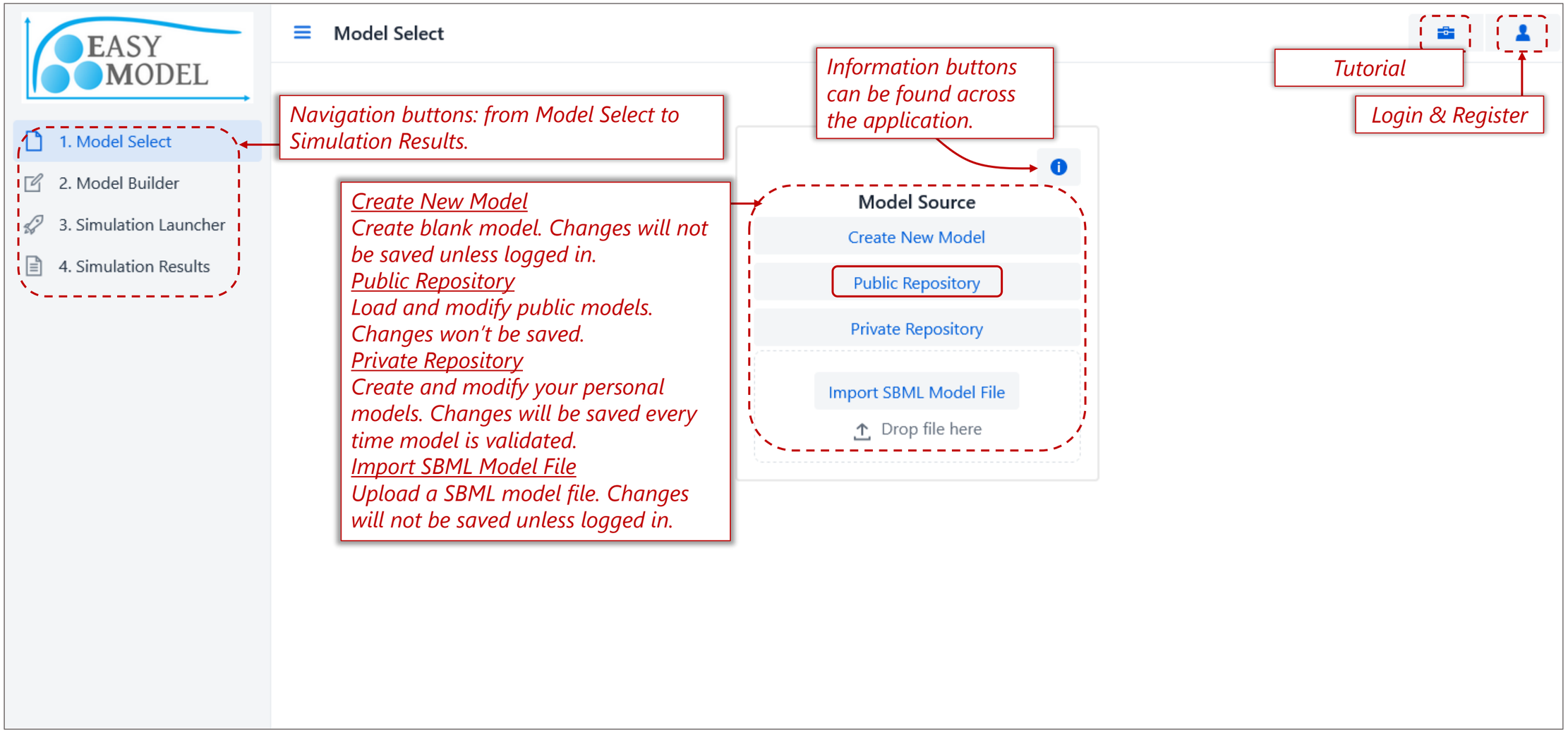
