Amygdala_LR vs unifrac.
PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	901.2853	23.55501	38.263003	0.00000
unifrac.PC.1	-290.7944	153.22640	-1.897809	

Table 66: microbiome_vs_brain_neo: neo.Amygdala_LR vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	900.03278	25.13863	35.8027783	0.000000
unifrac.PC.2	-63.17285	179.92567	-0.3511053	

Table 67: microbiome_vs_brain_neo: neo.Amygdala_LR vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	900.8966	22.88686	39.363047	0.0000000
unifrac.PC.3	389.1137	169.45677	2.296241	0.0303193

Table 68: microbiome_vs_brain_neo: neo. Amygdala_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	899.649768	25.19105	35.7130762	0.000000
unifrac.PC.4	-3.229479	260.09999	-0.0124163	0.990192

Table 69: microbiome_vs_brain_neo: neo.Amygdala_LR vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1011.94792	81.7904188	12.372451	0.000000
chao1	-1.14578	0.7972216	-1.437216	

Table 70: microbiome_vs_brain_neo: neo. Amygdala_LR vs observed_otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept	978.235209	85.30925	11.4669297	0.0000000
$observed_otus$	-1.328367	1.38031	-0.9623682	0.3450814

Table 71: microbiome_vs_brain_neo: neo. Amygdala_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(>\! t)$
Intercept PD_whole_tree	1039.59151 -28.90439	$118.41946 \\ 23.93271$	8.778891 -1.207736	$0.0000000 \\ 0.2384507$

Table 72: microbiome_vs_brain_neo: neo.Amygdala_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	936.92538 -13.47053	$125.75888 \\ 44.54161$	7.4501726 -0.3024258	0.000000

Table 73: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	26101.948	658.2269	39.654939	0.0000000
wunifrac.PC.1	-4051.702	2376.0248	-1.705244	0.1005461

Table 74: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	26080.9025	696.354	37.4535129	0.000000
wunifrac.PC.2	-196.0926	4999.569	-0.0392219	0.969025

Table 75: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	26085.8534	695.9681	37.4813948	0.0000000
wunifrac.PC.3	-604.2677	5717.3814	-0.1056896	0.9166721

Table 76: microbiome_vs_brain_neo: neo.mPFC vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	26019.355	694.4505	37.4675471	0.0000000
wunifrac.PC.4	4827.568	6884.1399	0.7012595	0.4896179

Table 77: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	26111.789	676.7525	38.583959	0.0000000
unifrac.PC.1	-5260.308	4402.3057	-1.194899	

Table 78: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	26119.272	673.7127	001100=0	0.0000000
unifrac.PC.2	-6248.478	4821.9892		0.2068709

Table 79: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	26106.251	665.3108	39.239178	0.0000000 0.1399802
unifrac.PC.3	7508.854	4926.0325	1.524321	

Table 80: microbiome_vs_brain_neo: neo.mPFC vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	26080.6363	000.0-0-	37.4923122	0.000000
unifrac.PC.4	-559.9276	7182.4082	-0.0779582	0.9384819

Table 81: microbiome_vs_brain_neo: neo.mPFC vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	27565.5874	2329.68872	11.8323050	0.000000
chao1	-15.1345	22.70777	-0.6664898	

Table 82: microbiome_vs_brain_neo: neo.mPFC vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	27532.78494	2380.03381	11.5682327	0.000000
observed_otus	-24.51995	38.50913	-0.6367307	

 $\begin{tabular}{lll} Table & 83: & microbiome_vs_brain_neo: & neo.mPFC & vs \\ PD_whole_tree & & \\ \end{tabular}$

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	28171.8981	3337.2577	8.4416310	0.0000000
PD_whole_tree	-431.6115	674.4635	-0.6399331	0.5280377

Table 84: microbiome_vs_brain_neo: neo.mPFC vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	26396.5164	3478.877	7.5876543	0.000000
shannon	-113.5505	1232.158	-0.0921558	

Table 85: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	298745.55	11538.39	25.891442	0.00000
wunifrac.PC.1	-68740.57	57630.29	-1.192785	0.26345

Table 86: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.2	293407.0 4157.2	$11442.57 \\ 100467.85$	$25.6417074 \\ 0.0413784$	0.000000

Table 87: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept wunifrac.PC.3	291031.6 134912.5	$11013.6 \\ 126846.6$	26.424761 1.063588	$0.0000000 \\ 0.3152184$

Table 88: microbiome_vs_brain_neo: yr1.WM vs wunifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	291443.81	13346.92	21.836028	0.0000000
wunifrac.PC.4	36457.49	129363.08	0.281823	0.7844522

Table 89: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	292025.90	11920.78	24.4972113	0.000000
unifrac.PC.1	27790.85	73344.93	0.3789062	

Table 90: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	292280.99	11038.20	26.4790491	0.000000
unifrac.PC.2	61249.33	68504.63	0.8940904	

Table 91: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	299820.6	9605.896	31.212139	$\begin{array}{c} 0.0000000 \\ 0.0518183 \end{array}$
unifrac.PC.3	174789.5	78020.733	2.240295	

Table 92: microbiome_vs_brain_neo: yr1.WM vs unifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	293357.244	11455.64	25.6081087	0.0000000
unifrac.PC.4	8851.687	116665.00	0.0758727	0.9411802

Table 93: microbiome_vs_brain_neo: yr1.WM vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	237375.2305	32062.5612	7.403502	0.0000409
chao1	554.2202	302.0985	1.834567	0.0997692

Table 94: microbiome_vs_brain_neo: yr1.WM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	245315.7642	38767.0442	6.327946	0.0001364
$observed_otus$	800.0024	620.7714	1.288723	0.2296337

Table 95: microbiome_vs_brain_neo: yr1.WM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	269602.688 4749.646	67949.00 13368.98	$\begin{array}{c} 3.9677211 \\ 0.3552736 \end{array}$	0.000=000

Table 96: microbiome_vs_brain_neo: yr1.WM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	228935.70 23529.75	63237.12 22740.45	0.000.	$0.0055694 \\ 0.3278060$

Table 97: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	136657.876	4676.97	29.2193199	0.0000000
wunifrac.PC.1	5664.265	23359.86	0.2424786	0.8138448

Table 98: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	137135.03	4045.055	33.901892	0.00000
wunifrac.PC.2	40277.72	35516.328	1.134062	

Table 99: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	138492.14	3772.34	36.712525	0.000000
wunifrac.PC.3	-79304.63	43447.08	-1.825315	

Table 100: microbiome_vs_brain_neo: yr1.GM vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.4	138255.25 -21531.01	00	27.5879025 -0.4432741	0.000000

Table 101: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	134648.36	3666.682	36.722130	0.0000000
unifrac.PC.1	49430.87	22559.974	2.191087	0.0561507

Table 102: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.2	137568.96 -25699.98		33.327148 -1.003203	0.000000

