Simulation Galleries
Combining Experiment Design and Visual Analytics

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Simulation modeling of actin filaments

- We need to understand how bone synthesis cells grow towards implant surfaces
- The cells’ skeleton is shaped by polymerization, branching, and severing of actin filaments
- These processes are influenced by intracellular processes with many model parameters
- The simulation output can not easily be analyzed automatically

Complex input ⇒ Experimental Design
Complex output ⇒ Visual Analytics
The user in the loop

Sample new interesting parameter combinations based on selections of the user

Execute simulation runs for the sampled parameter combinations

Let the user select parameter combinations that she finds interesting

Visualize all simulation results and present them to the user simultaneously