

Additional Table 2 Data statistics details

Data	Response variable	Groups	n define as	Animal used	Normality	Homogeneity of variance test (Levene)	Hypothesis test	Test value	P-value	Summary
Figure 1E left	Blood Flow Index (U)	0:3m/s-1mm n=3	Mouse	3 mice	W=0.879 df=3 P=0.323	F=3.098 df=4 p=0.153	Repeated measurement ANOVA	$F_{\text{between group}}=11.385$ df1=1 df2=4	$P_{\text{between group}}=0.028$	*
		0:3m/s-2mm n=3		3 mice	W=0.825 df=3 P=0.175			$F_{\text{within group}}=2.996$ df1=3 df2=12	$P_{\text{within group}}=0.073$	
		10:3m/s-1mm n=3		3 mice	W=0.933 df=3 P=0.500	F=3.232 df=4 p=0.147				
		10:3m/s-2mm n=3		3 mice	W=0.995 df=3 P=0.871					
		20:3m/s-1mm n=3		3 mice	W=0.973 df=3 P=0.683	F=0.223 df=4 p=0.662				
		20:3m/s-2mm n=3		3 mice	W=0.754 df=3 P=0.010					
		30:3m/s-1mm n=3		3 mice	W=0.995 df=3 P=0.866	F=2.847 df=4 p=0.167				
		30:3m/s-2mm n=3		3 mice	W=0.821 df=3 P=0.167					
Figure 1E middle	Blood Flow Index (U)	0:4m/s-1mm n=3	Mouse	3 mice	W=0.750 df=3 P=0.000	F=0.005 df=4 p=0.947	Friedman's M test	$X^2=3$ df=1	P=0.083	ns
		0:4m/s-2mm n=3		3 mice	W=0.907 df=3 P=0.407					
		10:4m/s-1mm n=3		3 mice	W=0.796 df=3 P=0.105	F=15.574 df=4 p=0.017				
		10:4m/s-2mm n=3		3 mice	W=0.983 df=3 P=0.751	F=0.912 df=4 p=0.394				
		20:4m/s-1mm n=3		3 mice	W=0.987 df=3 P=0.784					
		20:4m/s-2mm n=3		3 mice	W=0.953 df=3 P=0.584	F=2.394 df=4 p=0.197				
		30:4m/s-1mm n=3		3 mice	W=0.793 df=3 P=0.098					
		30:4m/s-2mm n=3		3 mice	W=0.793 df=3 P=0.098					
Figure 1E right	Blood Flow Index (U)	0:5m/s-1mm n=3	Mouse	3 mice	W=0.911 df=3 P=0.422	F=6.510 df=4 p=0.063	Repeated measurement ANOVA	$F_{\text{between group}}=21.526$ df1=1 df2=4	$P_{\text{between group}}=0.01$	*
		0:5m/s-2mm n=3		3 mice	W=0.369 df=3 P=0.087			$F_{\text{within group}}=8.946$ df1=3 df2=12	$P_{\text{within group}}=0.002$	
		10:5m/s-1mm n=3		3 mice	W=0.198 df=3 P=0.868	F=0.006 df=4 p=0.94				
		10:5m/s-2mm n=3		3 mice	W=0.198 df=3 P=0.870					
		20:5m/s-1mm n=3		3 mice	W=0.262 df=3 P=0.597	F=0.245 df=4 p=0.647				
		20:5m/s-2mm n=3		3 mice	W=0.209 df=3 P=0.823					
		30:5m/s-1mm n=3		3 mice	W=0.351 df=3 P=0.180	F=1.085 df=4 p=0.356				
		30:5m/s-2mm n=3		3 mice	W=0.295 df=3 P=0.450					
Figure 1F left	Difference value of BFI (U)	3m/s-1mm n=3	Mouse	3 mice	W=0.898 df=3 P=0.378	F=2.924 df1=1 df2=4 p=0.162	Two-tailed unpaired t-test	t=2.413	P=0.73	ns
		3m/s-2mm n=3		3 mice	W=0.861 df=3 P=0.269					
Figure 2F middle	Difference value of BFI (U)	4m/s-1mm n=3	Mouse	3 mice	W=0.979 df=3 P=0.722	F=0.127 df1=1 df2=4 p=0.74	Two-tailed unpaired t-test	t=4.392	P=0.012	*
		4m/s-2mm n=3		3 mice	W=0.802 df=3 P=0.12					
Figure 2F right	Difference value of BFI (U)	5m/s-1mm n=3	Mouse	3 mice	W=0.810 df=3 P=0.139	F=3.078 df1=1 df2=4 p=0.154	Two-tailed unpaired t-test	t=4.561	P=0.01	*
		5m/s-2mm n=3		3 mice	W=0.931 df=3 P=0.494					
Figure 1H left	Blood Flow Index (U)	0:3m/s-1mm n=3	Mouse	3 mice	W=0.757 df=3 P=0.015	F=4.389 df=4 p=0.104	Repeated measurement ANOVA	$F_{\text{between group}}=0.623$ df1=1 df2=4	$P_{\text{between group}}=0.474$	ns
		0:3m/s-2mm n=3		3 mice	W=0.987 df=3 P=0.784			$F_{\text{within group}}=11.465$ df1=3 df2=12	$P_{\text{within group}}=0.001$	