Table 103: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept unifrac.PC.3	$137856.8 \\ 20664.1$	4450.33 36146.34	$30.976754 \\ 0.571679$	$0.0000000 \\ 0.5815339$

Table 104: microbiome_vs_brain_neo: yr1.GM vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.4	137316.13 -42014.32		33.441293 -1.004703	

Table 105: microbiome_vs_brain_neo: yr1.GM vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	127642.328	13811.1002	9.2420101	0.0000069
chao1	93.535	130.1304	0.7187792	0.4905163

Table 106: microbiome_vs_brain_neo: yr1.GM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	123610.9441	15244.62	0.20020	0.0000199
observed otus	224.3778	244.11		0.3819826

Table 107: microbiome_vs_brain_neo: yr1.GM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	$131808.962 \\ 1055.503$		5.1099314 0.2079766	0.000000

Table 108: microbiome_vs_brain_neo: yr1.GM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	97803.39 14342.03	21499.800 7731.458		0.0013878 0.0965759

Table 109: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	653172.7	12442.40	52.495720	0.000000
wunifrac.PC.1	-110836.4	62145.51	-1.783498	0.108177

Table 110: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	644554.205	13339.19	48.3203573	$\begin{array}{c} 0.0000000 \\ 0.9674056 \end{array}$
wunifrac.PC.2	-4920.591	117120.49	-0.0420131	

Table 111: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	641360.5	12563.23	000	0.0000000
wunifrac.PC.3	181942.4	144694.13		0.2402466

Table 112: microbiome_vs_brain_neo: yr1.CSF vs wunifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept wunifrac.PC.4	634863.1 180403.4	14343.38 139021.11		$\begin{array}{c} 0.0000000 \\ 0.2266727 \end{array}$

Table 113: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	647313.01	13679.67	47.3193588	$\begin{array}{c} \hline 0.00000000 \\ 0.5255918 \\ \hline \end{array}$
unifrac.PC.1	-55576.25	84166.81	-0.6603107	

Table 114: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	643198.45	12821.35	50.1662154	0.000000
unifrac.PC.2	74243.62	79571.10	0.9330476	0.3751491

Table 115: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	651002.3	11977.03	0 0 0	0.0000000
unifrac.PC.3	175502.4	97279.53		0.1047081

Table 116: microbiome_vs_brain_neo: yr1.CSF vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.4	644683.69 -24081.65	$13335.46 \\ 135809.20$	48.3435747 -0.1773197	0.000000

Table 117: microbiome_vs_brain_neo: yr1.CSF vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	630529.3171	43535.9651	14.4829526	$0.0000002 \\ 0.7428860$
chao1	138.7767	410.2028	0.3383126	

Table 118: $microbiome_vs_brain_neo: yr1.CSF$ vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	653519.4380	49088.2399	13.3131569	$\begin{array}{c} 0.0000003 \\ 0.8537905 \end{array}$
observed otus	-149.0743	786.0433	-0.1896515	

Table 119: microbiome_vs_brain_neo: yr1.CSF vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	643269.5134 257.2747		8.0646423 0.0163936	0.0000=00

Table 120: microbiome_vs_brain_neo: yr1.CSF vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	644820.08451	77980.46	8.2689956	$0.0000170 \\ 0.9973599$
shannon	-95.39512	28042.24	-0.0034018	

Table 121: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1088576.1	23794.79	45.748512	0.000000
wunifrac.PC.1	-173912.7	118846.79	-1.463335	

Table 122: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1075096.23	24353.26	44.1458893	0.0000000
wunifrac. PC. 2	39514.33	213826.07	0.1847966	0.8574857

Table 123: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1070884.2	23947.18	44.718592	0.0000000
wunifrac.PC.3	237550.3	275806.29		0.4114348

Table 124: microbiome_vs_brain_neo: yr1.ICV vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1064562.2	27782.11	38.3182646	0.000000
wunifrac.PC.4	195329.8	269273.95	0.7253945	

Table 125: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept 1	1073987.27	25591.78	41.9660994	0.000000
unifrac.PC.1	21645.47	157458.43	0.1374678	

Table 126: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1073048	23839.38	45.0115980	0.0000000
unifrac. $PC.2$	109793	147950.56	0.7420923	0.4769506

Table 127: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.3	1088680 370956	$20533.55 \\ 166777.01$	00.0-000-	$\begin{array}{c} 0.00000000 \\ 0.0531926 \end{array}$

Table 128: microbiome_vs_brain_neo: yr1.ICV vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1075357.07	24360.83	44.1428799	0.000000
unifrac.PC.4	-57244.28	248092.31	-0.2307378	

Table 129: microbiome_vs_brain_neo: yr1.ICV vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	995546.8753			0.000000
chao1	786.5319	708.0231	1.110885	0.295413

Table 130: microbiome_vs_brain_neo: yr1.ICV vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1022446.1462	88095.758	11.6060769	0.0000010
$observed_otus$	875.3059	1410.665	0.6204915	0.5503214

Table 131: microbiome_vs_brain_neo: yr1.ICV vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	1044681.163 6062.423		7.1786176 0.2117328	0.00000=0

Table 132: microbiome_vs_brain_neo: yr1.ICV vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	971559.17	138259.00	7.0270955	0.00000==
shannon	37776.38	49718.77	0.7598012	

Table 133: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac. PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2443.3689	82.42592	29.6432096	0.0000000
wunifrac.PC.1	-272.0345	411.68916	-0.6607766	0.5253065

Table 134: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac.
PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.2	2422.16035 -72.57116	$77.7371 \\ 682.5459$	31.1583587 -0.1063242	0.000000

Table 135: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac. PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2403.084	72.90704	32.960930	$\begin{array}{c} 0.0000000 \\ 0.2269175 \end{array}$
wunifrac.PC.3	1089.016	839.69047	1.296925	

Table 136: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs wunifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.4	$2410.2595 \\ 222.6751$	90.80003 880.06582	26.544698 0.253021	0.0000000 0.8059366
wumirac.PC.4	222.0731	000.00002	0.255021	0.8059500

Table 137: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac. PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2446.1957	77.35556	31.622751	$0.0000000 \\ 0.3360825$
unifrac.PC.1	-483.6451	475.94520	-1.016178	

Table 138: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac.
PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2408.7843	67.65048	35.606313	$0.0000000 \\ 0.1144879$
unifrac.PC.2	733.6975	419.84853	1.747529	

Table 139: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac.
PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2421.59961	81.48806	29.7172340	0.000000
unifrac.PC.3	-17.08575	661.85995	-0.0258148	0.97996

Table 140: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2425.9193	74.32968	32.6372910	0.000000
unifrac.PC.4	-711.4804	756.97843	-0.9398952	

Table 141: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs chao
1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2518.7251592	253.217187	9.9468965	
chao1	-0.9545463	2.385852	-0.4000861	

Table 142: microbiome_vs_brain_neo: yr1.Hippocampus_LR vs observed_otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2602.103000	279.94867	9.2949290	0.000000
observed_otus	-2.992494	4.48278	-0.6675532	

