

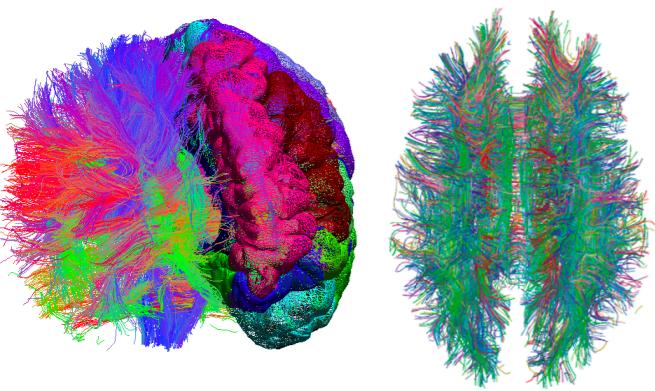
Modeling and Analysis of Complex Biological Systems

Manlio De Domenico

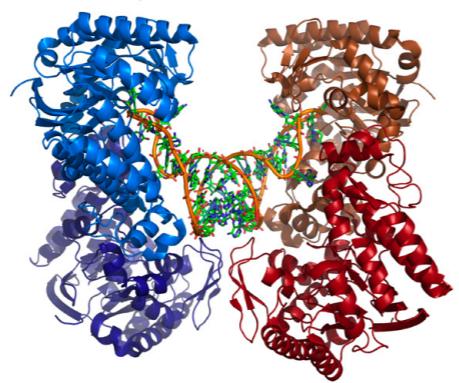
Complex Multilayer Networks Lab
Center for Information Technology, Bruno Kessler Foundation

FBK
4 Oct 2018

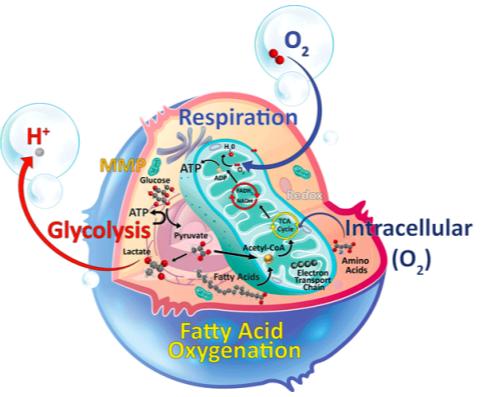
Modeling & analysis of complex biological systems



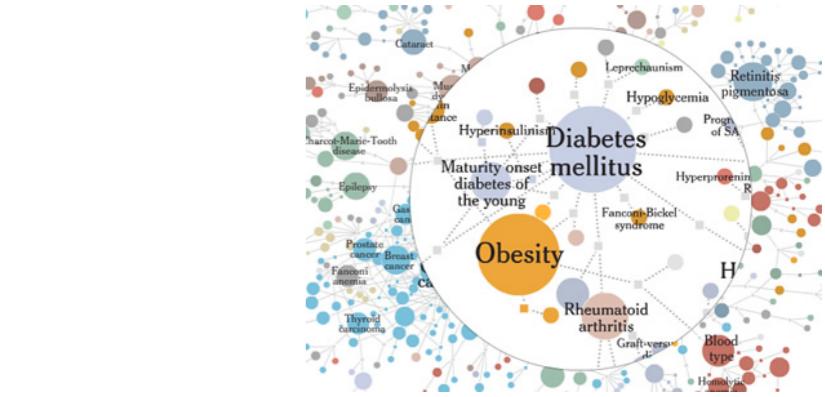
Connectome



Proteome



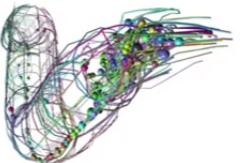
Metabolome



Diseasome

Projects

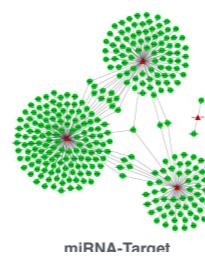
■ C. Elegans Systems integration →



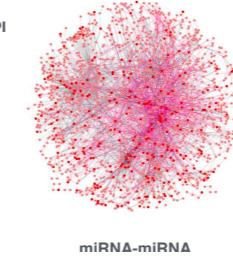
■ Disease-disease interaction (multilayer) →



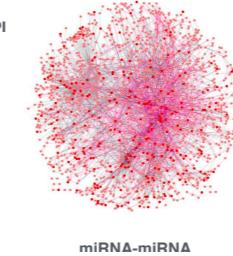
■ Pathogenesis of complex diseases →



PPI



miRNA-Target



miRNA-miRNA

■ Prognosis of Psychiatric disorders & Neurodegenerative diseases →



Healthy



Unhealthy