INTRODUCTION TO NETWORK MODELS

Watch these videos:

# 1. Social network analysis overview

<https://www.youtube.com/watch?v=fgr_g1q2ikA>

2. The hidden influence of social networks

<https://www.youtube.com/watch?v=2U-tOghblfE>

# 3. Tracking the human genome in 4D

<https://www.youtube.com/watch?v=Q_KdrtsmYoE>

Read the specified sections of following article:

Beagrie RA, Scialdone A, Schueler M, Kraemer DC, Chotalia M, Xie SQ, Barbieri

M, de Santiago I, Lavitas LM, Branco MR, Fraser J, Dostie J, Game L, Dillon N, Edwards PA, Nicodemi M, Pombo A.

Complex multi-enhancer contacts captured by genome architecture mapping.

*Nature*. 2017 Mar 23;**543(7646)**:519-524.

1. Read the section entitled “Principle of the method.”
2. Study figure 1 – “Concept of genome architecture mapping.”
3. Study Extended Data Figure 2 – “Outline of the GAM method.”

The article is available here:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5366070/#!po=5.27638>

Concepts to learn from the videos and the article:

* What is a social network?
* What is a genome network?
* What is the concept of genome architecture mapping?
* What are the major steps of the GAM method?
* What is the genome network that is captured by GAM?

In the next class we will have a blackboard quiz about these concepts. The quiz may include multiple choice, true-false, fill-in-the-blank, and/or matching questions.