

SUPPLEMENTARY INFORMATION

SPATIAL GEOMETRY OF STEM CELL PROLIFERATION IN THE ADULT HIPPOCAMPUS

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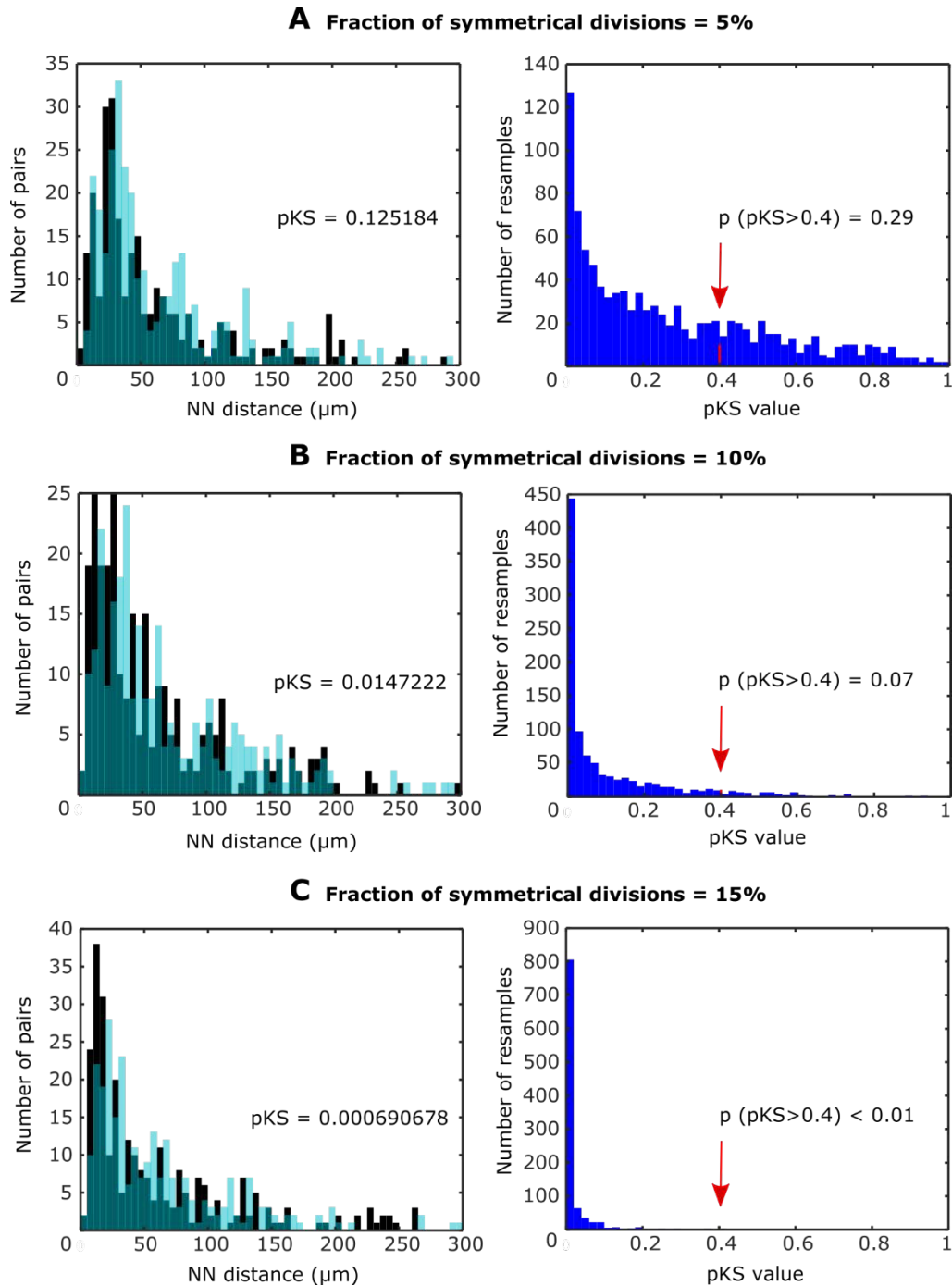


