

Supplementary Materials

The list of all supplemental material

- 1) Figure S1. It demonstrates the experimental setup for measuring mobility of vesicles in astrocytes using TIRF microscope, which was described in Material and Methods. It helps to demonstrate how the data was collected.
- 2) Table S1. It is the results of one-way ANOVA test used in Figures 2, 3, and 4. The table supports the the statistical significance of the results.
- 3) Movie S1 and movie S2. They are the movies of movement of intracellular vesicles labeled by EGFP-CD63 (S1) and EGFP-VAMP3 (s2). The movies help to demonstrate how the data was processed.

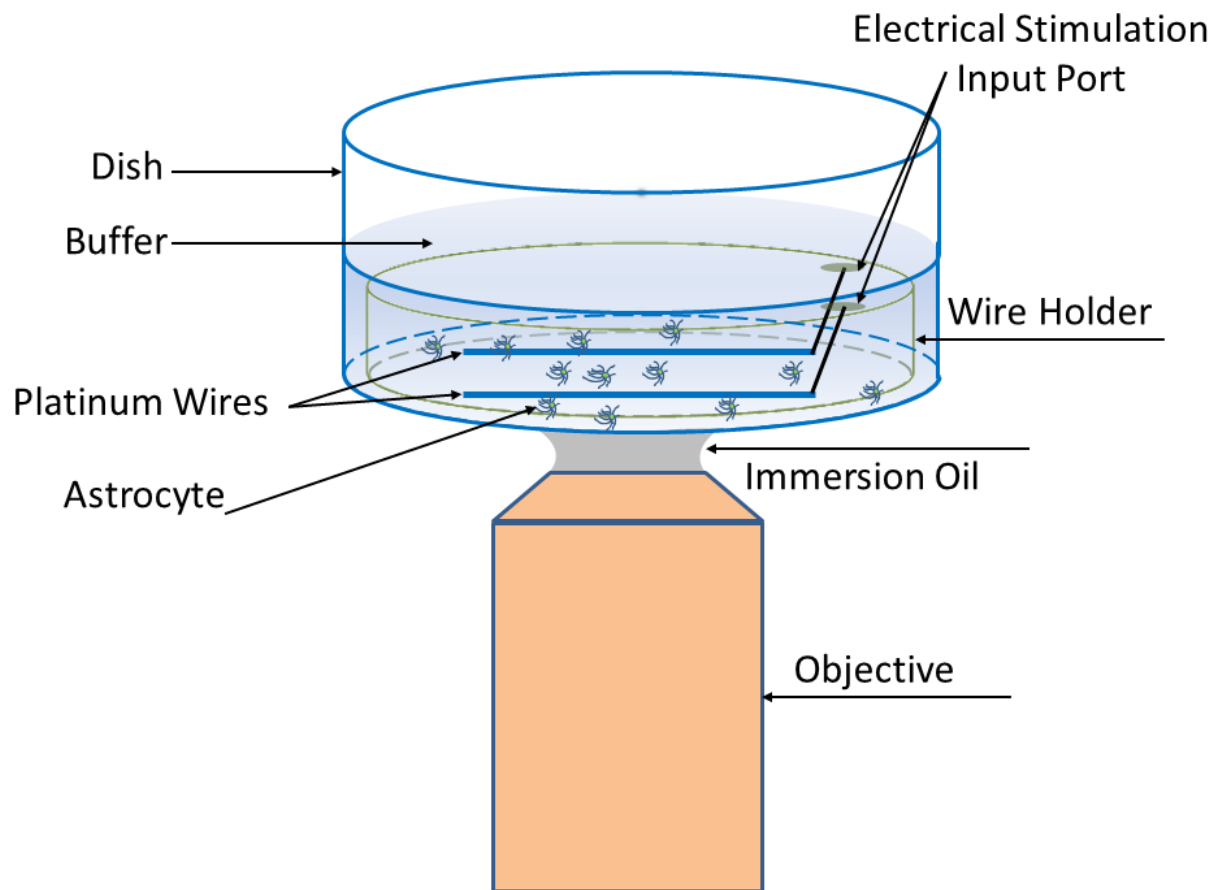


Figure S1

A schematic diagram of the experimental setup for measuring mobility of vesicles in astrocytes using TIRF microscope. The output of stimulus isolator was connected to platinum wires through two electrical stimulation input ports.

Table S1

The results of one-way ANOVA used in Figures 2, 3, and 4

Figure	SS (Between groups)	df (Between groups)	MS (Between groups)	SS (Within groups)	df (Within groups)	MS (Within groups)	F- statistic	p-value
Fig. 2C	0.1854	1	0.1854	0.1158	8	0.0145	12.80	0.0072
Fig. 2D	0.0971	1	0.0971	0.0653	6	0.0109	8.92	0.0244
Fig. 3C	0.1747	1	0.1747	0.0845	8	0.0106	16.55	0.0036
Fig. 3D	0.1728	1	0.1728	0.0375	6	0.0063	27.64	0.0019
Fig. 4A2	0.0499	3	0.0166	0.0363	12	0.0030	5.51	0.0130
Fig. 4B2	0.0392	3	0.0131	0.0298	12	0.0025	5.26	0.0151
Fig. 4A3	0.1046	3	0.0349	0.0204	12	0.0017	20.55	0.0001
Fig. 4B3	0.0711	3	0.0237	0.0409	12	0.0034	6.95	0.0058
Fig. 4C3	0.0370	3	0.0123	0.0383	12	0.0032	3.86	0.0381
Fig. 4D3	0.0564	3	0.0188	0.0329	12	0.0027	6.86	0.0060

SS, Sum of squares.

df, Degrees of freedom.

MS, Mean squares.

Movie S1 and S2 (see attachment)