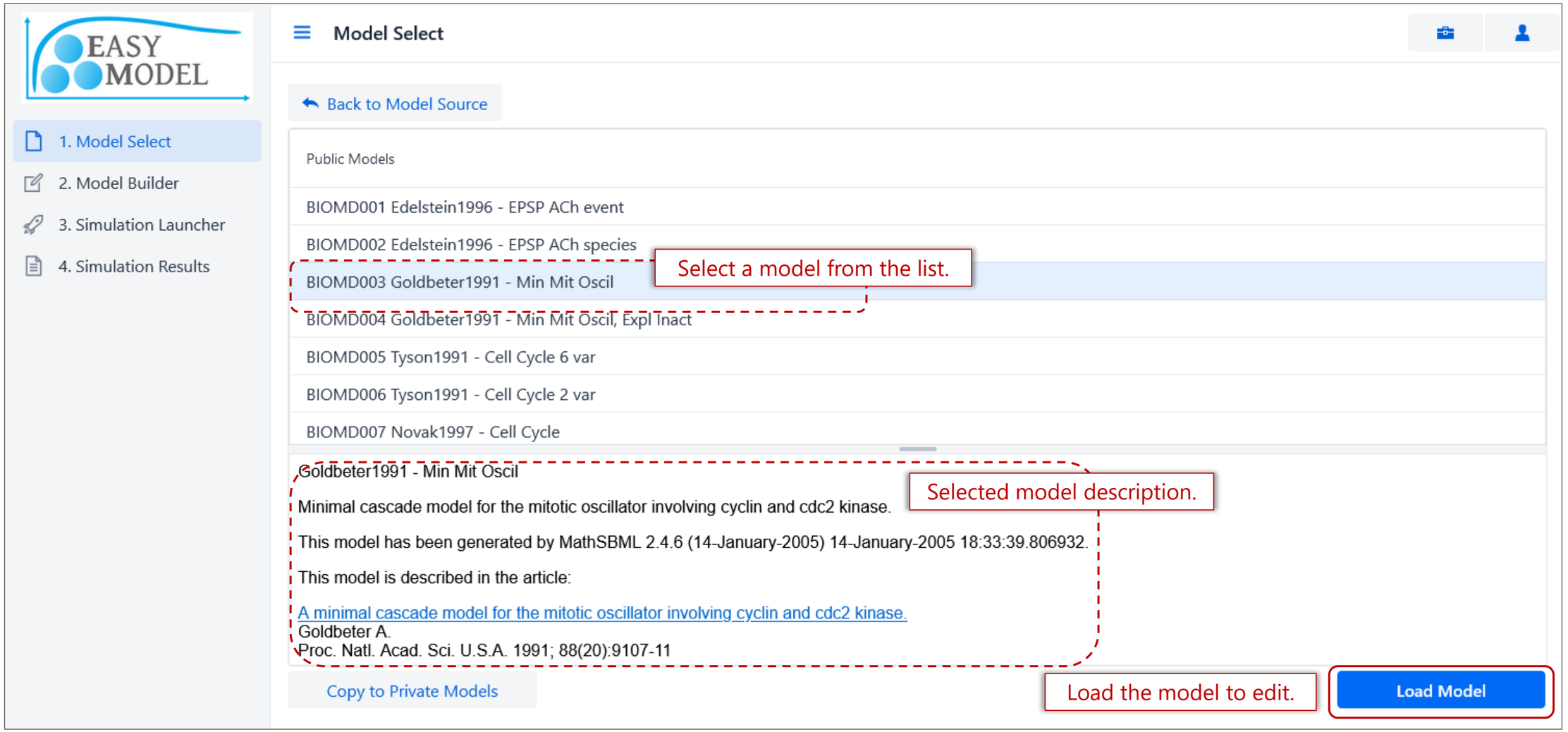
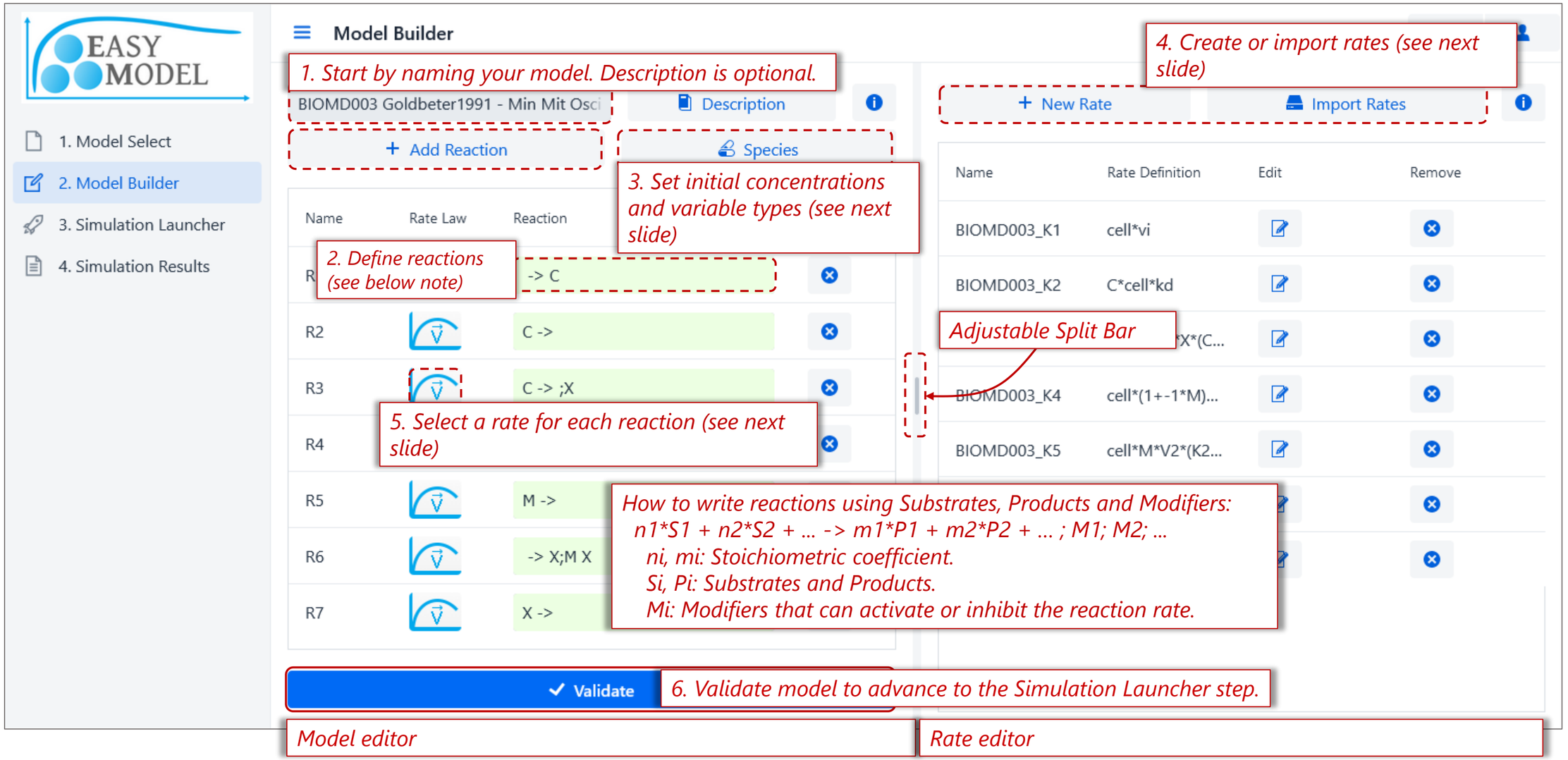
1. Model Select – Model Source



