

# [Corrigendum: generating functionals for computational intelligence: the fisher in...](https://assignbuster.com/corrigendum-generating-functionals-for-computational-intelligence-the-fisher-information-as-an-objective-function-for-self-limiting-hebbian-learning-rules/)

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A corrigendum on

[Generating functionals for computational intelligence: the Fisher information as an objective function for self-limiting Hebbian learning rules
*by Echeveste, R., and Gros, C. (2014). Front. Robot. AI 1: 1. doi: 10. 3389/frobt. 2014. 00001*](https://www.frontiersin.org/article/10.3389/frobt.2014.00001/abstract)

In formula (10) of ( [Echeveste and Gros, 2014](#B1) ) the Fisher information with respect to the synaptic flux was formulated formally as an integral over the postsynaptic activity *y* , without stating explicitly that the postsynaptic activity *y* = *y* (y) is actually a function of the *N w* presynaptic activities y = ( y 1 , … , y N w ) . The correct version of equation (10) is hence

F w = ∫ ( ∑ j = 1 N w w j ∂ ∂ w j ln ⁡ ( p ( y ( y ) ) ) 2 × p ( y ) d y .

The functional dependence of the postsynaptic *y* on the presynapticywas implicitly used in equation (12) and in the derivation of the synaptic plasticity rules, but otherwise not explicitly stated.

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## Reference

Echeveste, R., and Gros, C. (2014). Generating functionals for computational intelligence: the Fisher information as an objective function for self-limiting Hebbian learning rules. *Front. Robot. AI* 1: 1. doi: 10. 3389/frobt. 2014. 00001

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