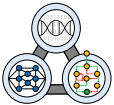# Hands On : Using MaBoSS with WebMaBoSS

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Computational Systems Biology for Complex Human Disease
from static to dynamic representations of disease mechanisms

April 24th, 2024

Using MaBoSS with WebMaBoSS

Using MaBoSS with WebMaBoSS

› Create an account

Using MaBoSS with WebMaBoSS

› Logging in

Using MaBoSS with WebMaBoSS

› List of projects

Using MaBoSS with WebMaBoSS

› Creating a project

Using MaBoSS with WebMaBoSS

› List of models

Using MaBoSS with WebMaBoSS

› Loading a model

Using MaBoSS with WebMaBoSS

› Importing a model

Using MaBoSS with WebMaBoSS

› Model interaction graph

Using MaBoSS with WebMaBoSS

› Creating a new simulation : General settings

Using MaBoSS with WebMaBoSS

› Creating a new simulation : Initial states

Using MaBoSS with WebMaBoSS

› Creating a new simulation : Output nodes

Using MaBoSS with WebMaBoSS

› Creating a new simulation : Mutants
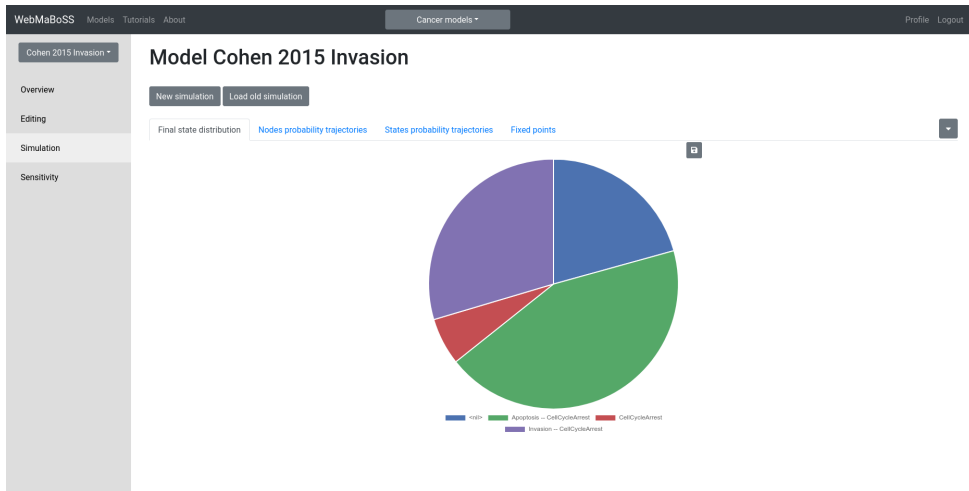
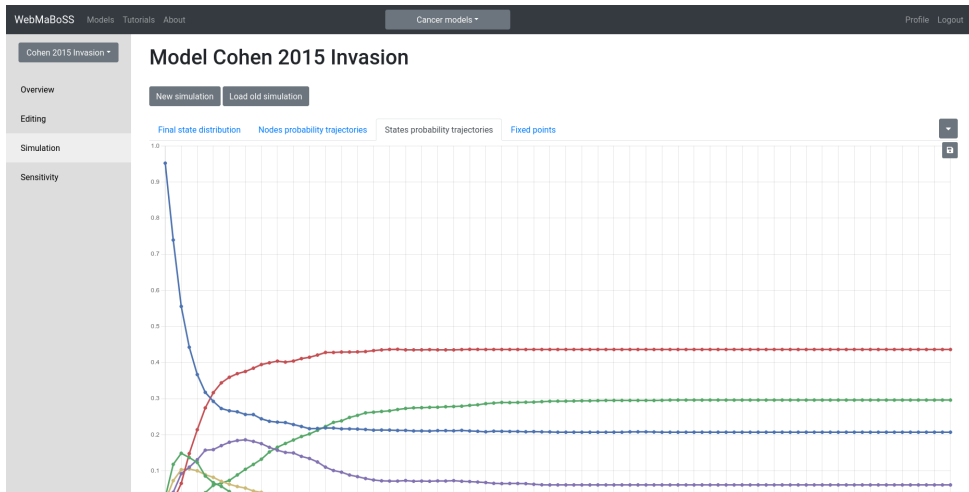# Using MaBoSS with WebMaBoSS

