



# Corrigendum: VIP Modulation of Hippocampal Synaptic Plasticity: A Role for VIP Receptors as Therapeutic Targets in Cognitive Decline and Mesial Temporal Lobe Epilepsy

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## A Corrigendum on

### VIP Modulation of Hippocampal Synaptic Plasticity: A Role for VIP Receptors as Therapeutic Targets in Cognitive Decline and Mesial Temporal Lobe Epilepsy

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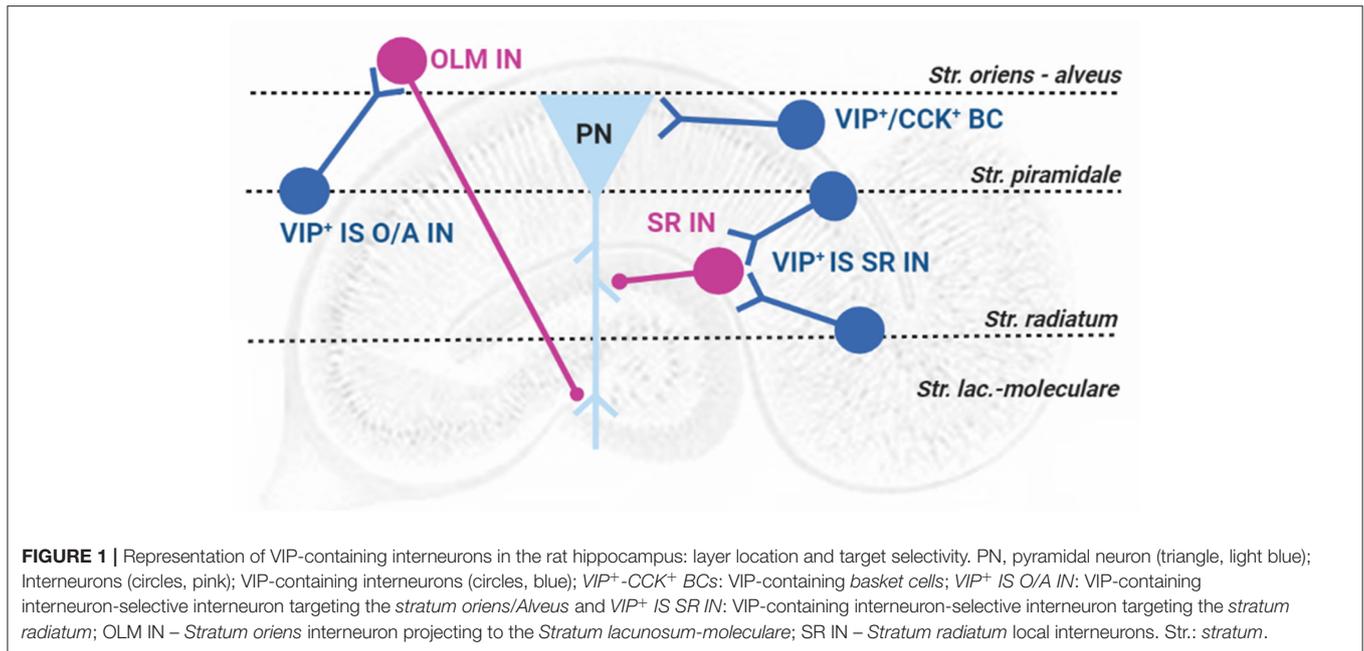
In the original article, there was a mistake in **Figure 1** as published. Circuits on the left side of the Figure moved down and stretched and do not represent what is described in the text for VIP O/A interneurons and their targets, OLM cells that should have their cell body in the stratum oriens. The corrected **Figure 1** appears below.

Additionally, in the original article, there was an error in the identification of type II IS cells (a different nomenclature for a subpopulation (and not all) of VIP+ interneurons projecting to the stratum radiatum).

A correction has been made to section *VIP in the Hippocampus, Second Paragraph*.

The corrected paragraph is shown below.

Detailed immunohistochemistry studies fully characterized hippocampal VIP+ INs dendritic trees and axon projections (Acsády et al., 1996a,b), allowing the classification of VIP+ INs into two fundamental groups according to their targets: VIP+ basket cells are responsible for somatic inhibition of pyramidal cells, are also immunoreactive for cholecystokinin (VIP+ - CCK+ BCs, **Figure 1**) and do not express parvalbumin, as most BCs in the hippocampus. VIP+ INs that selectively innervate other interneurons (VIP+ IS INs) include two subtypes: (a) interneurons with cell bodies located at the *stratum pyramidale* (SP) or near and projecting to the *stratum Oriens/Alveus* border (VIP+ IS O/A INs or type III IS cells, **Figure 1**), that also express the interneuron marker calretinin and target mostly somatostatin-expressing (SOM+) *oriens lacunosum-moleculare* (OLM) interneurons innervating the distal dendrites of pyramidal cells at the *stratum lacunosum-moleculare* (SLM) and (b) VIP+ INs that project their axons to the *stratum radiatum* (SR, VIP+ IS SR INs, **Figure 1**), with cell bodies located either at the SR/SLM border (type II IS cells) or at SR/SP and targeting *interneurons* controlling synaptic transmission to proximal dendrites of pyramidal cells in the SR (Acsády et al., 1996a,b; Klausberger and Somogyi, 2008). In genetically modified VIP-eGFP mice, additional targets of VIP+ IS O/A INs in the O/A,



including bistratified cells and oriens–oriens INs, have been described and recently a new VIP expressing interneuron population located at the O/A (*VIP<sup>+</sup>* long-range projecting INs, *VIP<sup>+</sup> LRP INs*) was described targeting INs within the O/A in CA1 but also both INs and pyramidal cells within the *subiculum*

(Francavilla et al., 2018). It is not clear if it is also present in the rat hippocampus.

The authors apologize for these errors and state that they do not change the scientific conclusions of the article in any way. The original article has been updated.

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