## Check for updates

### **OPEN ACCESS**

EDITED AND REVIEWED BY Roger Gutiérrez-Juárez, National Autonomous University of Mexico, Mexico

\*CORRESPONDENCE Claudia A. Riedel Claudia.riedel@unab.cl

RECEIVED 12 November 2024 ACCEPTED 27 November 2024 PUBLISHED 12 December 2024

#### CITATION

González-Madrid E, Rangel-Ramírez MA, Opazo MC, Méndez L, Bohmwald K, Bueno SM, González PA, Kalergis AM and Riedel CA (2024) Corrigendum: Gestational hypothyroxinemia induces ASD-like phenotypes in behavior, proinflammatory markers, and glutamatergic protein expression in mouse offspring of both sexes. *Front. Endocrinol.* 15:1527177. doi: 10.3389/fendo.2024.1527177

### COPYRIGHT

© 2024 González-Madrid, Rangel-Ramírez, Opazo, Méndez, Bohmwald, Bueno, González, Kalergis and Riedel. This is an open-access article distributed under the terms of the **Creative Commons Attribution License (CC BY)**. The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

# Corrigendum: Gestational hypothyroxinemia induces ASDlike phenotypes in behavior, proinflammatory markers, and glutamatergic protein expression in mouse offspring of both sexes

Enrique González-Madrid<sup>1,2</sup>, Ma. Andreina Rangel-Ramírez<sup>1,2</sup>, María C. Opazo<sup>2,3</sup>, Luis Méndez<sup>1,2</sup>, Karen Bohmwald<sup>2,4</sup>, Susan M. Bueno<sup>2,5</sup>, Pablo A. González<sup>2,5</sup>, Alexis M. Kalergis<sup>2,5,6</sup> and Claudia A. Riedel<sup>1,2\*</sup>

<sup>1</sup>Laboratorio de Endocrino-inmunología, Departamento de Ciencias Biológicas, Facultad de Ciencias de la Vida, Universidad Andrés Bello, Santiago, Chile, <sup>2</sup>Millennium Institute on Immunology and Immunotherapy, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile, <sup>3</sup>Facultad de Medicina Veterinaria y Agronomía, Instituto de Ciencias Naturales, Universidad de las Américas, Santiago, Chile, <sup>4</sup>Instituto de Ciencias Biológicas, Facultad de Ciencias de la Salud, Universidad Autónoma de Chile, Santiago, Chile, <sup>5</sup>Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile, <sup>6</sup>Departamento de Endocrinología, Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile,

### KEYWORDS

prenatal thyroid function, gestational hypothyroxinemia, neurodevelopment, autism spectrum disorder, behavior, inflammation, NLGN3 and HOMER1 expression

# A Corrigendum on

Gestational hypothyroxinemia induces ASD-like phenotypes in behavior, proinflammatory markers, and glutamatergic protein expression in mouse offspring of both sexes

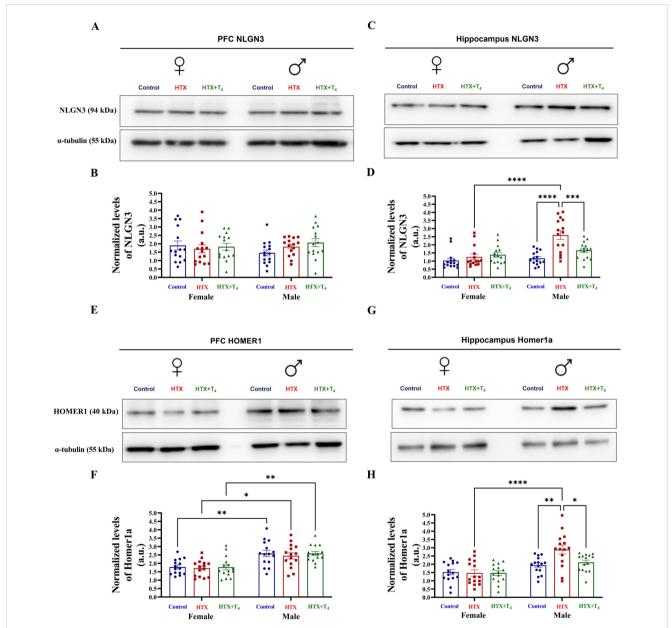
By González-Madrid E, Rangel-Ramírez MA, Opazo MC, Méndez L, Bohmwald K, Bueno SM, González PA, Kalergis AM and Riedel CA (2024) *Front. Endocrinol.* 15:1381180. doi: 10.3389/fendo.2024.1381180

In the published article, there was an error in Figure 10 as published. There are three errors in this figure: 1) The photo for the western blot of tubulin in Figure 10A is repeated in Figure 10C. The correct one is the tubulin in Figure 10A, and the incorrect one is the tubulin photo in Figure 10C. 2) The photo for the western blot of neuroligin in the hippocampus in Figure 10C is repeated with the photo of Homer-1 in the hippocampus in Figure 10G. The correct one is the neuroligin of Figure 10C, and the incorrect one is Figure 10G. 3) The photo for the western blot of tubulin in Figure 10E is repeated with tubulin in Figure 10E. The correct one is in Figure 10E, and the incorrect one is in the photo of Figure 10G. The corrected Figure 10 and its caption appear below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

# Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.



## FIGURE 10

The expression of hippocampal NLGN3 and HOMER1 is increased in male HTX-offspring. Progenies from the three experimental groups were euthanized on P65, and prefrontal cortex (PFC) and hippocampus were isolated. Total proteins were extracted from these tissues and the relative expression of Neuroligin 3 (NLGN3) and HOMER1 from the PFC and hippocampus were evaluated by western blot in each experimental group. (A) Representative photography of the western blot of NLGN3 from the PFC, (B) the graph shows the normalized relative expression of NLGN3 in the PFC, (C) representative photography of the western blot of NLGN3 from the hippocampus, (D) the graph shows the normalized relative expression of NLGN3 from the hippocampus, (E) representative photography of the western blot of the vestern blot of HOMER1 from the PFC, (F) the graph shows the normalized relative expression of HOMER1 in the PFC, (G) representative photography of the western blot of the western blot of HOMER1 from the PFC, (F) the graph shows the normalized relative expression of HOMER1 in the PFC, (G) representative photography of the western blot of HOMER1 from the PFC, (F) the graph shows the normalized relative expression of HOMER1 in the PFC, (G) representative photography of the western blot of HOMER1 from the hippocampus, and (H) the graph shows the normalized relative expression of HOMER1 in the PFC, (G) representative photography. N =15 per group and sex. a.u means arbitrary units. Data are presented as mean  $\pm$  S.E.M. Multiple comparisons between experimental groups were analyzed by Mixed-effects model and Tukey's post-hoc. (\*p<0.05, \*\*p<0.01, \*\*\*p<0.001). Control-offspring: blue circles, HTX-offspring: red squares, and HTX+T<sup>4</sup>-offspring: green triangles.