		10:3m/s-1mm n=3		3 mice	W=0.943 df=3 P=0.540	F=0.041 df=4 p=0.849				
		10:3m/s-2mm n=3		3 mice	W=0.999 df=3 P=0.934					
		20:3m/s-1mm n=3		3 mice	W=0.887 df=3 P=0.344	F=1.081 df=4 p=0.496				
		20:3m/s-2mm n=3		3 mice	W=0.851 df=3 P=0.244					
		30:3m/s-1mm n=3		3 mice	W=0.898 df=3 P=0.380	F=1.332 df=4 p=0.879				
		30:3m/s-2mm n=3		3 mice	W=0.956 df=3 P=0.597					
Figure 1H middle	Blood Flow Index (U)	0:4m/s-1mm n=3	Mouse	3 mice	W=0.757 df=3 P=0.015	F=0.002 df=4 p=0.966	Repeated measurement ANOVA	$F_{\text{between group}}=53.153$ df1=1 df2=4	$P_{\text{between group}}=0.002$	**
		0:4m/s-2mm n=3		3 mice	W=0.781 df=3 P=0.053			$F_{\text{within group}}=5.898$ df1=3 df2=12	$P_{\text{within group}}=0.01$	
		10:4m/s-1mm n=3		3 mice	W=0.998 df=3 P=0.925	F=0.113 df=4 p=0.754				
		10:4m/s-2mm n=3		3 mice	W=0.977 df=3 P=0.708					
		20:4m/s-1mm n=3		3 mice	W=0.976 df=3 P=0.702	F=3.084 df=4 p=0.154				
		20:4m/s-2mm n=3		3 mice	W=0.987 df=3 P=0.780					
		30:4m/s-1mm n=3		3 mice	W=0.793 df=3 P=0.097	F=0.255 df=4 p=0.640				
		30:4m/s-2mm n=3		3 mice	W=0.999 df=3 P=0.943					
Figure 1H right	Blood Flow Index (U)	0:5m/s-1mm n=3	Mouse	3 mice	W=0.999 df=3 P=0.932	F=13.605 df=4 p=0.021	Friedman's M test	$X^2=1.333$ df=1	P=0.248	ns
		0:5m/s-2mm n=3		3 mice	W=0.758 df=3 P=0.017					
		10:5m/s-1mm n=3		3 mice	W=0.775 df=3 P=0.057	F=9.205 df=4 p=0.039				
		10:5m/s-2mm n=3		3 mice	W=0.887 df=3 P=0.344					
		20:5m/s-1mm n=3		3 mice	W=0.907 df=3 P=0.407	F=9.090 df=4 p=0.039				
		20:5m/s-2mm n=3		3 mice	W=0.925 df=3 P=0.469					
		30:5m/s-1mm n=3		3 mice	W=0.995 df=3 P=0.807	F=1.085 df=4 p=0.044				

		30:5m/s-2mm n=3		3 mice	W=0.925 df=3 P=0.471					
Figure 1J left	Blood Flow Index (U)	0:3m/s-1mm n=3	Mouse	3 mice	W=0.908 df=3 P=0.412	F=2.486 df=4 p=0.190	Friedman's M test	X <sup>2</sup> =1.333 df=1	P=0.248	ns
		0:3m/s-2mm n=3		3 mice	W=0.876 df=3 P=0.312					
		10:3m/s-1mm n=3		3 mice	W=0.833 df=3 P=0.196	F=3.727 df=4 p=0.126				
		10:3m/s-2mm n=3		3 mice	W=0.757 df=3 P=0.016					
		20:3m/s-1mm n=3		3 mice	W=0.847 df=3 P=0.233	F=3.911 df=4 p=0.119				
		20:3m/s-2mm n=3		3 mice	W=0.824 df=3 P=0.173					
		30:3m/s-1mm n=3		3 mice	W=0.763 df=3 P=0.029	F=0.099 df=4 p=0.769				
		30:3m/s-2mm n=3		3 mice	W=0.838 df=3 P=0.209					
Figure 1J middle	Blood Flow Index (U)	0:4m/s-1mm n=3	Mouse	3 mice	W=0.998 df=3 P=0.912	F=9.4 df=4 p=0.037	Friedman's M test	X <sup>2</sup> =3 df=1	P=0.083	ns
		0:4m/s-2mm n=3		3 mice	W=0.805 df=3 P=0.127					
		10:4m/s-1mm n=3		3 mice	W=0.993 df=3 P=0.845	F=0.746 df=4 p=0.436				
		10:4m/s-2mm n=3		3 mice	W=0.995 df=3 P=0.870					
		20:4m/s-1mm n=3		3 mice	W=0.939 df=3 P=0.522	F=0.911 df=4 p=0.394				
		20:4m/s-2mm n=3		3 mice	W=0.862 df=3 P=0.272					
		30:4m/s-1mm n=3		3 mice	W=0.969 df=3 P=0.661	F=3.273 df=4 p=0.145				
		30:4m/s-2mm n=3		3 mice	W=0.998 df=3 P=0.904					
Figure 1J right	Blood Flow Index (U)	0:5m/s-1mm n=3	Mouse	3 mice	W=0.989 df=3 P=0.802	F=0.035 df=4 p=0.862	Repeated measurement ANOVA	F <sub>between group</sub> =1.355 df1=1 df2=4 F <sub>within group</sub> =5.948 df1=3 df2=12	P <sub>between group</sub> =0.309 P <sub>within group</sub> =0.010	ns
		0:5m/s-2mm n=3		3 mice	W=0.838 df=3 P=0.208					