Table 143: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs PD_whole_tree

	Estimate	Std. Error	t value	Pr(> t)
Intercept PD_whole_tree	2727.47030 -60.91461	453.5025 89.2267	6.0142341 -0.6826949	$0.0001990 \\ 0.5119874$

Table 144: microbiome_vs_brain_neo: yr1. Hippocampus_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2556.1862	452.4253	5.6499625	0.0000=00
shannon	-48.8933	162.6949	-0.3005214	

Table 145: microbiome_vs_brain_neo: yr1. Amygdala_LR vs wunifrac.
PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1958.6332	42.15094	46.467128	0.00000
wunifrac.PC.1	267.1166	210.52947	1.268785	

Table 146: microbiome_vs_brain_neo: yr1. Amygdala_LR vs wunifrac.
PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1980.0443	32.43506	61.04642	0.0000000
wunifrac.PC.2	710.2101	284.78579	2.49384	0.0342058

Table 147: microbiome_vs_brain_neo: yr1.Amygdala_LR vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1987.8723	40.74338	48.790063	0.0000000
wunifrac.PC.3	-482.3751	469.25280	-1.027964	0.3308003

Table 148: microbiome_vs_brain_neo: yr1.Amygdala_LR vs wunifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1985.850	49.23685	40.3325914	0.00000
wunifrac.PC.4	-120.144	477.22089	-0.2517576	0.806883

Table 149: microbiome_vs_brain_neo: yr1.Amygdala_LR vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1990.3775	42.62691	46.6929860	0.0000000
unifrac.PC.1	-221.6482	262.27035	-0.8451135	0.4199461

Table 150: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.
PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1977.59716	42.12469	46.946272	0.000000
unifrac.PC.2	98.01183	261.43182	0.374904	

Table 151: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.
PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.3	1984.3162 134.0952	43.84342 356.10380	$45.259152 \\ 0.376562$	$0.0000000 \\ 0.7152234$

Table 152: microbiome_vs_brain_neo: yr1. Amygdala_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1981.4312	40.23218	49.2499102	0.000000
unifrac.PC.4	-392.7537	409.72722	-0.9585736	

Table 153: microbiome_vs_brain_neo: yr1. Amygdala_LR vs chao
1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1918.0540167	136.846003	14.0161494	0.000000
chao1	0.6067552	1.289385	0.4705773	

Table 154: microbiome_vs_brain_neo: yr1.Amygdala_LR vs observed_otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept observed_otus	1901.08157 1.30282	153.128087 2.452019	12.4149763 0.5313254	$0.0000006 \\ 0.6080549$

Table 155: microbiome_vs_brain_neo: yr1. Amygdala_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	1954.396322 4.988339		7.7539726 0.1005894	0.0000=0=

Table 156: microbiome_vs_brain_neo: yr1. Amygdala_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2232.835	231.15900	9.659305	0.0000048
	-92.503	83.12617	-1.112802	0.2946314

Table 157: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	79458.630	2037.398	39.0000499	0.000000
wunifrac.PC.1	-5603.475	10176.104	-0.5506503	

Table 158: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	79027.968	1898.576	41.6248701	0.0000000
wunifrac. $PC.2$	5264.634	16669.843	0.3158179	0.7593417

Table 159: microbiome_vs_brain_neo: yr1.mPFC vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept wunifrac.PC.3	78694.06 18720.66	1872.564 21566.835		$0.0000000 \\ 0.4079272$

Table 160: microbiome_vs_brain_neo: yr1.mPFC vs wu-nifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	78456.33	2206.77	35.552561	0.0000000
wunifrac.PC.4	10546.51	21388.79	0.493086	0.6337588

Table 161: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	79559.39	1916.824	41.5058455	
unifrac.PC.1	-10820.48	11793.632	-0.9174851	

Table 162: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	78872.677	1870.156	42.1743948	$0.0000000 \\ 0.4971297$
unifrac.PC.2	8212.279	11606.451	0.7075616	

Table 163: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.3	79512.61 13331.55	$1923.71 \\ 15624.70$	$41.3329555 \\ 0.8532359$	$\begin{array}{c} 0.0000000 \\ 0.4156585 \end{array}$

Table 164: microbiome_vs_brain_neo: yr1.mPFC vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	78956.35	1864.683	42.3430388	0.000000
unifrac.PC.4	12870.65	18990.058	0.6777573	0.5149697

Table 165: microbiome_vs_brain_neo: yr1.mPFC vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept chao1	$75000.86107 \\ 39.78778$	6109.57223 57.56536	$12.2759595 \\ 0.6911758$	

Table 166: microbiome_vs_brain_neo: yr1.mPFC vs observed otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept	76592.12051	6988.1755	10.9602457	0.0000017
$observed_otus$	40.44345	111.9007	0.3614227	0.7261227

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	71328.951 1535.458		6.4177616 0.7021674	

Table 168: microbiome_vs_brain_neo: yr1.mPFC vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept shannon pdf 2	87944.281 -3256.094	10743.347 3863.372	8.1859294 -0.8428114	0.0000184

Microbiome yr1 vs brain volume

Table 169: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	299858.153	10678.62	28.0802434	0.0000000 0.8689594
wunifrac.PC.1	4383.518	25957.00	0.1688761	

Table 170: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.2	299206.05 42026.06	10500.96 65073.75	28.493218 0.645822	0.000000 0.531636
wummac.i C.2	42020.00	00010.10	0.040022	0.001000

Table 171: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	296751.0	9439.55	31.436987	0.0000000
wunifrac.PC.3	189312.1	101763.99	1.860305	0.0897681

Table 172: microbiome_vs_brain_yr1: yr1.WM vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	299819.9	9900.296	30.283930	$\begin{array}{c} 0.00000000 \\ 0.2105488 \end{array}$
wunifrac.PC.4	141833.6	106669.962	1.329649	

Table 173: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	299720.834	10663.88	28.1061725	0.00000
unifrac.PC.1	-5351.421	67947.01	-0.0787587	

Table 174: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	303808.7	9945.116	30.548530	$\begin{array}{c} 0.0000000 \\ 0.1388356 \end{array}$
unifrac.PC.2	116967.9	73296.471	1.595819	

Table 175: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	302377.71	11124.95	27.1801480	0.000000
unifrac.PC.3	61356.71	88949.35	0.6897938	

Table 176: microbiome_vs_brain_yr1: yr1.WM vs unifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	298167.09	10446.09	28.5434148	0.0000000
unifrac.PC.4	90429.19	101153.89	0.8939764	0.3904751

Table 177: microbiome_vs_brain_yr1: yr1.WM vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	345769.6784	29397.893	11.76172	0.0000001
chao1	-179.1202	108.184	-1.65570	0.1260020

Table 178: microbiome_vs_brain_yr1: yr1.WM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	351167.209	30752.5109	11.419139	0.000000
observed otus	-335.372	190.8637	-1.757129	

