



# Corrigendum: A Probabilistic Framework for Decoding Behavior From *in vivo* Calcium Imaging Data

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# A Corrigendum on

A Probabilistic Framework for Decoding Behavior From in vivo Calcium Imaging Data by Etter, G., Manseau, F., and Williams, S. (2020) Front. Neural Circuits 14:19. doi: 10.3389/fncir.2020.00019

In the original article, there were errors in several equations. Some terms were flipped or omitted.

Corrections have been made to Results, Extracting Probability Values in a Bayesian Context, Equations 1 and 2, and Results, Decoding Behavior Using Activity From Multiple Neurons, Equations 7 and 8.

The Corrected Equations are Shown Below:

Equation 1:

 $P(A) = \frac{time\ active}{total\ time}$ 

Equation 2:

 $P(S_i) = \frac{time \ in \ state \ i}{total \ time}$ 

Equation 7:

$$P(S|A) = \exp[\sum_{k=1}^{N} \log(1 + \frac{P(A_k|S) \times P(S)}{P(A_k)}) - 1]$$

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Etter G, Manseau F and Williams S (2020) Corrigendum: A Probabilistic Framework for Decoding Behavior From in vivo Calcium Imaging Data. Front. Neural Circuits 14:629162. doi: 10.3389/fncir:2020.629162 Equation 8:

$$\hat{y} = arg \max exp[\sum_{k=1}^{N} \log(1 + \frac{P(A_k|S) \times P(S)}{P(A_k)}) - 1]$$

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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