		10:5m/s-1mm n=3		3 mice	W=0.946 df=3 P=0.552	F=7.025 df=4 p=0.057				
		10:5m/s-2mm n=3		3 mice	W=0.917 df=3 P=0.441					
		20:5m/s-1mm n=3		3 mice	W=0.827 df=3 P=0.181	F=0.173 df=4 p=0.699				
		20:5m/s-2mm n=3		3 mice	W=0.99 df=3 P=0.807					
		30:5m/s-1mm n=3		3 mice	W=0.947 df=3 P=0.557	F=3.287 df=4 p=0.144				
		30:5m/s-2mm n=3		3 mice	W=0.953 df=3 P=0.582					
Figure 2B	Thickness of cortical swelling (μm)	3m/s-1mm n=11	Slice	11 slices / 3 mice	W=0.873 df=11 P=0.085	F=2.514 df1=2 df2=28 p=0.099	One-way ANOVA	F=230.590 df1=2 df2=28	P<0.0001	****
		4m/s-1mm n=10		10 slices / 3 mice	W=0.947 df=10 P=0.628					
		5m/s-1mm n=10		10 slices / 3 mice	W=0.901 df=10 P=0.225					
		3m/s vs 4m/s					Tukey's multiple comparisons test		P<0.0001	****
		4m/s vs 5m/s					Tukey's multiple comparisons test		P<0.0001	****
		3m/s vs 5m/s					Tukey's multiple comparisons test		P<0.0001	****
Figure 2C	Bleeding area (μm <sup>2</sup> )	3m/s-1mm n=10	Slice	10 slices / 3 mice	W=0.650 df=10 P<0.000	F=12.451 df1=2 df2=24 p<0.000	Kruskal-Wallis H test	H=17.762 df=2	P<0.0001	****
		4m/s-1mm n=9		9 slices / 3 mice	W=0.903 df=9 P=0.272					
		5m/s-1mm n=10		10 slices / 3 mice	W=0.888 df=10 P=0.191					
			3m/s vs 4m/s					Nemenyi multiple comparisons test		P=0.007
		4m/s vs 5m/s					Nemenyi multiple comparisons test		P=1.02	ns
		3m/s vs 5m/s					Nemenyi multiple comparisons test		P<0.0001	****
Figure 2D	Cortex loss depth (μm)	3m/s-2mm n=10	Slice	10 slices / 3 mice	W=0.885 df=10 P=0.148	F=0.450 df1=2 df2=26 p=0.642	One-way ANOVA	F=32.948 df1=2 df2=26	P<0.0001	****
		4m/s-2mm n=10		10 slices / 3 mice	W=0.927 df=10 P=0.415					
		5m/s-2mm n=9		9 slices / 3 mice	W=0.939 df=9 P=0.542					
		3m/s vs 4m/s					Tukey's multiple comparisons test		P=0.046	*
		4m/s vs 5m/s					Tukey's multiple comparisons test		P<0.0001	****
		3m/s vs 5m/s					Tukey's multiple comparisons test		P<0.0001	****
Figure 2E	Bleeding area (μm <sup>2</sup> )	3m/s-2mm n=10	Slice	10 slices / 3 mice	W=0.986 df=10 P=0.988	F=4.241 df1=2 df2=27 p=0.025	Kruskal-Wallis H test	H=17.159 df1=2 df2=27	P<0.0001	****
		4m/s-2mm n=10		10 slices / 3 mice	W=0.948 df=10 P=0.641					
		5m/s-2mm n=10		10 slices / 3 mice	W=0.960 df=10 P=0.788					
		3m/s vs 4m/s					Nemenyi multiple comparisons test		P=0.422	ns

		4m/s vs 5m/s					Nemenyi multiple comparisons test		P=0.027	*		
		3m/s vs 5m/s					Nemenyi multiple comparisons test		P<0.0001	****		
Figure 3D 3m/s	LF print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.836 df=8 P=0.068	F=0.494 df1=2 df2=19 p=0.618	Kruskal-Wallis H test	H=12.735 df1=2 df2=19	P=0.002	**		
		1mm n=8		8 mice	W=0.775 df=8 P=0.015							
		2mm n=6		6 mice	W=0.937 df=6 P=0.638							
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.644	ns		
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.001	***		
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.003	**		
	LH print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.973 df=8 P=0.921	F=0.442 df1=2 df2=19 p=0.649	One-way ANOVA	F=5.924 df1=2 df2=19	P=0.01	**		
		1mm n=8		8 mice	W=0.885 df=8 P=0.211							
		2mm n=6		6 mice	W=0.934 df=6 P=0.615							
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.989	ns		
