FUJITSU

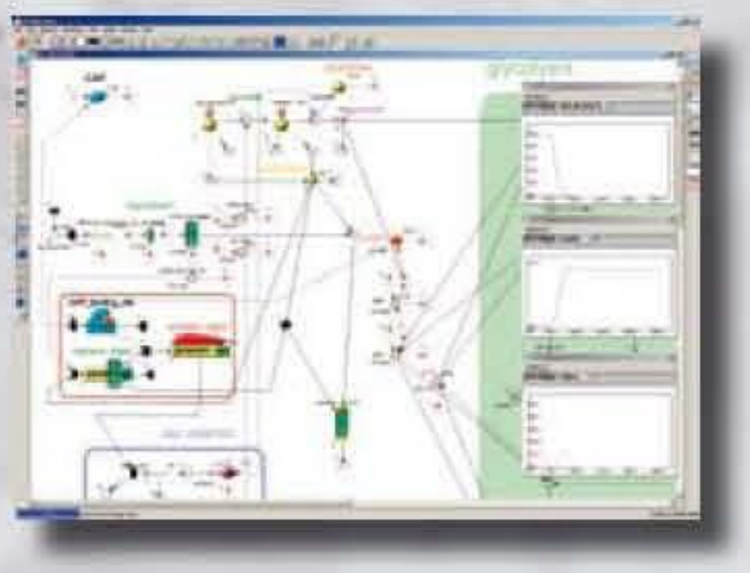
GNI Gene Networks International

Cell Illustrator

Cell Illustrator™ is a powerful tool that enables biologists to draw, model, elucidate and simulate complex biological processes and systems. It has outstanding drawing capabilities, moreover it allows researchers to model metabolic pathways, signal transduction cascades, gene regulatory networks as well as dynamic interactions of various biological entities such as genomic DNA, mRNA and proteins. Cell Illustrator™ models are used to visualize biopathways, interpret experimental data and test hypotheses. In addition, it provides researchers with model diagrams of publication quality and simulations results charts. Cell Illustrator™ has been successfully utilized to model biological processes like Circadian Rhythms of Mus musculus, glycolytic pathway and lac operon of Escherichia coli.

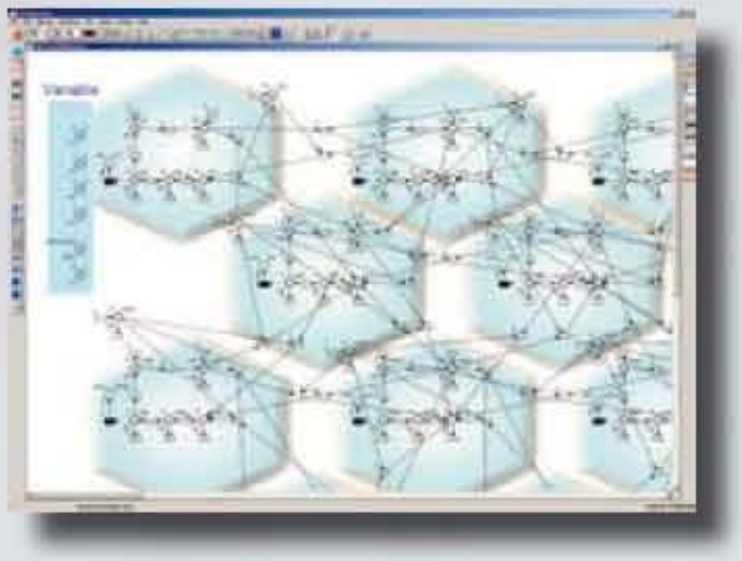
Drawing models:

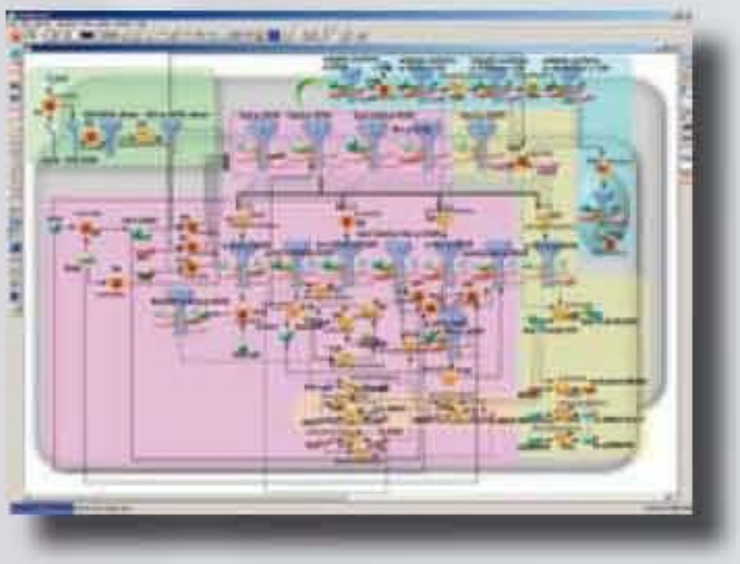
- User-friendly and intuitive graphical interface.
- The Biological Elements Library consists of over 40 images for biological entities, more than 250 images of biological processes and about 70 images of cell components. Each image corresponds to one Gene Ontology term and can be edited in the SVG editor included in Cell Illustrator™.
- Extensive support for external references to public databases.
- Gene Network Mode enables to view and explore gene relationships networks. This mode offers a special visualization style and tools for the analysis of gene relationships, such as Pathway search, Sub-network Extraction and Network Merge.
- Models can be imported from widely used CellML and SBML formats, then edited, analysed, and simulated as any other Cell Illustrator™ model.
- Models can be exported to common graphical format files (PS, PNG, JPEG)



Key modelling features:

- Models combining discrete and continuous processes can be created.
- All model's variables, parameters of processes and connectors are tabulated and are easy to modify.
- Variable's actual values can be displayed during simulation.
- Discrete processes have unique animated simulation option to observe quantities flow through the system.
- Five simulation modes: three different continuous simulation modes, step simulation and step simulation with animation.
- Simulation results can be presented on real-time graphs or exported to common format files. A simulation run can be saved in a log file and replayed in Cell Illustrator™ Player, which enables the visualisation of entity value changes over time and the comparison of results from several simulation runs.
- Final results can be presented using Cell Animator™ with graphs and animations.
- Models can be imported from www.csml.org





Hardware and software requirements

- Suggested hardware configuration: Intel Pentium 4 2.0 GHz or higher; 512 MB RAM or more; 100MB HDD space or more.
- Operating systems: Windows 98/ ME/2000/XP, Mac OS X, Linux, UNIX – Java compatible platforms.
- Java SDK 1.5 or higher.
- Cell Illustrator™ server version is also available special for complex calculations.

To find additional information, please visit: **http://www.scubeindia.com/cell_illustrator.html**