Table 179: microbiome_vs_brain_yr1: yr1.WM vs PD whole tree

	Estimate	Std. Error	t value	Pr(> t)
Intercept PD_whole_tree	351094.494 -5109.185	50478.103 4918.023	6.955382 -1.038870	$0.0000241 \\ 0.3211623$

Table 180: microbiome_vs_brain_yr1: yr1.WM vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept shannon	383200.64 -19417.52	$51156.00 \\ 11691.83$	7.490825 -1.660777	$0.0000121 \\ 0.1249639$

Table 181: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	137584.89	3418.467	40.247536	0.000000
wunifrac.PC.1	-11978.14	8309.425	-1.441513	

Table 182: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.2

123	timate Std.	Error t valu	$e ext{Pr}(> t)$
			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 183: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	138425.3 -31389.6	3669.364 30557.041	37.7245912	0.000000
wunifrac.PC.3	-31389.6	39557.941	-0.7935096	0.444261

Table 184: microbiome_vs_brain_yr1: yr1.CSF vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	137950.61	3613.39	38.1776135	
wunifrac.PC.4	31335.03	38932.19	0.8048619	

Table 185: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	137938.019	3714.799	37.1320248	$0.0000000 \\ 0.8852653$
unifrac.PC.1	3495.589	23669.576	0.1476828	

Table 186: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	138136.141	3839.775	35.9750656	0.000000
unifrac.PC.2	5882.918	28299.511	0.2078805	0.839121

Table 187: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	138496.03	3930.228	35.2386736	0.000000
unifrac.PC.3	13099.22	31424.081	0.4168529	0.6848048

Table 188: microbiome_vs_brain_yr1: yr1.CSF vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.4	138510.26 -33479.72	00=0-0	38.2145210 -0.9538928	0.00000 0.36063

Table 189: microbiome_vs_brain_yr1: yr1.CSF vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept chao1	151236.83337 -51.76852	$10639.85995 \\ 39.15459$	14.214175 -1.322157	0.000000

Table 190: microbiome_vs_brain_yr1: yr1.CSF vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	152692.62471	11194.64944	13.639786	0.0000000
$observed_otus$	-96.24843	69.47894	-1.385289	0.1934115

Table 191: microbiome_vs_brain_yr1: yr1.CSF vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	147986.490 -1000.232	18178.065 1771.068	8.1409375 -0.5647623	0.000000

Table 192: microbiome_vs_brain_yr1: yr1.CSF vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	143723.036	19864.461	7.2351844	0.0000=00
shannon	-1347.389	4540.072	-0.2967771	

Table 193: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	655448.20	13692.67	47.8685324	0.0000000
wunifrac.PC.1	-22029.34	33283.41	-0.6618715	0.5216776

Table 194: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	654752.0	12971.38	50.476675	$0.0000000 \\ 0.2116047$
wunifrac.PC.2	106615.3	80382.78	1.326345	

Table 195: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	650236.1	9580.814	67.868562	0.0000000
wunifrac.PC.3	371503.2	103286.903	3.596809	0.0041933

Table 196: microbiome_vs_brain_yr1: yr1.GM vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	656131.06	13773.28	47.6379831	0.00000
wunifrac.PC.4	74096.63	148399.08	0.4993065	

Table 197: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	656150.9	13840.22	47.4089760	$0.0000000 \\ 0.7134503$
unifrac.PC.1	33233.2	88185.72	0.3768546	

Table 198: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept unifrac.PC.2	$660574.7 \\ 128803.4$	13414.02 98862.63	49.245091 1.302852	$\begin{array}{c} 0.0000000 \\ 0.2192393 \end{array}$

Table 199: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.3	661187.6 118314.0	$14151.65 \\ 113149.31$	$46.721590 \\ 1.045645$	$0.0000000 \\ 0.3181588$

Table 200: microbiome_vs_brain_yr1: yr1.GM vs unifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	652217.6	12294.11	53.051215	0.0000000
unifrac.PC.4	223547.9	119049.07	1.877779	0.0871628

Table 201: microbiome_vs_brain_yr1: yr1.GM vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
	685681.8987			0.0000000
chao1	-115.1527	154.0319	-0.74759	0.4703877

Table 202: microbiome_vs_brain_yr1: yr1.GM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	689476.6204	44197.6772	15.5998384	0.0000000
$observed_otus$	-217.7212	274.3103	-0.7937041	0.4441524

Table 203: microbiome_vs_brain_yr1: yr1.GM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	736834.455 -8032.323	64446.819 6278.979		$0.0000002 \\ 0.2271383$

Table 204: microbiome_vs_brain_yr1: yr1.GM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	734560.93 -18255.96	70720.46 16163.34	-0.0000-0	$0.0000005 \\ 0.2827292$

Table 205: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1092891.24	24026.64	45.4866509	0.0000000
wunifrac.PC.1	-29623.97	58402.65	-0.5072367	0.6220033

Table 206: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1091303.2	22381.51	48.75915	0.0000000
wunifrac.PC.2	195505.6	138696.74	1.40959	0.1863013

Table 207: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1085412.3	19648.33	55.241954	0.000000
wunifrac.PC.3	529425.7	211820.78	2.499404	0.0295377

Table 208: microbiome_vs_brain_yr1: yr1.ICV vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1093901.5	23238.19	47.0734402	0.000000
wunifrac.PC.4	247265.2	250378.06	0.9875675	

Table 209: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1093809.74	24202.39	45.1942921	0.0000000
unifrac.PC.1	31377.36	154210.28	0.2034713	0.8424818

Table 210: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.2	$1102519.5 \\ 251654.2$	22878.27 168615.09	48.190677 1.492477	$\begin{array}{c} 0.00000000 \\ 0.1636888 \end{array}$

Table 211: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1102061	24786.31	44.4625074	$\begin{array}{c} 0.0000000 \\ 0.3516026 \end{array}$
unifrac.PC.3	192770	198178.55	0.9727085	

Table 212: microbiome_vs_brain_yr1: yr1.ICV vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1088895.0	22990.42	47.362979	0.000000
unifrac.PC.4	280497.4	222625.94	1.259949	0.2337624

Table 213: microbiome_vs_brain_yr1: yr1.ICV vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1182688.4105	69101.1462	17.115323	$\begin{array}{c} 0.0000000 \\ 0.2008035 \end{array}$
chao1	-346.0415	254.2916	-1.360806	

Table 214: microbiome_vs_brain_yr1: yr1.ICV vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1193336.4537	72549.7393	16.448528	0.0000000
$observed_otus$	-649.3417	450.2757	-1.442098	0.1771354

Table 215: microbiome_vs_brain_yr1: yr1.ICV vs PD_whole_tree

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1235915.44	111996.81	11.035274	0.0000003
PD_whole_tree	-14141.74	10911.72	-1.296014	0.2215034