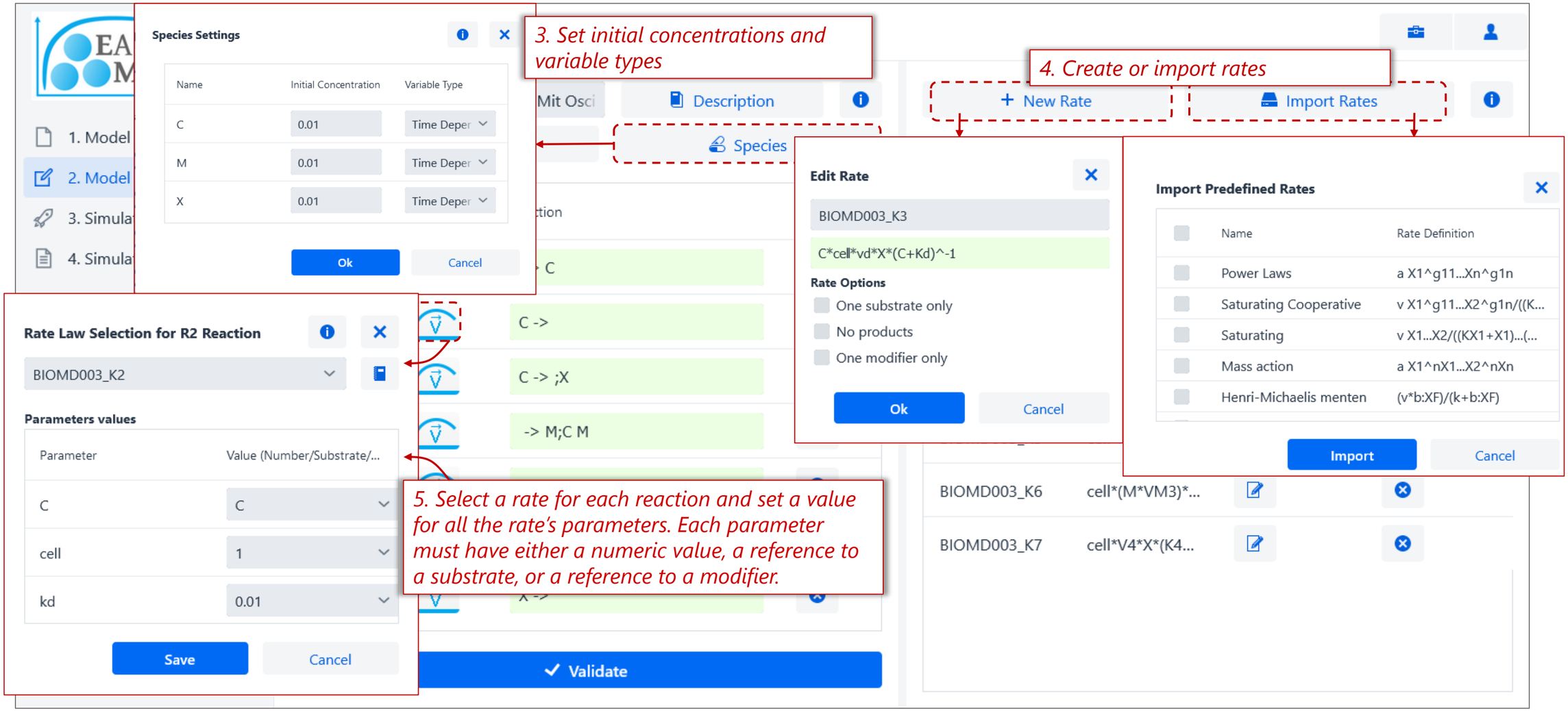
1. Model Select – Model Repository



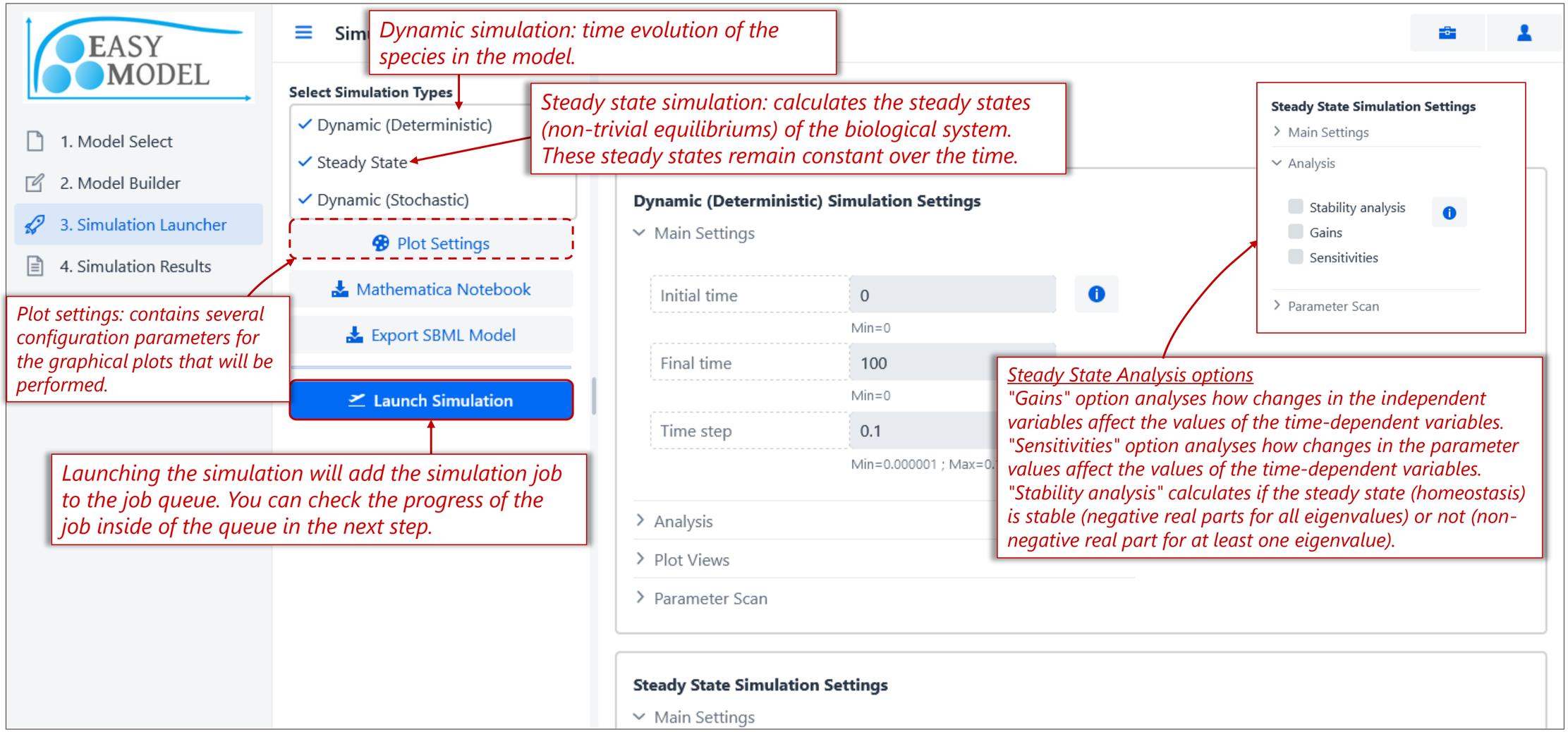
2. Model Builder – Define Reactions



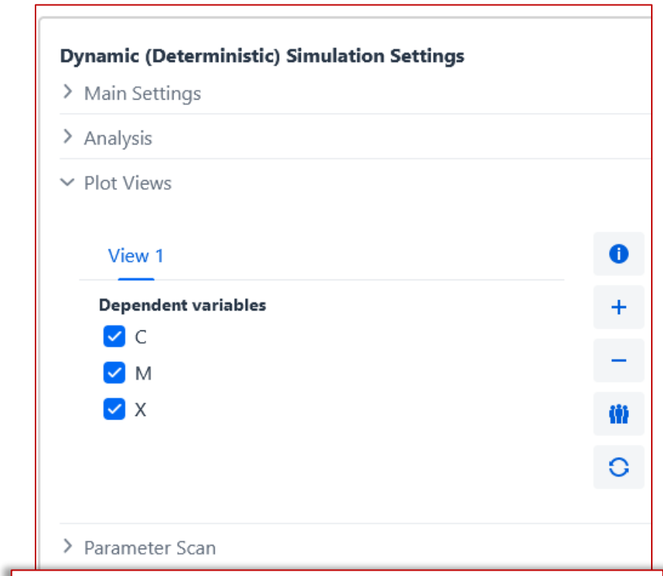
