VCell Tutorial BioModel with Multiple Applications

Create a single biomodel of RAN nuclear transport then use different modeling strategies to solve simulations.

Part 2: Compartmental Applications and Parameter Estimation

The Multi-App Tutorial

 Part 1: Spatial Deterministic Application using a 3D geometry derived from an image stack

Create the Physiology for a simple Biomodel of RAN nuclear transport, create a 3D geometry directly from a z-stack of microscopy images, and run a deterministic spatial simulation.

• Part 2: Additional Applications

Compartmental stochastic application with data export; compartmental deterministic (ODE) application with parameter estimation parameters using external data; stochastic spatial application.

In Part 2 of this tutorial...

- Copy and modify an existing application to create a compartmental stochastic application.
- Create and run the stochastic simulation and export results.
- Copy an existing application to create a compartmental deterministic (ODE) application.
- Use external data to estimate parameters that best fit the data
- Copy an existing application to create and run a spatial stochastic simulation.

Table of contents

- Re-Open a model
- Copy an application
- Create a stochastic simulation
- Export results as spreadsheet
- Create a non-spatial deterministic application
- Using parameter estimation
- Create a spatial stochastic application





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