Table 216: microbiome_vs_brain_yr1: yr1.ICV vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1261484.61	119430.40		
shannon	-39020.87	27296.11	-1.429539	0.1806300

Table 217: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.
PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2460.6001	70.92448	34.6932428	0.000000
wunifrac.PC.1	-127.9001	172.39938	-0.7418826	

Table 218: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.
PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2466.776	72.0729	34.2261284	0.0000000
wunifrac.PC.2	-198.353	446.6311	-0.4441093	0.6655736

Table 219: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2443.331	63.44064	38.513663	0.0000000
wunifrac.PC.3	1331.653	683.92806	1.947066	0.0775038

Table 220: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs wunifrac. PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2464.0358	71.54737	34.4392251	0.0000000

	Estimate	Std. Error	t value	$\Pr(> t)$
wunifrac. PC. 4	-418.4411	770.88151	-0.5428086	0.5980877

Table 221: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac.
PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept unifrac.PC.1	$2464.34545 \\ 24.59301$	$72.49408 \\ 461.91033$	33.993747 0.053242	$\begin{array}{c} 0.00000000 \\ 0.9584938 \end{array}$

Table 222: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac.
PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2458.7152	74.7288	32.9018411	0.0000000
unifrac.PC.2	-160.1195	550.7585	-0.2907254	0.7766695

Table 223: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac.
PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2467.98898	77.16751	31.9822271	0.0000000
unifrac.PC.3	85.61216	616.99170	0.1387574	0.8921496

Table 224: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2448.9804	68.17403	35.922485	$\begin{array}{c} 0.0000000 \\ 0.2069122 \end{array}$
unifrac.PC.4	885.3593	660.15775	1.341133	

Table 225: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2508.8766004	$222.8816603 \\ 0.8202025$	11.2565412	0.0000002
chao1	-0.1734467		-0.2114682	0.8363889

Table 226: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs observed_otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2490.230133	236.406848	10.5336633	0.0000004
$observed_otus$	-0.169092	1.467245	-0.1152446	0.9103281

Table 227: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs PD whole tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2838.22376	340.61626	8.332614	0.0000044
PD_whole_tree	-37.19529	33.18585	-1.120818	0.2862387

Table 228: microbiome_vs_brain_yr1: yr1. Hippocampus_LR vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2656.13595	384.38489	6.9100947	0.0000=00
shannon	-44.62778	87.85212	-0.5079876	

Table 229: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.
PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1987.2907	29.63193	67.065850	$\begin{array}{c} 0.0000000 \\ 0.0138784 \end{array}$
wunifrac.PC.1	-210.4919	72.02770	-2.922374	

Table 230: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.
PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1993.1131	39.50191	50.4561224	0.0000000
wunifrac.PC.2	20.8921	244.79076	0.0853467	0.9335193

Table 231: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.
PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1990.685	39.68972	50.1561911	0.0000000
wunifrac.PC.3	170.822	427.87887	0.3992297	0.6973656

Table 232: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs wunifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1993.0298	36.23407	55.004310	0.000000
wunifrac.PC.4	-552.7045	390.40113	-1.415735	

Table 233: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs unifrac.
PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1993.30481	39.36455	50.6370470	0.000000
unifrac.PC.1	-34.99515	250.81902	-0.1395235	

Table 234: microbiome_vs_brain_yr1: yr1.Amygdala_LR vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1987.6665	40.2102	49.4319007	$\begin{array}{c} 0.0000000 \\ 0.5916277 \end{array}$
unifrac.PC.2	-163.7474	296.3531	-0.5525417	

Table 235: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs unifrac.
PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2010.4585	39.22237	51.257955	$\begin{array}{c} 0.0000000 \\ 0.2326603 \end{array}$
unifrac.PC.3	396.1191	313.60187	1.263127	

Table 236: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1999.2036	38.55892	51.8480187	0.0000000 0.3861435
unifrac.PC.4	-336.9656	373.38223	-0.9024683	

Table 237: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1899.0974429	117.5830787	16.1511117	0.00000
chao1	0.3668017	0.4327047	0.8476952	

Table 238: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1885.6127282	123.929468	15.2152087	0.0000000
$observed_otus$	0.7026284	0.769161	0.9134998	0.3805666

Table 239: microbiome_vs_brain_yr1: yr1.Amygdala_LR vs PD whole tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1823.86950	188.28261	9.6868718	0.0000010
PD_whole_tree	16.86099	18.34416	0.9191475	0.3777333

Table 240: microbiome_vs_brain_yr1: yr1. Amygdala_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	1902.42808 21.15691	$209.46466 \\ 47.87367$	9.0823344 0.4419322	0.00000=0

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.1	80613.050 -6951.272	1926.314 4682.380		$0.0000000 \\ 0.1657423$

	Estimate	Std. Error	t value	Pr(> t)
Intercept	80678.35	2044.602	39.4592001	0.0000000
wunifrac.PC.2	10846.97	12670.264	0.8560966	0.4102056

Table 243: microbiome_vs_brain_yr1: yr1.mPFC vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	80009.87	1588.475	50.368983	0.0000000
wunifrac.PC.3	51073.31	17124.711	2.982433	0.0124652

	Estimate	Std. Error	t value	Pr(> t)
Intercept	80815.411	2104.302	38.4048603	0.0000000
wunifrac.PC.4	2336.652	22672.634	0.1030605	0.9197699

Table 245: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	80836.84	2033.587	39.7508656	$0.0000000 \\ 0.3928197$
unifrac.PC.1	11524.40	12957.400	0.8894071	

Table 246: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	81047.189	2161.116	37.5024696	$0.0000000 \\ 0.6825072$
unifrac.PC.2	6691.063	15927.635	0.4200915	

Table 247: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	81766.46	2082.48	39.263985	0.0000000
unifrac.PC.3	22085.06	16650.44	1.326395	

Table 248: microbiome_vs_brain_yr1: yr1.mPFC vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.4	80454.61 20772.30	2035.141 19707.124	00.00=10	$0.0000000 \\ 0.3144622$

Table 249: microbiome_vs_brain_yr1: yr1.mPFC vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
	84149.51917			0.000000
chao1	-12.97763	23.54341	-0.5512215	0.5925018

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept observed_otus	83738.62615	6806.4439	12.3028453	0.0000001
	-19.06948	42.2438	-0.4514149	0.6604606

	Estimate	Std. Error	t value	Pr(> t)
Intercept	87588.4211	10230.3593	8.5616173	0.0000034
PD_whole_tree	-673.8699	996.7321	-0.6760793	0.5129541

Table 252: microbiome_vs_brain_yr1: yr1.mPFC vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon pdf 2	91690.846 -2530.302	10787.747 2465.566	8.499536 -1.026256	0.0000037 0.3268098

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

Table 253: div_diff_vs_brain_yr1: WM vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept 3 chao1	20844.9049	16345.8479 84.6435	19.628526 -1.865923	0.000000