2. Model Builder – Species, Define rates, Select a rate for each reaction



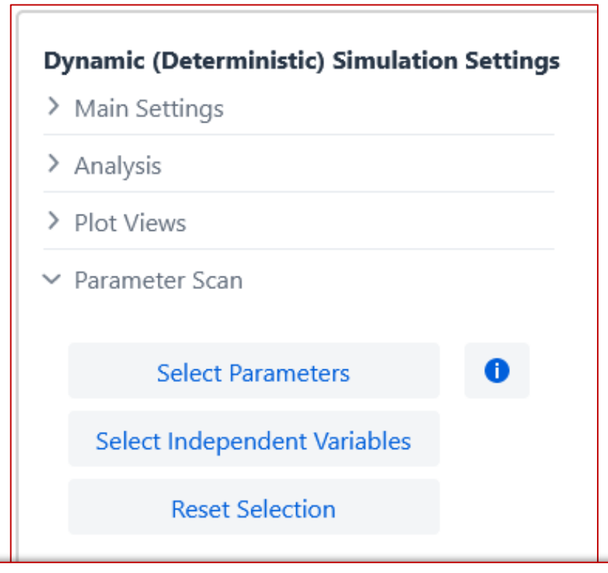
3. Simulation Launcher – Dynamic and Steady State simulation



