



Correction

Correction: Limits of Feedback Control in Bacterial Chemotaxis

The PLOS Computational Biology Staff

There are multiple errors in this article.

In the Results section, subsection Analytical Model of the Drift Velocity as a Function of CheY-P Concentration, there is an error in Equation 3. The term $e^{-t/\tau_{R0}}$ is incorrect. It should read $e^{-t/\tau_{R0}}$. Please view the complete correct equation here:

$$V_D = \frac{\tau_{R0}'}{1 + \tau_{R0}/\tau} \frac{v(1 - TB_0)}{d} \int_0^\infty \frac{e^{-t/\tau_{R0}}}{\tau_{R0}} f dt \quad (3)$$

$$\approx \frac{\tau_{R0}'}{1 + \tau_{R0}/\tau} \frac{(1 - TB_0)v^2 Ng}{d}$$

In the Methods section, subsection Linear Expansion, the inline equation in the first paragraph is incorrect. Please view the complete correct equation here:

$$F(t, s, F_i) = F_0 + (F_i - F_0)e^{-t/\tau} + se^{-t/\tau} \int_0^t e^{u/\tau} f(u) du$$

In the Methods section, subsection Linear Expansion, the inline equation on line 30 is incorrect. Please view the complete correct equation here:

$$\langle t | s, F_i \rangle \cong \tau_{R0} \left[1 - \lambda_{R0}' \int_0^\infty e^{-t/\tau_{R0}} \Delta F(t | s, F_i) dt \right] + O(\Delta F^2)$$

In the Methods Section, subsection Motor Adaptations:

The subscript in the definition of the parameter $k_{on} = 0.025 \text{ s}^{-1}$ is incorrect. The correct subscript should be: $k_{off} = 0.025 \text{ s}^{-1}$

The expression: “ $\Delta n = 4.16$, $\epsilon_{3,1} = 1.96$ to reproduce [19] (Figure 5B insert). $k_{off} = 0.0063 \text{ s}^{-1}$.” is incorrect. The correction expression should be: “ $\Delta n = 2.74$, $\epsilon_{3,1} = 2.31$ to reproduce [19] (Figure 5A). $k_{on} = 0.0063 \text{ s}^{-1}$.”

In the Supporting Information Legends:

In the legend for Figure S4, k_{off} should be k_{on} .

In the legend for Figure S5, $k_{off} = 0.0013 \text{ s}^{-1}$ should be $k_{on} = 0.0013 \text{ s}^{-1}$.

Reference

- Dufour YS, Fu X, Hernandez-Nunez L, Emonet T (2014) Limits of Feedback Control in Bacterial Chemotaxis. PLoS Comput Biol 10(6): e1003694. doi:10.1371/journal.pcbi.1003694

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