

What Can Networks Teach Us about Biology?

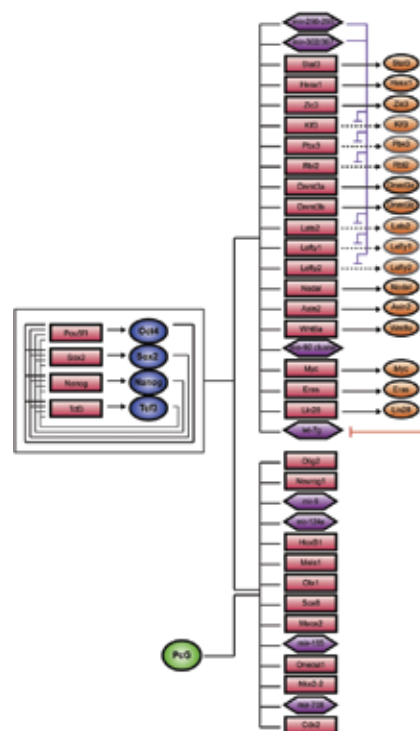
Fall 2010. Thursdays, 3 pm – 5 pm (**Class time is flexible.**) Room 68-151.

Instructors: Igor Ulitsky (ulitskyi@gmail.com, 8-5990; Bartel Laboratory)

Muhammed Yildirim (yildirim@gmail.com, 4-1651; Bartel Laboratory)

What do Facebook, the human brain, the electricity grid and transcriptional regulation in the cell have in common?

One simple answer is that they can all be represented as networks. In fact, studying the structures and features of these networks can help us understand the principles of all of these complex systems. Although networks from entirely different domains share surprising similarities, biological networks also have their own unique characteristics. In this course we will introduce biological networks and how they are studied in the context of general network theory. We will discover how network-based approaches are advancing various areas of biomedical research. Can we use networks to identify drugs that share a mode of action?



The course **will not** require any expert knowledge in biology, computer science or statistics and is open to students from any relevant department.

Snacks provided!!!

