1) Epigenetic Data for GeneWeaver input

2) Hi-C, RNA PolII ChIA-PET, etc data for chromatin contact

A 3D Map of the Human Genome at Kilobase Resolution Reveals Principles of Chromatin Looping. Rao et. al. *Cell.* Volume 159, Issue 7, 18 December 2014, Pages 1665–1680

183 Hi-C datasets across 9 different cell lines in humans

17 Hi-C datasets from one mouse cell line

# CTCF-Mediated Human 3D Genome Architecture Reveals Chromatin Topology for Transcription. Tang et. al. *Cell*. 2015 Dec 17;163(7):1611-27. doi: 10.1016/j.cell.2015.11.024.

# 1 SMC3 ChIA-PET dataset from human cell line

# 1 RAD21 ChIA-PET dataset from human cell line

# 2 RNAP2 ChIA-PET dataset from 2 human cell lines

# 2 CTCF ChIA-PET dataset from 2 human cell lines

# Highlighted aren’t informative for gene-enhancer interactions

# Chromatin connectivity maps reveal dynamic promoter-enhancer long-range associations. Zhang et. al. *Nature*. 2013 Dec 12;504(7479):306-10. doi: 10.1038/nature12716.

# 1 RNAP2 ChIA-PET dataset from mouse neural progenitor cells

# 2 RNAP2 ChIA-PET datasets from mouse neural stem cells

# 2 RNAP2 ChIA-PET datasets from mouse embryonic stem cells

# Topological domains in mammalian genomes identified by analysis of chromatin interactions.Dixon et al. *Nature*. 2012. Apr 11;485(7398):376-80. doi: 10.1038/nature11082.

# 4 Hi-C datasets from human cell lines

# 5 Hi-C datasets from mouse cell lines

# Extensive Promoter-centered Chromatin Interactions Provide a Topological Basis for Transcription Regulation.Li et. al. *Cell*. 2012 Jan 20; 148(1-2): 84–98.

# 10 RNAP2 ChIA-PET datasets from human cell lines

**Can find both regulatory IDs and Gene IDs associated with their genomic coordinates in Ensembl**

<http://mirbase.org/help/genome.shtml> has locations of all miRNAs

# Dissecting the chromatin interactome of microRNA genes. Chen *et al. Nucleic Acids Res.* 2014 Mar; 42(5): 3028–3043.

This paper details how they found TSS for miRNAs and is also good in general when thinking about how to incorporate these into GeneWeaver