› Simulation results : Final states

Using MaBoSS with WebMaBoSS

› Simulation results : Node trajectories

Using MaBoSS with WebMaBoSS

› Simulation results : State trajectories

Using MaBoSS with WebMaBoSS

› Simulation results : Fixed points

Using MaBoSS with WebMaBoSS

› Model editing : (in)activation rules

Using MaBoSS with WebMaBoSS

› Model editing : (in)activation rules

Using MaBoSS with WebMaBoSS

› Model editing : Initial states

Using MaBoSS with WebMaBoSS

› Model editing : Output nodes

Using MaBoSS with WebMaBoSS

› Model editing : Parameters

Using MaBoSS with WebMaBoSS

› Model editing : Settings

Using MaBoSS with WebMaBoSS

› Sensitivity analysis : General settings

Using MaBoSS with WebMaBoSS

› Sensitivity analysis : Mutant candidates

Using MaBoSS with WebMaBoSS

› Sensitivity analysis : Output nodes

Using MaBoSS with WebMaBoSS

› Sensitivity analysis : Results
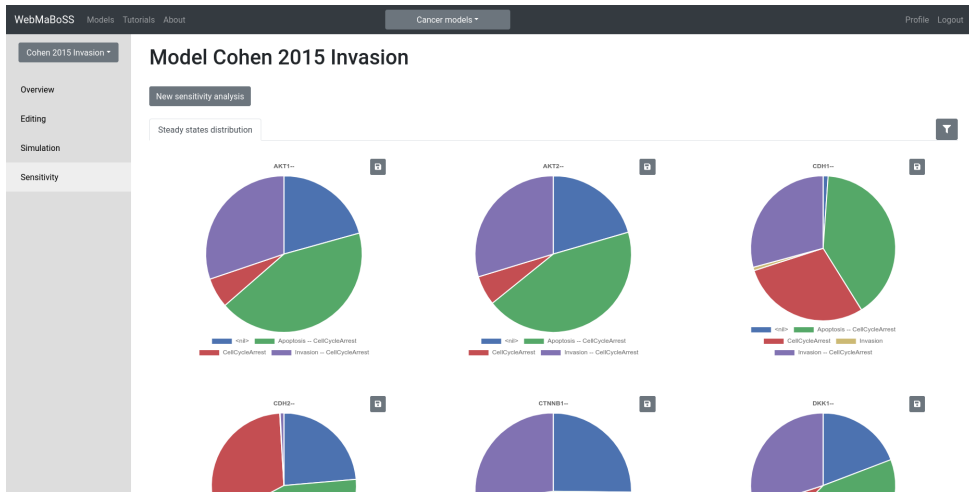
Using MaBoSS with WebMaBoSS

› Sensitivity analysis : Filtering results

Using MaBoSS with WebMaBoSS

› Sensitivity analysis : Filtered results

Using MaBoSS with WebMaBoSS

› Hands on

   › Create a new project

   › Load Cohen's model (bnd and cfg available in manuals/Modules/MaBoss/ folder)

   › Perform default simulation

   › Perform simulation with ECMicroenv and DNADamage on

institut **Curie**

Using MaBoSS with WebMaBoSS
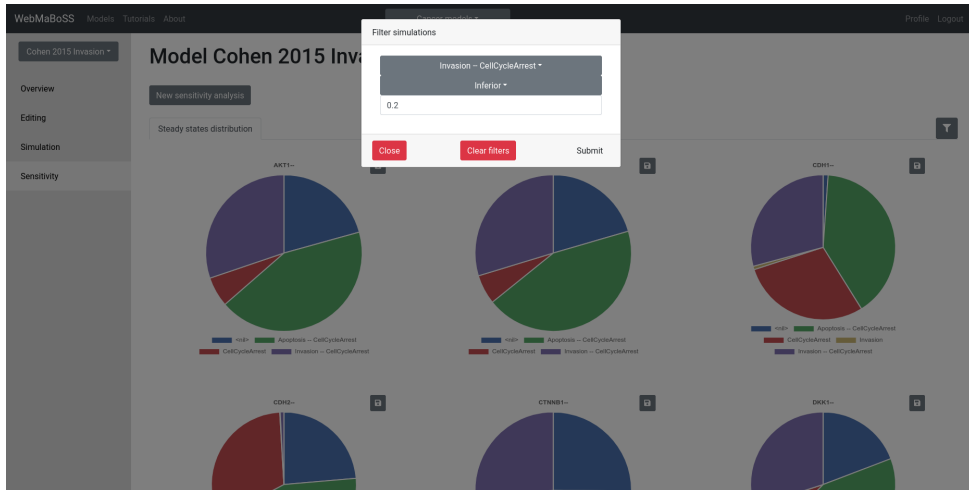
› Hands on

    › Perform simulation with NICD++, p53– mutant

    › Perform sensitivity analysis on single mutants, testing only inhibitions

    › Filter mutants where state Invasion – CellCycleArrest is less than 20%