		Sham vs 2mm					Tukey's multiple comparisons test		P=0.02	*		
		1mm vs 2mm					Tukey's multiple comparisons test		P=0.015	*		
	RF print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.928 df=8 P=0.498	F=5.349 df1=2 df2=19 p=0.014	Kruskal-Wallis H test	H=12.522 df1=2 df2=19	P=0.02	*		
		1mm n=8		8 mice	W=0.966 df=8 P=0.868							
		2mm n=6		6 mice	W=0.882 df=6 P=0.281							
		Sham vs 1mm					Nemenyi multiple comparisons test		P=1	ns		
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.005	***		
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.005	***		
	RH print area (cm <sup>2</sup> )	Sham n=8	Neuron	8 mice	W=0.950 df=8 P=0.706	F=2.351 df1=2 df2=19 p=0.122	One-way ANOVA	F=8.743 df1=2 df2=19	P=0.002	**		
		1mm n=8		8 mice	W=0.850 df=10 P=0.095							
		2mm n=6		6 mice	W=0.890 df=10 P=0.318							
				Sham vs 1mm					Tukey's multiple comparisons test		P=0.972	ns
				Sham vs 2mm					Tukey's multiple comparisons test		P=0.005	**
				1mm vs 2mm					Tukey's multiple comparisons test		P=0.003	**
Figure 3D 4m/s	LF print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.836 df=8 P=0.068	F=0.245 df1=2 df2=19 p=0.785	Kruskal-Wallis H test	H=12.125 df1=2 df2=19	P=0.002	**		
		1mm n=8		8 mice	W=0.930 df=8 P=0.518							
		2mm n=6		6 mice	W=0.762df=6 P=0.026							
		Sham vs 1mm					Nemenyi multiple comparisons test		P=1	ns		
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.004	**		
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.011	*		
	LH print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.973 df=8 P=0.921	F=1.591 df1=2 df2=19 p=0.23	One-way ANOVA	F=5.207 df1=2 df2=19	P=0.016	**		
		1mm n=8		8 mice	W=0.844 df=8 P=0.054							
		2mm n=6		6 mice	W=0.978 df=6 P=0.939							
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.221	ns		
		Sham vs 2mm					Tukey's multiple comparisons test		P=0.012	*		
		1mm vs 2mm					Tukey's multiple comparisons test		P=0.264	ns		

	RF print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.953 df=8 P=0.742	F=0.000 df1=2 df2=19 p=1	One-way ANOVA	F=35.089 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.936 df=8 P=0.569						
		2mm n=6		6 mice	W=0.917 df=6 P=0.485						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.657	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	RH print area (cm <sup>2</sup> )	Sham n=8	Neuron	8 mice	W=0.885 df=8 P=0.21	F=0.5 df1=2 df2=19 p=0.614	One-way ANOVA	F=6.981 df1=2 df2=19	P =0.005	**	
		1mm n=8		8 mice	W=0.957 df=8 P=0.781						
		2mm n=6		6 mice	W=0.936 df=6 P=0.628						
			Sham vs 1mm					Tukey's multiple comparisons test		P=0.245	ns
			Sham vs 2mm					Tukey's multiple comparisons test		P=0.004	**
			1mm vs 2mm					Tukey's multiple comparisons test		P=0.098	ns
Figure 3D 5m/s	LF print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.836 df=8 P=0.068	F=0.057 df1=2 df2=20 p=0.945	One-way ANOVA	F=34.176 df1=2 df2=20	P<0.0001	****	
		1mm n=8		8 mice	W=0.956 df=8 P=0.771						
		2mm n=7		7 mice	W=0.905 df=7 P=0.362						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.119	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	LH print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.973 df=8 P=0.921	F=0.951 df1=2 df2=20 p=0.403	One-way ANOVA	F=5.868 df1=2 df2=20	P=0.010	***	