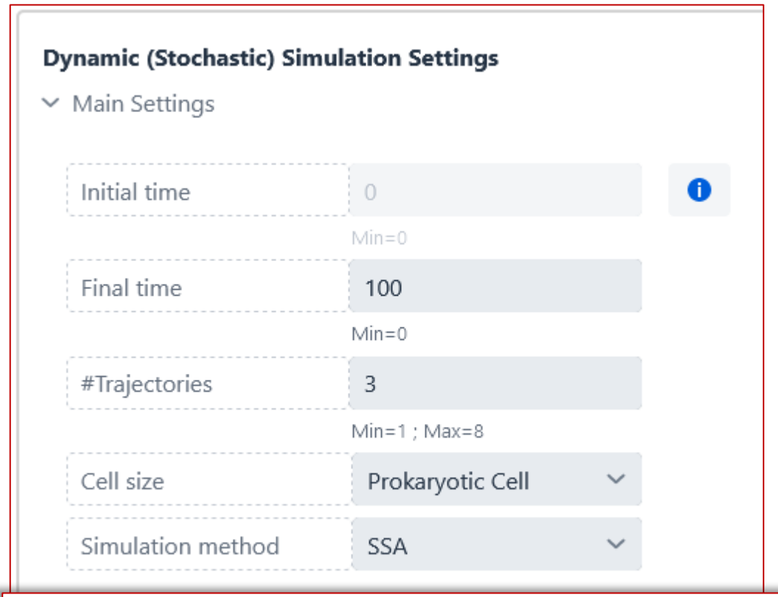
3. Simulation Launcher – Plot Views, Parameter Scan, Stochastic simulation



Plot views: you can select which time-dependent species are to be plotted in the simulation graphics. Furthermore, you can define several plot views, each of them with its own selected time-dependent species.



Parameter scan: perform the simulation for several values of the rate parameters or independent variables. Select a numerical range and the number of range intervals for the parameter you want to scan to observe how the system evolves with the values variation. Each parameter scan is simulated separated from the others.



Stochastic simulation: time evolution of the species using the Gillespie SSA stochastic simulation method. Compared to the deterministic simulation, it provides a more accurate simulation, specially when the model is composed of a small number of molecules and linear noise analysis is a more appropriate tool than the deterministic sensitivity analysis to understand the limitations and regulation of the system. All these benefits come at the expense of a longer simulation time.
Tau-leaping method: useful to reduce the simulation time. Not all models can benefit from it.

4. Simulation Results – Simulation Job Results

EASY MODEL

1. Model Select
2. Model Builder
3. Simulation Launcher
4. Simulation Results

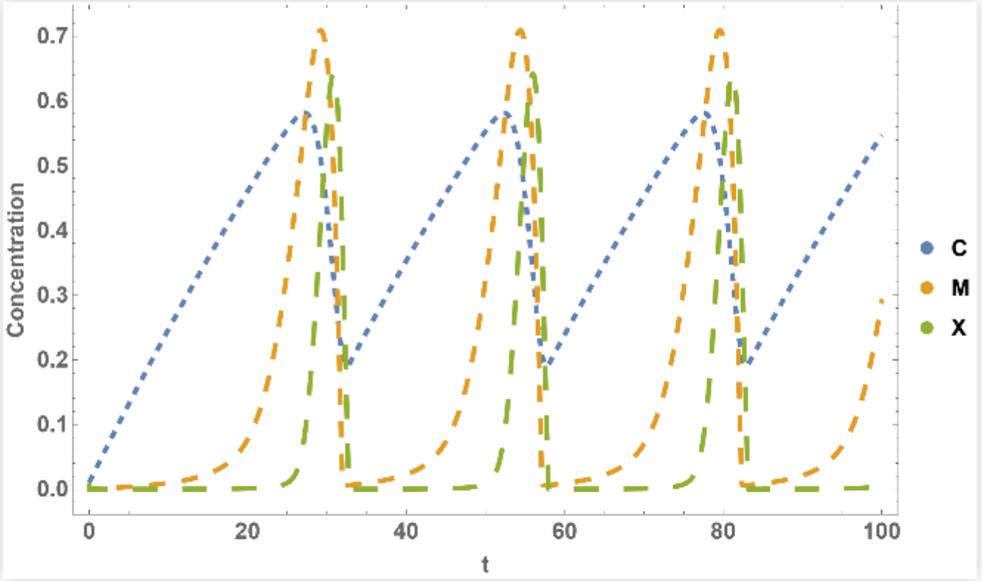
Simulation Results

SimId: 00000001 Finished

Share Run Stats

Model: BIOMD003 Goldbeter1991 - Min Mit Oscil

Dynamic Simulation



The simulation results are displayed in the final step.

Left-click images for high-resolution copies.

You can download:
-Images.
-Results text files.
-Mathematica Notebook of the model and simulation.
-SBML file of your model.

Download Dynamic Simulation Table

Generated Files

Mathematica Notebook SBML Model

4. Simulation Results – Simulation Queue