

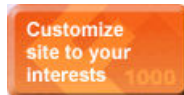
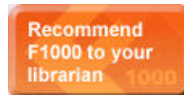
Welcome Shigeo Okabe

[Home](#)
[Feedback](#)
[Support](#)
[Log off](#)

Last visit : 14-Dec-2007



MAJOR ADVANCES. EXPERT OPINIONS.


[My F1000 Biology](#) | [Browse the Faculties](#) | [Top 10s](#) | [Advanced Search](#) | [My Details](#) | [About](#) | [Faculty Member List](#)
Must ReadF1000 Factor **6.0**

EndNote

[Download citation](#)[Send page by email](#)**Direct astrocytic contacts regulate local maturation of dendritic spines.**

Nishida H, Okabe S

J Neurosci 2007 Jan 10 **27**(2):331-40 [[abstract on PubMed](#)] [[citations on Google Scholar](#)] [[related articles](#)][[full text](#)] [[order article](#)]**Selected by** | Michael Ehlers

Evaluated 21 Feb 2007

[Relevant Sections](#)**Faculty Comments****Faculty Member****Michael Ehlers**Duke University Medical
Center, United States of
America
NEUROSCIENCE

New Finding

Tech Advance

Comments

Nishida and Okabe utilize elegant two-photon time-lapse imaging to simultaneously visualize astrocytic processes near and in contact with growing dendritic protrusions in hippocampal slice cultures. Dendritic protrusions which contacted astrocytic processes were longer lived and exhibited a more mature mushroom spine morphology. Interference with astrocyte actin remodeling and motility through Rac1 resulted in the induction of longer filopodial protrusions from nearby dendrites. These new results suggest that dynamic contact with astrocytes stabilizes dendritic spines.

Competing interests: None declared

Evaluated 21 Feb 2007

[How to cite this evaluation](#)**Faculty Comments****How to cite the Faculty of 1000 Biology evaluation(s) for this paper****1) To cite all the evaluations for this article:**Faculty of 1000 Biology: evaluations for Nishida H & Okabe S *J Neurosci* 2007 Jan 10 27 (2) :331-40
<http://www.f1000biology.com/article/id/1066976/evaluation>**2) To cite an evaluation by a specific Faculty member:**Michael Ehlers: Faculty of 1000 Biology, 21 Feb 2007 <http://www.f1000biology.com/article/id/1066976/evaluation>