

Systems Biology

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There are several definitions of systems biology; however all are consistent in it being an interdisciplinary approach towards understanding of biological systems dynamics. The final aim is therefore understanding of how living organisms function. In the contrast to the reductionistic approach of molecular biology where our focus of analysis is one by one element, e.g. gene or protein, in systems biology information gathered on different levels is integrated and interpreted holistically. The article presents basic principles and methods applied in systems biology. Additionally, possible examples of systems biology solutions in every day applications will be discussed.