Table 254: div_diff_vs_brain_yr1: WM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	322789.9987 -286.1776		18.856887 -1.879873	0.000000
$observed_otus$	-280.1770	132.2323	-1.879873	0.0695425

Table 255: div_diff_vs_brain_yr1: WM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	324787.893 -5696.365	26451.021 4781.137	12.278841 -1.191425	

Table 256: div_diff_vs_brain_yr1: WM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	321784.2 -16724.6	16224.863 8592.714	-0.000	0.0000000 0.0802297

Table 257: div_diff_vs_brain_yr1: CSF vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	145183.08426			
chao1	-44.53157	34.70032	-1.283319	0.2283219

Table 258: div_diff_vs_brain_yr1: CSF vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	146024.05794	6979.07394	20.923128	0.0000000
$observed_otus$	-83.76771	62.06618	-1.349652	0.2068871

Table 259: div_diff_vs_brain_yr1: CSF vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	143390.667	10615.949	13.5070986	0.0000001
PD_whole_tree	-1039.464	1918.879	-0.5417039	0.5998833

Table 260: div_diff_vs_brain_yr1: CSF vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	143561.742	6950.246	20.6556350	0.000000
shannon	-3511.128	3680.862	-0.9538876	

Table 261: div_diff_vs_brain_yr1: GM vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept chao1	664244.96817 -74.87118	25573.3736 132.4263		$0.0000000 \\ 0.5842765$

Table 262: div_diff_vs_brain_yr1: GM vs observed_otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept	663031.2583	26959.7997	24.5933302	0.0000000
$observed_otus$	-113.1894	239.7584	-0.4720977	0.6469902

Table 263: div_diff_vs_brain_yr1: GM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	688343.751	36679.360	18.766515	0.0000000
PD_whole_tree	-7037.799	6629.954	-1.061516	0.3134194

Table 264: div_diff_vs_brain_yr1: GM vs shannon

	Estimate	Std. Error	t value	Pr(> t)
Intercept	670057.36	25181.35	26.609270	0.0000000
shannon	-11355.64	13336.08	-0.851497	0.4144189

Table 265: div_diff_vs_brain_yr1: ICV vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept chao1	1130272.957 -277.341		27.512923 -1.303711	

Table 266: div_diff_vs_brain_yr1: ICV vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1131845.3149	43344.2606	26.11292	0.0000000
$observed_otus$	-483.1348	385.4684	-1.25337	0.2385826

Table 267: div_diff_vs_brain_yr1: ICV vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1156522.31	61636.00	18.763747	0.0000000
PD_whole_tree	-13773.63	11140.98	-1.236304	0.2445963

Table 268: div_diff_vs_brain_yr1: ICV vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1135403.32	40420.92	28.08950	0.00000
shannon	-31591.37	21406.98	-1.47575	0.17079

Table 269: div_diff_vs_brain_yr1: Hippocampus_LR vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	2452.565043	139.7000844	17.5559310	0.0000000
chao1	0.012288	0.7234072	0.0169863	0.9867816

Table 270: div_diff_vs_brain_yr1: Hippocampus_LR vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2432.9946060	146.362019	16.6231282	0.0000000
$observed_otus$	0.2266053	1.301624	0.1740943	0.8652653

Table 271: div_diff_vs_brain_yr1: Hippocampus_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2577.01047	203.81629	12.6437903	0.000000
PD_whole_tree	-23.89834	36.84068	-0.6486942	0.5311499

Table 272: div_diff_vs_brain_yr1: Hippocampus_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	2482.91581	139.81816	17.7581781	0.0000000
shannon	-18.12659	74.04793	-0.2447953	0.8115649

Table 273: div_diff_vs_brain_yr1: Amygdala_LR vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1963.2596894	75.0932983	26.1442730	0.0000000
chao1	0.2140581	0.3888547	0.5504834	0.5940706

Table 274: div_diff_vs_brain_yr1: Amygdala_LR vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1952.7972909	78.2099252	24.9686633	0.000000
$observed_otus$	0.4702162	0.6955352	0.6760495	0.5143398

Table 275: div_diff_vs_brain_yr1: Amygdala_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> \mid \! t \mid)$
Intercept PD_whole_tree	1890.78414	107.51767	17.585799	0.0000000
	20.81907	19.43429	1.071255	0.3092279

Table 276: div_diff_vs_brain_yr1: Amygdala_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1948.10210	74.16123	26.2684692	0.0000000
shannon	31.53356	39.27591	0.8028729	0.4407129

Table 277: div_diff_vs_brain_yr1: mPFC vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	81984.46536	3955.70653	20.7256187	0.0000000
chao1	-10.01818	20.48379	-0.4890785	0.6353352

Table 278: div_diff_vs_brain_yr1: mPFC vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	81453.39800	4180.75754	19.4829279	0.0000000
$observed_otus$	-11.26604	37.18024	-0.3030114	0.7680909

Table 279: div_diff_vs_brain_yr1: mPFC vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD whole tree	83857.0938 -677.9108	5842.169 1055.998	14.3537603 -0.6419625	0.000000
PD_wnoie_tree	-077.9108	1055.998	-0.0419025	0.5353350

Table 280: div_diff_vs_brain_yr1: mPFC vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon pdf 2	81887.8682 -961.1266	3976.852 2106.147	20.5911286 -0.4563435	

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

	Estimate	Std. Error	t value	Pr(> t)
Intercept	73981.8372	23484.5896	3.150229	0.0117332
chao1	519.5091	221.2755	2.347793	0.0434619

Table 282: neo_div_vs_diff_brain: diff.WM vs observed_otus

Intercept 78368.9 observed_otus 800.7	 29034.971 464.933	 0.0244288 0.1191207

Table 283: neo_div_vs_diff_brain: diff.WM vs PD_whole_tree

	Estimate	Std. Error	t value	Pr(> t)
Intercept PD_whole_tree	111321.565 3029.167	54050.60 10634.47	2.0595805 0.2848443	0.0000=

Table 284: neo_div_vs_diff_brain: diff.WM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	49680.67 28038.27	46280.55 16642.76		$0.3109987 \\ 0.1263282$

Table 285: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	129397.22	9533.62	13.5727263	0.000000
wunifrac.PC.1	-37269.24	47617.16	-0.7826852	

Table 286: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	126496.118	9078.432	13.9336971	0.0000002
wunifrac. PC. 2	-5030.987	79710.294	-0.0631159	0.9510538

Table 287: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.3	124741.2 100095.1	8807.984 101443.977	14.1622907 0.9867028	0.000000

Table 288: neo_div_vs_diff_brain: diff.WM vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.4	128811.04 -42987.31		12.2280541 -0.4210323	

Table 289: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	124144.50	9179.646	13.5238877	0.0000003
unifrac.PC.1	47544.33	56479.561	0.8417971	0.4217055

Table 290: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	125436.78	8590.75	14.601377	0.0000001
unifrac.PC.2	58070.53	53315.42	1.089188	0.3043744

