

Individual	Frontal left		Frontal right		Total brain size
	white	grey	white	grey	
Homo sapiens 14686	97.88	119.36	96.98	105.18	1437.00
Homo sapiens 1696	129.33	117.96	126.40	123.13	1757.00
Homo sapiens 18992	91.62	98.71	77.90	109.24	1270.00
Homo sapiens 20784	97.97	101.41	97.19	105.76	1349.00
Homo sapiens 2431	96.18	104.47	91.17	99.42	1234.00
Homo sapiens 54491	109.32	100.96	105.90	102.63	1350.00
Homo sapiens 5694	91.65	88.54	89.65	87.93	1216.00
Homo sapiens 6895	67.81	83.85	67.30	84.77	1110.00
Pan troglodytes 280	22.98	35.87	26.53	32.35	444.98
Pan paniscus 86137	12.79	25.39	14.55	25.27	378.40
Gorilla gorilla 375	17.38	34.69	17.95	36.42	434.36
Pongo pygmaeus yn85 38	12.06	22.50	12.64	20.46	356.20
Hylobates lar 1203	2.77	7.02	3.03	6.59	98.36
Papio anubis 97	6.25	12.76	7.54	11.52	184.36
Cercocebus albigena 242	2.89	6.40	3.78	6.91	106.66
Cercopithecus mitis 261	2.21	5.08	2.53	5.11	72.39
Cercopithecus ascianus 219	1.42	4.38	1.57	3.56	59.36
Erythrocebus patas 1341	2.49	5.84	2.94	5.38	93.73
Miopithecus talapoin 1171	0.88	2.59	0.95	2.59	39.67
Nasalis larvatus 1365	1.23	4.05	1.47	4.03	62.02
Procolobus badius 213	1.86	5.63	2.20	5.31	75.97
Alouatta seniculus 1184	1.40	2.80	1.38	2.71	45.17
Ateles geoffroyi 1000	2.33	7.92	2.98	8.09	102.70
Lagothrix lagotricha 1571	2.54	6.21	2.94	5.57	88.16
Pithecia monachus 1180	0.78	1.77	0.83	1.91	32.82
Cebus albifrons 1200	2.52	4.98	2.70	4.47	77.03

Supplementary table 1: Volumes (cm<sup>3</sup>) of frontal white matter and frontal grey matter in left and right hemispheres, and total brain volume. Numbers after species names refer to catalogue numbers in the collection.

Individual	Section interval 5 left		Section interval 5 right	
	white	grey	white	grey
Homo sapiens 14686	11.94	23.08	17.13	31.45
Homo sapiens 1696	14.68	25.1	14.38	25.05
Homo sapiens 18992	11.92	21.51	13.18	28.62
Homo sapiens 20784	16.7	24.18	19.25	27.26
Homo sapiens 2431	10.73	18.65	8.62	15.58
Homo sapiens 54491	16.92	23.54	20.62	26.10
Homo sapiens 5694	13	19.25	14.47	19.28
Homo sapiens 6895	11.94	22.32	9.61	19.62
Pan troglodytes 280	2.11	7.64	2.50	6.57
Pan paniscus 86137	1.02	4.22	1.03	3.73
Gorilla gorilla 375	1.29	5.87	1.32	5.77
Pongo pygmaeus yn85 38	1.68	5.68	0.84	2.92
Hylobates lar 1203	0.24	1.28	0.27	1.30
Papio anubis 97	0.36	2.01	0.49	1.91
Cercocebus albigena 242	0.19	1.13	0.24	1.18
Cercopithecus mitis 261	0.08	0.63	0.12	0.75
Cercopithecus ascianus 219	0.07	0.57	0.09	0.58
Erythrocebus patas 1341	0.11	0.81	0.16	0.75
Miopithecus talapoin 1171	0.07	0.48	0.09	0.53
Nasalis larvatus 1365	0.02	0.38	0.05	0.44
Procolobus badius 213	0.08	0.81	0.12	0.78
Alouatta seniculus 1184	0.04	0.32	0.13	0.69
Ateles geoffroyi 1000	0.08	1.22	0.21	1.55
Lagothrix lagotricha 1571	0.09	0.97	0.14	0.92
Pithecia monachus 1180	0.02	0.16	0.07	0.44
Cebus albifrons 1200	0.1	0.66	0.15	0.77

Supplementary table 2: Volumes (cm<sup>3</sup>) of white and grey matter in left and right hemispheres up to the 5<sup>th</sup> section of the anterior frontal (data in Figures 2, 4, and 5). Numbers after species names refer to catalogue numbers in the collection.