Figure S1. The sensitivity of RAM. We tested our technique by repeating our analysis in Fig. 1 with the certain number of symmetric divisions artificially introduced into the data. **(a)** When the fraction of symmetric divisions artificially introduced is 5%, observing similar actual and resampled nearest neighbor distributions, as in Fig.1 is very likely. $p > 0.4$ is observed in 29% of cases. **(b)** For 10% of artificially introduced symmetric divisions, failure to detect them ($p > 0.4$) is less likely (7%). **(c)** For 15% of symmetric divisions, observing $p > 0.4$, as in our data is very unlikely ($< 1\%$). We conclude that 15% of symmetrical divisions is unlikely to be consistent with our data, while the borderline of 10% is consistent.

A

Age	Cell type	Average no. of sampled sections per DG	Total cells in sampled sections Mean, SD	Total cells per DG Mean, SD
2 weeks	RGLs	7	2301, 536	26356, 5018
2.5 months	RGLs	16	815, 62 *	8197, 195
	BrdU ⁺ RGLs	16	68, 15 *	777, 146
	Non-radial	8	15, 6	174, 77
	BrdU ⁺ Non-radial	8	6, 5	66, 54
7 months	RGLs	8.5	361, 48	3836, 354

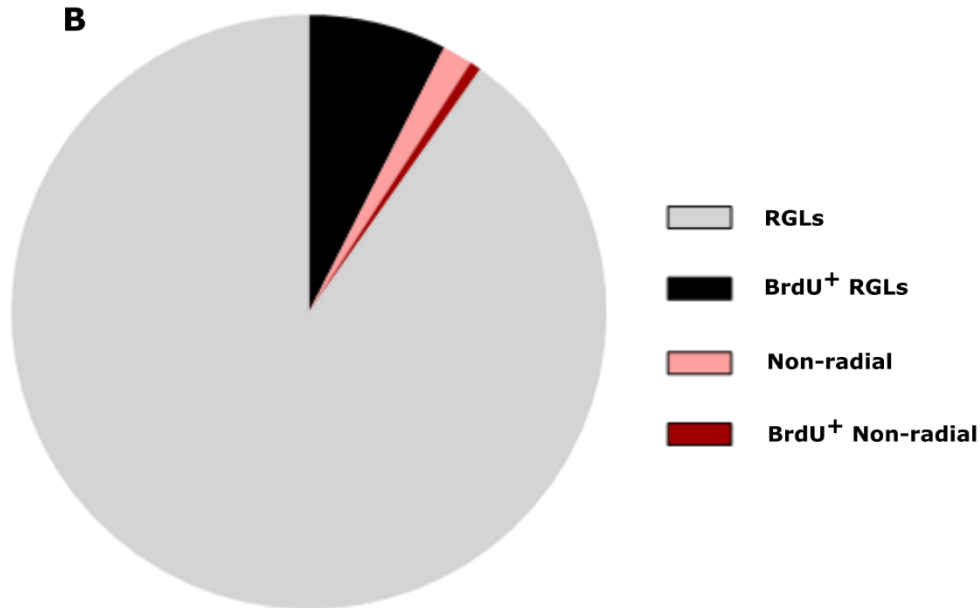
B

Figure S2. RGLs and non-radial GFP/GFAP-positive cells in the DG. **(a)** 4 animals were analyzed for each age. Estimation per DG presented as average number of cells per section in each animal multiplied by the average number of sections collected, by 6 (every sixth section was analyzed), and by 2 (for 2 hemispheres). * - One collection of 8 sections was used for each animal on average, the same sections were analyzed for non-radial cells. **(b)** Graphical representation of the data from the forth column, i.e. RGLs and non-radial GFP/GFAP-positive cells in 2.5-month-old animals.