Table 2. Hippocampal CA1 spine dimensions and correlations with synaptic (PSD) area

Feature	N	Mean $\pm$ SD	Range (low, high)	r	p
Synaptic PSD area (μm^2)	100	0.069 $\pm$ 0.08	0.008, 0.54	–	–
Spine volume (μm^3)	100	0.062 $\pm$ 0.08	0.004, 0.56	+0.88	<0.0005
Head	100	0.051 $\pm$ 0.07	0.003, 0.55	+0.88	<0.0005
Neck[a]	92	0.012 $\pm$ 0.01	0.0004, 0.07	+0.32	<0.005
Spine surface area (μm^2)	100	0.83 $\pm$ 0.63	0.13, 4.38	+0.83	<0.0005
Head	100	0.61 $\pm$ 0.57	0.10, 4.24	+0.88	<0.0005
Neck	92	0.24 $\pm$ 0.17	0.02, 0.89	−0.11	ns
Axonal varicosity (μm^3)	58	0.11 $\pm$ 0.11	0.005, 0.76	+0.87	<0.0005
Vesicle number	58	223 $\pm$ 245	3, 1606	+0.90	<0.0005
Spine length (μm)	100	0.95 $\pm$ 0.42	0.24, 2.46	+0.23	<0.01
To PSD	100	0.82 $\pm$ 0.36	0.16, 2.13	−0.002	ns
Head	100	0.53 $\pm$ 0.28	0.15, 1.89	+0.48	<0.0005
Neck	92	0.45 $\pm$ 0.29	0.08, 1.58	=0.15	ns
Neck diameter (μm)	92	0.15 $\pm$ 0.06	0.038, 0.46	−0.03	ns

N, number of "features" completely contained within these 7 photographic series; r, correlation with synaptic PSD area; p, probability that r is not different from zero; ns, r is not significantly different from zero.

[a] Eight stubby dendritic spines were treated as "heads" because there were no constrictions ("necks") along their lengths.