Role of Transcriptional enhancers in chromatin organization

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Investigations using Hi-C/5C technologies has revealed highly organized topologically associated domains (TADs) in chomosomes. These megabase sized regions are characterized by increased frequency (~2 fold) of interaction between loci within the TADs when compared to their interaction to loci located outside the confines of boundary elements. Further, these TADs are segregated based on their transcriptional activity into A and B domains. However, the defining principle behind these ordered structure is unknown. I will talk about some preliminary evidences indicating, the role of transcriptional enhancers in such hirarechical chromatin organization.