		1mm n=8		8 mice	W=0.846 df=8 P=0.088						
		2mm n=7		7 mice	W=0.83 df=7 P=0.08						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.153	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P=0.007	**	
		1mm vs 2mm					Tukey's multiple comparisons test		P=0.297	ns	
	RF print area (cm <sup>2</sup> )	Sham n=8	Mouse	8 mice	W=0.953 df=8 P=0.742	F=1.87 df1=2 df2=20 p=0.18	One-way ANOVA	F=40.95 df1=2 df2=20	P<0.0001	****	
		1mm n=8		8 mice	W=0.95 df=8 P=0.712						
		2mm n=7		7 mice	W=0.89 df=7 P=0.274						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.066	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	RH print area (cm <sup>2</sup> )	Sham n=8	Neuron	8 mice	W=0.885 df=8 P=0.21	F=0.472 df1=2 df2=20 p=0.63	One-way ANOVA	F=1.607 df1=2 df2=20	P =0.225	ns	
		1mm n=8		8 mice	W=0.83 df=8 P=0.059						
		2mm n=7		7 mice	W=0.956 df=6 P=0.784						
Figure 3E 3m/s	LF Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.988 df=8 P=0.992	F=0.244 df1=2 df2=19 p=0.786	One-way ANOVA	F=105.163 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.937 df=8 P=0.579						
		2mm n=6		6 mice	W=0.798 df=6 P=0.057						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.977	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	

		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	LH Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.774 df=8 P=0.015	F=1.145 df1=2 df2=19 p=0.339	Kruskal-Wallis H test	H=12.528 df1=2 df2=19	P=0.02	*	
		1mm n=8		8 mice	W=0.813 df=8 P=0.04						
		2mm n=6		6 mice	W=0.884 df=6 P=0.286						
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.939	ns	
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.02	*	
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.02	*	
	RF Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.863 df=8 P=0.128	F=1.917 df1=2 df2=19 p=0.174	One-way ANOVA	F=82.471 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.921 df=8 P=0.441						
		2mm n=6		6 mice	W=0.858 df=6 P=0.182						
		Sham vs 1mm					Tukey's multiple comparisons test		P=9.07	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	RH Meanintensity (U)	Sham n=8	Neuron	8 mice	W=0.949 df=8 P=0.700	F=2.253 df1=2 df2=19 p=0.132	One-way ANOVA	F=10.336 df1=2 df2=19	P<0.0001	**	
		1mm n=8		8 mice	W=0.908 df=10 P=0.338						
		2mm n=6		6 mice	W=0.855 df=10 P=0.173						
			Sham vs 1mm					Tukey's multiple comparisons test		P=0.923	ns
			Sham vs 2mm					Tukey's multiple comparisons test		P=0.001	***
			1mm vs 2mm					Tukey's multiple comparisons test		P=0.003	**
Figure 3E 4m/s	LF Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.988 df=8 P=0.992	F=0.854 df1=2 df2=19 p=0.441	One-way ANOVA	F=78.305 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.901 df=8 P=0.292						
		2mm n=6		6 mice	W=0.902 df=6 P=0.386						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.954	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	

		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	LH Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.774 df=8 P=0.015	F=1.803 df1=2 df2=19 p=0.192	Kruskal-Wallis H test	H=82.471 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.873 df=8 P=0.162						
