

Systems biology approaches for prioritizing therapeutic gene targets

Johannes Schuchhardt

MicroDiscovery GmbH, Marienburger Str. 1, 10405 Berlin

Rational approaches to therapy of complex diseases may be improved by predictive modelling of underlying disease mechanisms. Formulating and implementing such models requires the integration of heterogeneous information from different sources and usually entails considerable effort. We need new concepts and resources making knowledge on causal regulatory interactions of genes and physiological states in a disease context available. Dedicated ontologies and text mining methods can be of great use for guiding and supporting the process of model construction and model evaluation.