

PekingR Liu Yunpeng Notes

(Up to 10.4)

9.23

Planned the Wiki outline, including documentation of the RBS Calculator platform and the mathematical modelling for the AND gate and bistable switch modules.

9.25

Discussed modeling with Professor Ouyang during JC. The bistable switch should be verified using a stochastic algorithm instead of a steady-state one.

9.26~9.28

Optimized details to the AND gate modeling using new experimental data: quantification of the AND gate experimental results by employing the fold-changes in output under different inducer combinations. The fold-changes were plotted versus parameter a to show its correlation with translation rates.

10.1~10.4

Wrote first and second drafts of the modeling part of the wiki. After revising the text, figures and images were sequentially designed and added to the text. The wiki draft was reformatted into an academic style and Appendices were written for more details of our models for the AND gate and bistable switch, ready for the final round of revision.