Correction

NEUROSCIENCE

Correction for "Left-right asymmetry of the hippocampal synapses with differential subunit allocation of glutamate receptors," by Yoshiaki Shinohara, Hajime Hirase, Masahiko Watanabe, Makoto Itakura, Masami Takahashi, and Ryuichi Shigemoto, which appeared in issue 49, December 9, 2008, of *Proc Natl Acad Sci USA* (105:19498–19503; first published December 3, 2008; 10.1073/pnas.0807461105).

The authors note that Fig. 1 appeared incorrectly. The *x* axis in Figure 1*Dii* and the *y* axis in Figure 1*Eii* have been corrected. The corrected figure and its corresponding legend appear below.

On page 19499, right column, first paragraph, line 1 "0.278 μm^3 vs. 0.166 μm^3" should instead appear as "0.0349 μm^3 vs. 0.0207 μm^3".

On page 19500, left column, first paragraph, line 9 "F = 0.06, $P = 0.806$ for spine head volume" should instead appear as "F = 0.0783, $P = 0.78$ for spine head volume".

CORRECTION

Downloaded by guest on October 26, 2021

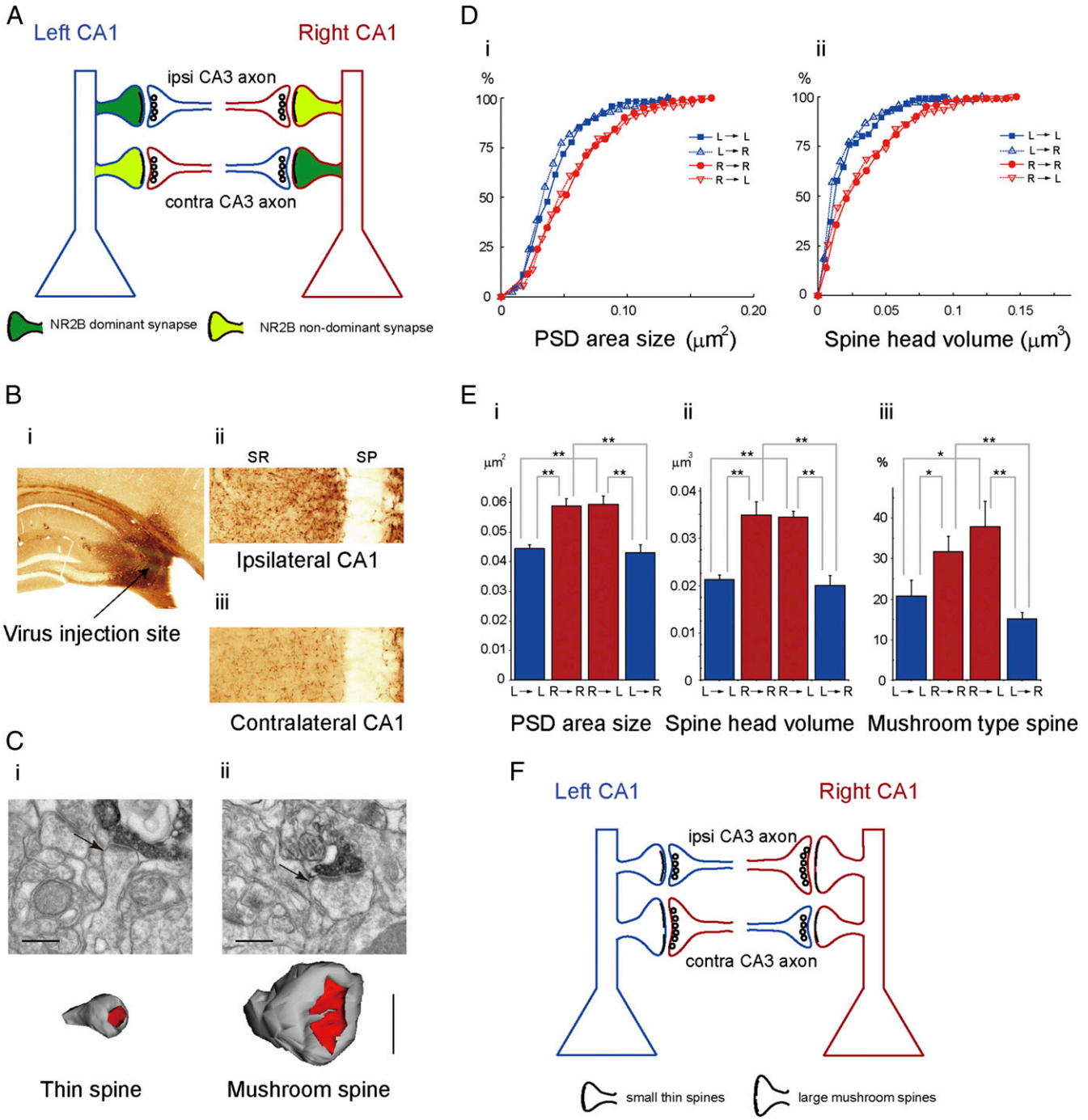

Fig. 1. Morphology of CA1 pyramidal cell apical dendrite spines and synapses is dependent on the laterality of presynaptic CA3 pyramidal cell. (*A*) Schematic illustration of left (blue) and right (red) CA1 pyramidal cells having NR2B dominant (dark green) and NR2B non-dominant (light green) synapses. The diagram was derived from Kawakami *et al* (3). (*B*) GFP-expressing lentivirus was injected unilaterally into the CA3 pyramidal cell layer (arrow in *i*). Axons and their terminals were heavily labeled for GFP in ipsilateral (*ii*) and contralateral (*iii*) CA1 SR. SP, *stratum pyramidale*. (*C*) GFP-labeled axon terminals were clearly observed by electron microscopy (*Upper*), and the spines making synapses (arrows) with labeled terminals were reconstructed using serial ultrathin sections (*Lower*). Reconstructed spines were classified as thin (*i*) or mushroom-type (*ii*) spines. Mushroom spines are defined as those with perforated PSDs (in red). (Scale bars, 300 nm.) (*D*) Cumulative percentile distributions of PSD area size (*i*) and spine head volume (*ii*). Those parameters were measured for the spines making synapses with ipsilateral (L → L, blue filled square, R → R, red filled circle) and contralateral (L → R, blue open triangle, R → L, red open triangle) projections in CA1. L, left; R, right. (*E*) Average PSD area (*i*), spine head volume (*ii*), and percentage of mushroom-type spines (*iii*) were calculated from three animals. Blue and red bars indicate left and right presynaptic origins, respectively. Statistically significant differences were detected between all combinations of red and blue bar data (mean ± SD; *, $P < 0.05$; **, $P < 0.01$). Error bars represent SD. (*F*) Asymmetrical morphology of CA1 pyramidal cell synapses. Left CA3-originated axons (blue) make synapses more frequently with small thin CA1 spines, whereas right CA3-originated axons (red) make synapses more frequently with large mushroom-type CA1 spines.

www.pnas.org/cgi/doi/10.1073/pnas.1309461110

Downloaded by guest on October 26, 2021