Visualization Gene Regulation

Background

People are trying to understand gene regulation

DNA has genes

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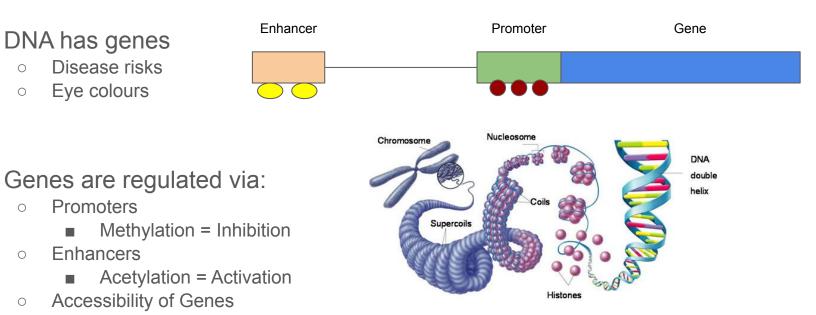
Disease risks \bigcirc

Promoters

Enhancers

Accessibility of Genes

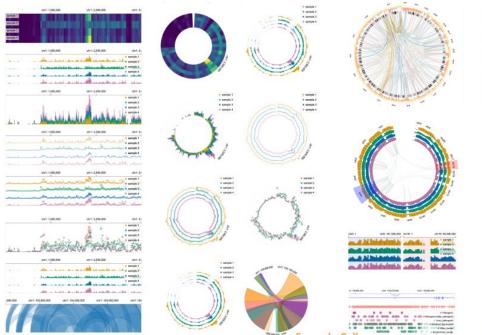
Eye colours 0





A Grammar-based Toolkit for Scalable and Interactive Genomics Data Visualization







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Pitch

Gremlin (O'Brien et al. 2010) chr5: 20.000.000 chr5: 60,000,000 chr5: 80, chr5: 40,000,000 Chromosome 5 013.2 p15.33 Region of Interest MA mamon m

- Main idea: Visualize regions of gene activity
 - Humans/Mice/Whatever
 - Data to Visualize

- Along the DNA...
 - DNA Methylation
 - Enhancer Acetylation
 - DNA Accessibility

• Not worried about finding these datasets