

Table S3. Microglial molecular layer estimates for aged, exercised and sedentary subjects raised in large and small litters. Experimental parameters, optical fractionator counting results and individual unilateral microglial numbers (N) and mean groups with the coefficient of error (CE).

Subjects	Section thickness (μm)	N	CE	tsf	No. of counting frames	ΣQ^*	Subjects	Section thickness (μm)	N	CE	tsf	No. of counting frames	ΣQ^*
Aged Sedentary from Large Litters							Aged Exercised from Large Litters						
SMG20 EX62	31.8 \pm 7.43	31315.52	0.047	0.253 \pm 0.036	199	305	PAE G13	17.7 \pm 0.38	26842.82	0.038	0.396 \pm 0.0083	224	443
VIE G21 EX66	23.4 \pm 0.24	35491.54	0.040	0.299 \pm 0.003	213	439	SM G13	40.2 \pm 0.65	28099	0.052	0.175 \pm 0.0028	212	203
VSDE G21 EX64	33.1 \pm 5.21	36923.36	0.044	0.233 \pm 0.034	203	338	SM G32	30.5 \pm 3.55	27355.25	0.050	0.244 \pm 0.0281	210	266
VSDE G29EX119	26.7 \pm 0.41	32348.03	0.045	0.262 \pm 0.004	203	351	VIE G32 A	25.8 \pm 1.64	22590.08	0.047	0.277 \pm 0.0163	198	258
VSDEG29EX120	32.4 \pm 1.80	34783.94	0.045	0.219 \pm 0.011	216	311	VSE G32 A	28.1 \pm 1.47	24445.39	0.049	0.252 \pm 0.0132	211	255
Mean	29.5 \pm 1.89	34172.48	0.044				Mean	25866.51	25866.51	0.047			
SD		2300.65108					SD		2286.27				
CV²=(SD/Mean)²		0.005					CV²=(SD/Mean)²		0.008				
CE²		0.002					CE²		0.002				
CE²/CV²		0.4288					CE²/CV²		0.2865				
CVB²		0.003					CVB²		0.006				
CVB² (% of CV²)		57					CVB² (% of CV²)		71				
Aged Sedentary from Small Litters							Aged Exercised from Small Litters						
DOR EXP 122	29.5 \pm 3.89	29682.22	0.043	0.262 \pm 0.047	197	304	SMG23EX56	22.7 \pm 0.26	22578.74	0.045	0.309 \pm 0.036	211	289
SM G01B	18.6 \pm 0.31	24145.84	0.039	0.378 \pm 0.006	198	380	VIEG23EX58	22.1 \pm 1.50	21724.54	0.048	0.323 \pm 0.021	210	293
VME G04B	18.9 \pm 0.29	21524.84	0.044	0.370 \pm 0.006	207	330	VSDG01A	18.4 \pm 0.61	23877.26	0.040	0.382 \pm 0.012	215	378
VSD G04B	21.6 \pm 0.64	22572.45	0.046	0.325 \pm 0.010	212	304	VSEG23EX59	24.8 \pm 1.17	22193.94	0.051	0.285 \pm 0.013	209	261
VSE G01	19.8 \pm 0.58	21415.26	0.045	0.356 \pm 0.010	211	316	VSEG25	22.4 \pm 0.59	23503.34	0.043	0.314 \pm 0.008	228	305
Mean	21.7 \pm 2.02	23868.122	0.044				Mean	22775.56	0.045				
S.D.		3430.27445					S.D.		897.9239				
CV²=(D.P./Mean)²		0.021					CV²=(D.P./Mean)²		0.002				
CE²		0.002					CE²		0.002				
CE²/CV²		0.0921					CE²/CV²		1.3170				
CVB²		0.019					CVB²		0.000				
CVB² (% of CV²)		91					CVB² (% of CV²)		-32				

All evaluations were performed using a 100X objective lens (Nikon, NA 1.3, DF = 0.19 μm). a(frame)-area of the optical disector counting frame = 60 \times 60 μm^2 ; A(x,y step), x and y step sizes = 90 \times 90; asf, area sampling fraction [a(frame)/A(x,y step)] = 0.44; tsf, thickness sampling fraction, calculated by the height of optical disector = 7 μm divided by section thickness, h/section thickness; ssf, section sampling fraction = 1/6; number of sections = 5; ΣQ^ , counted microglial markers.