Table 291: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	130831	8189.466	15.975524	0.0000001
unifrac. $PC.3$	117943	66516.243	1.773146	0.1099593

Table 292: neo_div_vs_diff_brain: diff.WM vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	126554.45	9086.541	13.9276824	0.0000002
unifrac.PC.4	-10351.24	92537.943	-0.1118595	0.9133899

Table 293: neo_div_vs_diff_brain: diff.GM vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-135379.76334	52989.7339	-2.5548300	0.0309485
chao1	11.51897	499.2777	0.0230713	0.9820969

Table 294: neo_div_vs_diff_brain: diff.GM vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept observed otus	-137692.6016 57.8503	59479.4362 952.4361	-2.3149614 0.0607393	0.0 -0 0 0 = 0

Table 295: neo_div_vs_diff_brain: diff.GM vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	-137554.0776 666.2946	96471.03 18980.69	-1.4258589 0.0351038	00.000-

Table 296: neo_div_vs_diff_brain: diff.GM vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-144928.389	94249.16	-1.5377155	0.1584978
shannon	3910.141	33892.57	0.1153687	0.9106859

Table 297: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-142648.6	15939.94	-8.949133	0.0000089
wunifrac.PC.1	108512.4	79614.51	1.362973	0.2060143

Table 298: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	-134272.21	15962.54	-8.4117051	0.0000148
wunifrac. PC. 2	-62074.81	140154.05	-0.4429041	0.6682892

Table 299: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-131729.7	15959.9	-8.2537890	0.0000172
wunifrac.PC.3	-141400.8	183814.6	-0.7692575	0.4614509

Table 300: neo_div_vs_diff_brain: diff.GM vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-126338.7	18217.63	-6.9349688	0.0000680
wunifrac.PC.4	-146557.4	176571.67	-0.8300164	0.4279964

Table 301: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-135913.09	16839.87	-8.0709100	0.0000206
unifrac.PC.1	34258.76	103610.60	0.3306491	0.7484771

Table 302: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-135182.90	15990.73	-8.4538295	0.0000===
unifrac.PC.2	52812.96	99240.74	0.5321702	

Table 303: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-138454.3	16226.44	-8.5326369	0.0000132
unifrac.PC.3	-115459.2	131793.95	-0.8760585	0.4037738

Table 304: neo_div_vs_diff_brain: diff.GM vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	-133730.96	15866.28	-8.4286281	0.0000146
unifrac.PC.4	-93322.12	161583.25	-0.5775482	0.5777298

Table 305: neo_div_vs_diff_brain: diff.CSF vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	554785.0316	44923.3481	12.3495922	0.0000006
chao1	252.3016	423.2749	0.5960703	0.5658159

Table 306: neo_div_vs_diff_brain: diff.CSF vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept observed_otus	586308.7850 -100.1138	51377.6201 822.7028	11.4117545 -0.1216889	

Table 307: neo_div_vs_diff_brain: diff.CSF vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	579019.3864 253.7715	00000.00	6.9437983 0.0154679	0.0000.0

Table 308: neo_div_vs_diff_brain: diff.CSF vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	599347.101	81266.42	7.3750889	$\begin{array}{c} 0.0000421 \\ 0.8172133 \end{array}$
shannon	-6955.202	29223.90	-0.2379971	

Table 309: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	589540.5	12880.42	45.770296	0.000000
wunifrac.PC.1	-119012.7	64333.25	-1.849941	0.0973601

Table 310: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	580269.28	13917.2	41.694401	0.000000
wunifrac. PC. 2	-23723.29	122195.6	-0.194142	0.850376

Table 311: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	575769.1	12139.52	47.429312	0.0000000
wunifrac.PC.3	257246.1	139814.20	1.839914	0.0989251

Table 312: neo_div_vs_diff_brain: diff.CSF vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	575184.58	16007.3	35.9326373	0.0000000
wunifrac.PC.4	95014.47	155148.4	0.6124103	0.5554215

Table 313: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	582532.78	14436.67	40.350901	0.000000
unifrac.PC.1	-45234.12	88824.45	-0.509253	0.6228254

Table 314: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	577620.7	11651.31		0.0000000
unifrac.PC.2	145749.6	72309.70		0.0746468

Table 315: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	586889.7	12612.08	46.533948	$0.0000000 \\ 0.1132368$
unifrac.PC.3	179727.7	102437.45	1.754512	

Table 316: neo_div_vs_diff_brain: diff.CSF vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	580259.587	13963.97	41.5540609	0.000000
unifrac.PC.4	6059.906	142209.99	0.0426124	

Table 317: neo_div_vs_diff_brain: diff.ICV vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	493387.1055	63594.5352		0.0000283
chao1	783.3297	599.1978		0.2235215

Table 318: neo_div_vs_diff_brain: diff.ICV vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	526985.1273	76262.524	6.9101454	0.0000699
$observed_otus$	758.4771	1221.181	0.6211011	0.5499379

Table 319: neo_div_vs_diff_brain: diff.ICV vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	552786.874 3949.233		$4.3830094 \\ 0.1591521$	0.0000-

Table 320: neo_div_vs_diff_brain: diff.ICV vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	504099.38 24993.21		4.1565353 0.5730735	

Table 321: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.1	576289.04 -47769.54	$22696.59 \\ 113361.65$	25.3909999 -0.4213906	0.000000

Table 322: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	572493.19	20839.52	27.4715156	0.0000000
wunifrac. PC.2	-90829.08	182974.80	-0.4964021	0.6315084

Table 323: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept wunifrac.PC.3	568780.6 215940.4	$20643.55 \\ 237757.42$	27.5524665 0.9082383	$0.0000000 \\ 0.3874257$

Table 324: neo_div_vs_diff_brain: diff.ICV vs wunifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	577656.93	24529.93	23.5490639	0.0000000
wunifrac.PC.4	-94530.22	237752.71	-0.3975989	0.7001913

Table 325: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	570764.18	22089.71	25.8384690	0.0000000
${\it unifrac.} {\rm PC.1}$	36568.97	135911.23	0.2690651	0.7939462

Table 326: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.2	567874.5 256633.1	16186.33 100454.68	$35.083585 \\ 2.554715$	0.000000

Table 327: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	579266.4	20827.24	27.812918	0.0000000
unifrac.PC.3	182211.5	169162.43	1.077139	0.3094416

Table 328: neo_div_vs_diff_brain: diff.ICV vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	573083.08	20909.07	27.4083541	0.000000
unifrac.PC.4	-97613.46	212939.34	-0.4584097	

Table 329: neo_div_vs_diff_brain: diff. Hippocampus_LR vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1632.3329548	328.905997	4.9629164	0.0007774
chao1	-0.6195523	3.099004	-0.1999198	0.8459875

Table 330: neo_div_vs_diff_brain: diff. Hippocampus_LR vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1761.657092	364.051424	4.8390337	0.0009223
$observed_otus$	-3.193472	5.829506	-0.5478119	0.5971432

