frontiers in
CELLULAR NEUROSCIENCE

GENERAL COMMENTARY
published: 12 August 2014
doi: 10.3389/fncel.2014.00230

Corrigendum: Tumor necrosis factor alpha maintains denervation-induced homeostatic synaptic plasticity of mouse dentate granule cells

Denise Becker, Nadine Zahn, Thomas Deller and Andreas Vlachos*

Institute of Clinical Neuroanatomy, Neuroscience Center, Goethe-University Frankfurt, Frankfurt, Germany
**Correspondence: a.vlachos@med.uni-frankfurt.de*

Edited and reviewed by:
Tycho M. Hoogland, Netherlands Institute for Neuroscience, Netherlands

Keywords: entorhinal cortex lesion, homeostatic synaptic scaling, astrocytes, brain injury, organotypic slice culture

A commentary on

Tumor necrosis factor alpha maintains denervation-induced homeostatic synaptic plasticity of mouse dentate granule cells
by Becker, D., Zahn, N., Deller, T., and Vlachos, A. (2013). Front Cell Neurosci. 7:257. doi: 10.3389/fncel.2013.00257

We noticed that in **Figure 2C** of our article the sample traces shown for non-denervated controls and for denervated TNFα-deficient preparations at 3–4 days post lesion (dpl) are identical. Upon re-examination of the original recordings, we found that this sample trace was taken from a denervated dentate granule cell ("3–4 dpl group"). The corrected figure showing a sample trace of a non-denervated control is now presented. We apologize for the mistake and for any inconvenience caused to the readers.

Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Received: 02 July 2014; accepted: 23 July 2014; published online: 12 August 2014.
*Citation: Becker D, Zahn N, Deller T and Vlachos A (2014) Corrigendum: Tumor necrosis factor alpha maintains denervation-induced homeostatic synaptic plasticity of mouse dentate granule cells. Front. Cell. Neurosci. **8**:230. doi: 10.3389/fncel.2014.00230*
This article was submitted to the journal Frontiers in Cellular Neuroscience.

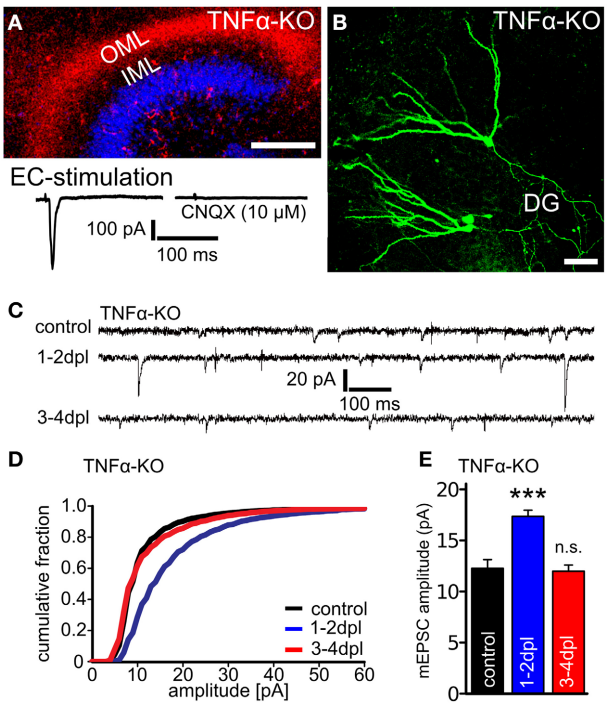

FIGURE 1 | Figure legend same as in the original article: Denervation-induced homeostatic synaptic strengthening is not observed in granule cells of TNFα-deficient slice cultures at 3–4 dpl. (A) Mini-Ruby tracing of entorhino-hippocampal axons (red; ToPRO nuclear staining, blue) and electrical stimulations of the entorhinal cortex (EC) while recording evoked EPSCs from dentate granule cells revealed an intact and functional entorhino-hippocampal projection in slice cultures prepared from TNFα-deficient mice (TNFα-KO; three independent experiments each, up to 50 traces averaged per neuron). Evoked EPSCs (amplitude: 369 ± 102 pA) could be blocked by the AMPA-receptor antagonist CNQX (10 µM; amplitude: 9.6 ± 2.1 pA). Scale bar: 200 µm. **(B)** Patched granule cells were filled with biocytin and *post hoc* identified using Alexa568- or Alexa488-streptavidin. Scale bar: 50 µm. **(C–E)** Whole-cell patch-clamp recordings from granule cells of TNFα-deficient slice cultures revealed an increase in the mEPSC amplitudes at 1–2 dpl but not at 3–4 dpl ($n = 12$–16 neurons per group, from six to eight cultures each). Data represent mean ± s.e.m.; $^{***}p < 0.001$; n.s., not significant.