		2mm n=6		6 mice	W=0.951 df=6 P=0.747						
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.065	ns	
		Sham vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Nemenyi multiple comparisons test		P<0.023	*	
	RF Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.863 df=8 P=0.128	F=1.96 df1=2 df2=19 p=0.168	One-way ANOVA	F=94.059 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.985 df=8 P=0.982						
		2mm n=6		6 mice	W=0.954 df=6 P=0.772						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.534	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	RH Meanintensity (U)	Sham n=8	Neuron	8 mice	W=0.949 df=8 P=0.700	F=1.103 df1=2 df2=19 p=0.352	One-way ANOVA	F=23.307 df1=2 df2=19	P<0.0001	****	
		1mm n=8		8 mice	W=0.877 df=10 P=0.177						
		2mm n=6		6 mice	W=0.952 df=10 P=0.757						
			Sham vs 1mm					Tukey's multiple comparisons test		P=0.702	ns
			Sham vs 2mm					Tukey's multiple comparisons test		P=0.001	****
			1mm vs 2mm					Tukey's multiple comparisons test		P=0.001	****
Figure 3E 5m/s	LF Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.988 df=8 P=0.992	F=0.198 df1=2 df2=20 p=0.822	One-way ANOVA	F=130.246 df1=2 df2=20	P<0.0001	****	
		1mm n=8		8 mice	W=0.944 df=8 P=0.653						
		2mm n=7		7 mice	W=0.940 df=7 P=0.636						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.922	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
	LH Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.774 df=8 P=0.015	F=2.435 df1=2 df2=20 p=0.113	Kruskal-Wallis H test	H=14.136 df1=2 df2=20	P=0.001	***	
		1mm n=8		8 mice	W=0.977 df=8 P=0.948						
		2mm n=7		7 mice	W=0.975 df=7 P=0.931						
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.712	ns	
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.001	***	
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.002	***	
	RF Meanintensity (U)	Sham n=8	Mouse	8 mice	W=0.961 df=8 P=0.824	F=1.033 df1=2 df2=20 p=0.374	One-way ANOVA	F=110.733 df1=2 df2=20	P<0.0001	****	
		1mm n=8		8 mice	W=0.87 df=8 P=0.151						
		2mm n=7		7 mice	W=0.933 df=7 P=0.579						
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.515	ns	
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		1mm vs 2mm					Tukey's multiple comparisons test		P<0.0001	****	
		Sham n=8		8 mice	W=0.949 df=8 P=0.700						



Figure 3G 3m/s	Latency to fall (s)	Sham n=6	Mouse	6 mice	W=0.805 df=6 P=0.065	F=1.616 df1=2 df2=15 p=0.231	Kruskal-Wallis H test	H=1.275 df1=2 df2=15	P =0.529	ns
		1mm n=6		6 mice	W=0.2 df=6 P=0.617					
		2mm n=6		6 mice	W=0.2 df=6 P=0.506					
Figure 3H 4m/s	Latency to fall (s)	Sham n=6	Mouse	6 mice	W=0.805 df=6 P=0.065	F=3.660 df1=2 df2=15 p=0.051	One-way ANOVA	F=11.722 df1=2 df2=15	P =0.00086	***
		1mm n=6		6 mice	W=0.801 df=6 P=0.060					
		2mm n=6		6 mice	W=0.792 df=6 P=0.050					
		Sham vs 1mm					Tukey's multiple comparisons test		P =0.0037	**
		Sham vs 2mm					Tukey's multiple comparisons test		P=0.00134	**
		1mm vs 2mm					Tukey's multiple comparisons test		P=0.865	ns
Figure 3I 5m/s	Latency to fall (s)	Sham n=6	Mouse	6 mice	W=0.805 df=6 P=0.065	F=7.408 df1=2 df2=15 p=0.006	Kruskal-Wallis H test	H=11.556 df1=2 df2=15	P=0.003	**