Table 331: neo_div_vs_diff_brain: diff. Hippocampus_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1786.17613	595.6652	2.998624	0.0149898
PD_whole_tree	-43.20008	117.1972	-0.368610	0.7209401

Table 332: neo_div_vs_diff_brain: diff. Hippocampus_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1640.47763	586.2269	2.7983661	$0.0207680 \\ 0.9051641$
shannon	-25.83273	210.8107	-0.1225399	

Table 333: neo_div_vs_diff_brain: diff.Hippocampus_LR vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1582.9892	108.3095	14.6154281	0.0000001
wunifrac.PC.1	-170.9885	540.9686	-0.3160784	0.7591503

Table 334: neo_div_vs_diff_brain: diff.Hippocampus_LR vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1569.5199	100.0940	15.6804662	
wunifrac.PC.2	-196.7357	878.8433	-0.2238576	

Table 335: neo_div_vs_diff_brain: diff. Hippocampus_LR vs wunifrac. PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1540.997	90.94536	16.944204	$0.0000000 \\ 0.1534422$
wunifrac.PC.3	1632.891	1047.44285	1.558931	

Table 336: neo_div_vs_diff_brain: diff. Hippocampus_LR vs wunifrac. PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1606.2207	115.2354	13.9386080	$0.0000002 \\ 0.5579619$
wunifrac.PC.4	-679.5238	1116.9017	-0.6084008	

Table 337: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.
PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept unifrac.PC.1	1594.9403 -509.2928	$101.7117 \\ 625.8010$	15.6809933 -0.8138256	0.000000

Table 338: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.
PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1552.0050	86.6889	17.903158	$\begin{array}{c} 0.0000000 \\ 0.1061973 \end{array}$
unifrac.PC.2	965.8142	538.0036	1.795181	

Table 339: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.PC.3

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1551.1186	103.0814	15.0475057	0.000000
unifrac.PC.3	-506.1105	837.2451	-0.6044951	

Table 340: neo_div_vs_diff_brain: diff. Hippocampus_LR vs unifrac.
PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1573.097	98.20028	16.0192696	0.000000
unifrac.PC.4	-654.456	1000.07829	-0.6544048	0.5292172

Table 341: neo_div_vs_diff_brain: diff.Amygdala_LR vs chao1

	Estimate	Std. Error	t value	Pr(> t)
Intercept chao1	1043.323630 1.024373		$\begin{array}{c} 6.0079617 \\ 0.6260599 \end{array}$	0.000=000

Table 342: neo_div_vs_diff_brain: diff.Amygdala_LR vs observed_otus

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1028.45457	194.890341	5.2770936	0.000000
observed otus	1.97019	3 120753	0.6313189	

Table 343: neo_div_vs_diff_brain: diff.Amygdala_LR vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1023.54109	320.27290	3.1958405	0.0109039
PD_whole_tree	24.61379	63.01375	0.3906099	0.7051705

Table 344: neo_div_vs_diff_brain: diff.Amygdala_LR vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1290.03170	312.0129	4.134546	$\begin{array}{c} 0.0025422 \\ 0.6525205 \end{array}$
shannon	-52.24808	112.2017	-0.465662	

Table 345: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1108.664	48.56179	22.829970	$0.0000000 \\ 0.0732457$
wunifrac.PC.1	491.736	242.54946	2.027364	

Table 346: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1147.40	49.55425	23.154428	0.0000000
wunifrac.PC.2	566.28	435.09538	1.301508	0.2254119

Table 347: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1151.0062	54.73739	21.0277881	0.000000
wunifrac.PC.3	-234.6801	630.42560	-0.3722566	

Table 348: neo_div_vs_diff_brain: diff.Amygdala_LR vs wunifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1194.2912	55.53093	21.506775	0.0000000
wunifrac.PC.4	-882.1499	538.22525	-1.638998	

Table 349: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.1

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1161.0135	54.57108	21.2752544	0.000000
unifrac.PC.1	-285.1693	335.75920	-0.8493269	

Table 350: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.2

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1143.2252	53.30087	21.4485283	0.000000
unifrac.PC.2	199.5305	330.79277	0.6031889	0.561274

Table 351: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	1131.9835	54.08413	20.930049	0.000000
unifrac.PC.3	-405.7587	439.28058	-0.923689	

Table 352: neo_div_vs_diff_brain: diff.Amygdala_LR vs unifrac.PC.4

	Estimate	Std. Error	t value	Pr(> t)
Intercept	1148.9572	52.48156		0.0000000
unifrac.PC.4	-400.0765	534.47571	-0.74854	0.4732417

Table 353: neo_div_vs_diff_brain: diff.mPFC vs chao1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept chao1	50243.33547 29.98677	3890.97274 36.66136	$12.9127955 \\ 0.8179394$	0.0000004 0.4345117

Table 354: neo_div_vs_diff_brain: diff.mPFC vs observed_otus

	Estimate	Std. Error	t value	Pr(> t)
Intercept	51550.41577	4488.16498	11.4858558	0.0000011
$observed_otus$	28.68754	71.86838	0.3991677	0.6990756

Table 355: neo_div_vs_diff_brain: diff.mPFC vs PD_whole_tree

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept PD_whole_tree	46276.519 1396.582	6950.938 1367.598	0.00.000	0.0000929 0.3338272

Table 356: neo_div_vs_diff_brain: diff.mPFC vs shannon

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept shannon	63637.993 -3782.424	0-00.0	10.159607 -1.679205	0.000000

Table 357: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	52857.019	1283.267	41.1894080	$0.0000000 \\ 0.4233579$
wunifrac.PC.1	5375.573	6409.479	0.8386911	

Table 358: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	53270.326	1213.996	43.8801464	0.000000
wunifrac. PC.2	-4875.748	10659.108	-0.4574255	0.658207

Table 359: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	53061.46	1203.757	44.0798914	0.000000
wunifrac.PC.3	12136.09	13863.998	0.8753674	

Table 360: neo_div_vs_diff_brain: diff.mPFC vs wunifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	53435.381	1434.899	37.2398196	
wunifrac.PC.4	-2987.929	13907.545	-0.2148423	

Table 361: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.1

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	53761.115	1174.688	45.766289	0.000000
unifrac.PC.1	-9812.957	7227.498	-1.357725	

Table 362: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.2

	Estimate	Std. Error	t value	Pr(> t)
Intercept	53005.51	951.0631	55.732906	0.0000000
unifrac.PC.2	14697.75	5902.4329	2.490118	0.0344154

Table 363: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.3

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept	53222.107	1285.173	41.4124228	0.0000000
unifrac. $PC.3$	-1435.125	10438.391	-0.1374852	0.8936739

Table 364: neo_div_vs_diff_brain: diff.mPFC vs unifrac.PC.4

	Estimate	Std. Error	t value	$\Pr(> t)$
Intercept unifrac.PC.4 pdf 2	53237.128 7258.558	1206.537 12287.459		0.0000000 0.5692373