

# Corrections

M. Stamatakis and N. V. Mantzaris. 2009. Comparison of deterministic and stochastic models of the *lac* operon genetic network. *Biophys. J.* 96:887–906.

In Table 2,  $\lambda_{R2}$  is incorrectly referred to as “LacY degradation constant”. The correct description is “LacI dimer degradation constant”. Also,  $\lambda_Y$  is referred to as “LacY-inducer degradation constant”. The correct description is “LacY degradation constant”.

In Table 3, there are errors in the reactions and the functional forms of propensities 11–13, as well as in the numbering of propensity functions 11–25. The corrected part of the Table appears below:

Reaction	Propensity function
11 $O \xrightarrow{k_{s1MY}} O + M_Y$	$\alpha_{11} = k_{s1MY} \cdot O$
12 $R_2O \xrightarrow{k_{s0MY}} R_2O + M_Y$	$\alpha_{12} = k_{s0MY} \cdot R_2O$
13 $M_Y \xrightarrow{k_{sY}} M_Y + Y$	$\alpha_{13} = k_{sY} \cdot M_Y$
14 $Y + I_{ex} \xrightarrow{k_p} YI_{ex}$	$\alpha_{14} = k_p \cdot [I_{ex}] \cdot Y$
15 $YI_{ex} \xrightarrow{k_{-p}} Y + I_{ex}$	$\alpha_{15} = k_{-p} \cdot YI_{ex}$
16 $YI_{ex} \xrightarrow{k_{ft}} Y + I$	$\alpha_{16} = k_{ft} \cdot YI_{ex}$
17 $I_{ex} \xrightarrow{k_i} I$	$\alpha_{17} = V_{E.coli} \cdot N_A \cdot k_i \cdot [I_{ex}]$
18 $I \xrightarrow{k_t} I_{ex}$	$\alpha_{18} = k_t \cdot I$
19 $M_R \xrightarrow{\lambda_{MR}} \emptyset$	$\alpha_{19} = \lambda_{MR} \cdot M_R$
20 $M_Y \xrightarrow{\lambda_{MY}} \emptyset$	$\alpha_{20} = \lambda_{MY} \cdot M_Y$
21 $R \xrightarrow{\lambda_R} \emptyset$	$\alpha_{21} = \lambda_R \cdot R$
22 $R_2 \xrightarrow{\lambda_{R2}} \emptyset$	$\alpha_{22} = \lambda_{R2} \cdot R_2$
23 $Y \xrightarrow{\lambda_Y} \emptyset$	$\alpha_{23} = \lambda_Y \cdot Y$
24 $YI_{ex} \xrightarrow{\lambda_{YI_{ex}}} I$	$\alpha_{24} = \lambda_{YI_{ex}} \cdot YI_{ex}$
25 $I_2R_2 \xrightarrow{\lambda_{I2R2}} 2 I$	$\alpha_{25} = \lambda_{I2R2} \cdot I_2R_2$

The above expressions had been used in all stochastic simulations shown in the original article.