		1mm n=6		6 mice	W=0.981 df=6 P=0.956					
		2mm n=6		6 mice	W=0.942 df=6 P=0.677					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.0068	**
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.0017	**
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.6653	ns
Figure 7B	Mito area ( $\mu\text{m}^2$ )	Sham n=56	Mito	3 mice	W=0.824 df=56 P<0.0001	F=15.939 df1=2 df2=190 p<0.0001	Kruskal-Wallis H test	H=7.951 df1=2 df2=190	P=0.019	**
		1mm n=72		3 mice	W=0.854 df=72 P<0.0001					
		2mm n=65		3 mice	W=0.894 df=65 P<0.0001					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.049	*
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.005	**
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.272	ns
Figure 7C	Mito perimeter ( $\mu\text{m}$ )	Sham n=56	Mito	3 mice	W=0.930 df=56 P=0.003	F=13.153 df1=2 df2=190 p<0.0001	Kruskal-Wallis H test	H=10.917 df1=2 df2=190	P=0.004	**
		1mm n=72		3 mice	W=0.951 df=72 P=0.007					
		2mm n=65		3 mice	W=0.929 df=65 P=0.001					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.01	*
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.002	**
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.747	ns
Figure 7D	Mito circularity	Sham n=56	Mito	3 mice	W=0.835 df=56 P<0.0001	F=6.771 df1=2 df2=190 p=0.0014	Kruskal-Wallis H test	H=5.534 df1=2 df2=190	P=0.063	ns
		1mm n=72		3 mice	W=0.855 df=72 P<0.0001					
		2mm n=65		3 mice	W=0.853 df=65 P<0.0001					
Figure 7E	Vacuole area ( $\text{nm}^2$ )	Sham n=160	Mito	3 mice	W=0.791 df=160 P<0.0001	F=30.086 df1=2 df2=545 p<0.0001	Kruskal-Wallis H test	H=42.963 df1=2 df2=545	P<0.0001	****
		1mm n=196		3 mice	W=0.629 df=196 P<0.0001					
		2mm n=192		3 mice	W=0.698 df=192 P<0.0001					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.032	*
		Sham vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****
		1mm vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****
Figure 7F	Vacuole perimeter (nm)	Sham n=160	Mito	3 mice	W=0.949 df=160 P<0.0001	F=18.863 df1=2 df2=545 p<0.0001	Kruskal-Wallis H test	H=36.815 df1=2 df2=545	P<0.0001	****
		1mm n=196		3 mice	W=0.902 df=196 P<0.0001					
		2mm n=192		3 mice	W=0.801 df=192 P<0.0001					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.024	*
		Sham vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****
		1mm vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****
Figure 7G	Are ratio	Sham n=56	Mito	3 mice	W=0.746 df=56 P<0.0001	F=5.154 df1=2 df2=190 p=0.006	Kruskal-Wallis H test	H=40.664 df1=2 df2=190	P<0.0001	****
		1mm n=72		3 mice	W=0.895 df=72 P<0.0001					
		2mm n=65		3 mice	W=0.930 df=65 P<0.0001					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.543	ns
		Sham vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****
		1mm vs 2mm					Nemenyi multiple comparisons test		P<0.0001	****
Figure 8B	Mito area ( $\mu\text{m}^2$ )	Sham n=76	Mito	3 mice	W=0.846 df=76 P<0.0001	F=19.12 df1=2 df2=205 p<0.0001	Kruskal-Wallis H test	H=12.638 df1=2 df2=205	P=0.002	**
		1mm n=68		3 mice	W=0.846 df=68 P<0.0001					
		2mm n=64		3 mice	W=0.942 df=64 P<0.0001					
		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.001	**
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.073	ns
