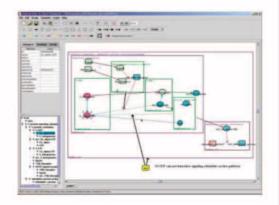
## Representation of Biological Processes: Signal Transduction Pathway Database Development

Signal transduction pathways (STPs) explain the underlying mechanisms of various biological phenomena in terms of interactions of bio-processes and bio-molecules.

Since most of the knowledge is represented in the form of text by natural language, a knowledge representation model for STPs that is as readily processed by a computer as it is easily understood by humans is required.

A hierarchical and recursive data model that is able to handle the diversity of molecules and the hierarchical structure of bio-processes in pathways has been developed.



Screenshot of our pathway editor GEST

## Ken-ichiro FUKUDA

Computational Biology Research Center e-mail: fukuda-cbrc@aist.go.jp AIST Today Vol. 2, No. 9 (2002) 19