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.035	*
Figure 8C	Mito perimeter ( $\mu\text{m}$ )	Sham n=76	Mito	3 mice	W=0.938 df=76 P<0.0001	F=13.329 df1=2 df2=205 p<0.0001	Kruskal-Wallis H test	H=12.050 df1=2 df2=205	P=0.002	**
		1mm n=68		3 mice	W=0.851 df=68 P<0.0001					
		2mm n=64		3 mice	W=0.977 df=64 P<0.0001					



		Sham vs 1mm					Nemenyi multiple comparisons test		P=0.0005	***
		Sham vs 2mm					Nemenyi multiple comparisons test		P=0.224	ns
		1mm vs 2mm					Nemenyi multiple comparisons test		P=0.034	*

Figure 8D	Mito circularity	Sham n=76	Mito	3 mice	W=0.830 df=76 P<0.0001	F=2.707 df1=2 df2=205 p=0.069	Kruskal-Wallis H test	H=20.989 df1=2 df2=205	P<0.0001	****
		1mm n=68		3 mice	W=0.902 df=68 P<0.0001					
		2mm n=64		3 mice	W=0.843 df=64 P<0.0001					
		Sham vs 1mm					nemenyi multiple comparisons test		P=0.054	ns
		Sham vs 2mm					nemenyi multiple comparisons test		P=0.013	*
		1mm vs 2mm					nemenyi multiple comparisons test		P<0.0001	****
Figure 8E	Vacuole area (nm <sup>2</sup> )	Sham n=189	Mito	3 mice	W=0.536 df=189 P<0.0001	F=15.133 df1=2 df2=624 p<0.0001	Kruskal-Wallis H test	H=19.139 df1=2 df2=624	P<0.0001	****
		1mm n=221		3 mice	W=0.678 df=221 P<0.0001					
		2mm n=217		3 mice	W=0.628 df=217 P<0.0001					
		Sham vs 1mm					nemenyi multiple comparisons test		P=0.563	ns
		Sham vs 2mm					nemenyi multiple comparisons test		P<0.0001	****
		1mm vs 2mm					nemenyi multiple comparisons test		P<0.0001	****
Figure 8F	Vacuole perimeter (nm)	Sham n=189	Mito	3 mice	W=0.717 df=189 P<0.0001	F=7.233 df1=2 df2=624 p=0.0007	Kruskal-Wallis H test	H=22.307 df1=2 df2=624	P<0.0001	****
		1mm n=221		3 mice	W=0.752 df=221 P<0.0001					
		2mm n=217		3 mice	W=0.845 df=217 P<0.0001					
		Sham vs 1mm					nemenyi multiple comparisons test		P=0.333	ns
		Sham vs 2mm					nemenyi multiple comparisons test		P<0.0001	****
		1mm vs 2mm					nemenyi multiple comparisons test		P<0.0001	****
Figure 8G	Are ratio	Sham n=76	Mito	3 mice	W=0.536 df=76 P<0.0001	F=15.361 df1=2 df2=205 p<0.0001	Kruskal-Wallis H test	H=33.486 df1=2 df2=205	P<0.0001	****
		1mm n=68		3 mice	W=0.583 df=68 P<0.0001					
		2mm n=64		3 mice	W=0.749 df=64 P<0.0001					
		Sham vs 1mm					nemenyi multiple comparisons test		P=0.052	
		Sham vs 2mm					nemenyi multiple comparisons test		P<0.0001	****
		1mm vs 2mm					nemenyi multiple comparisons test		P=0.004	**
Figure 9B	Normal Mito (%)	Sham n=3	Mouse	3 mice	W=0.998 df=3 P=0.954	F=2.584 df1=2 df2=6 p=0.155	One-way ANOVA	F=40.376 df1=2 df2=6	P<0.0001	****
		1mm n=3		3 mice	W=0.991 df=3 P=0.817					
		2mm n=3		3 mice	W=0.993 df=3 P=0.836					
		Sham vs 1mm					Tukey's multiple comparisons test		P=0.001	**
		Sham vs 2mm					Tukey's multiple comparisons test		P<0.0001	****
		1mm vs 2mm					Tukey's multiple comparisons test		P=0.825	ns
Figure 9C	Reactive/degenerating Mito (%)	7d n=3	Mouse	3 mice	W=0.910 df=3 P=0.417	F=2.295 df1=1 df2=4 P=0.204	Two-tailed unpaired t-test	t=-3.571	P=0.023	*
		30d n=3		3 mice	W=0.997 df=3 P=0.903					
Figure 9D	End-stage degenerating Mito (%)	7d n=3	Mouse	3 mice	W=0.917 df=3 P=0.442	F=0.133 df1=1 df2=4 P=0.734	Two-tailed unpaired t-test	t=4.102	P=0.015	*
		30d n=3		3 mice	W=0.994 df=3 P=0.848					