

CHROMATIN RELATED DISEASES

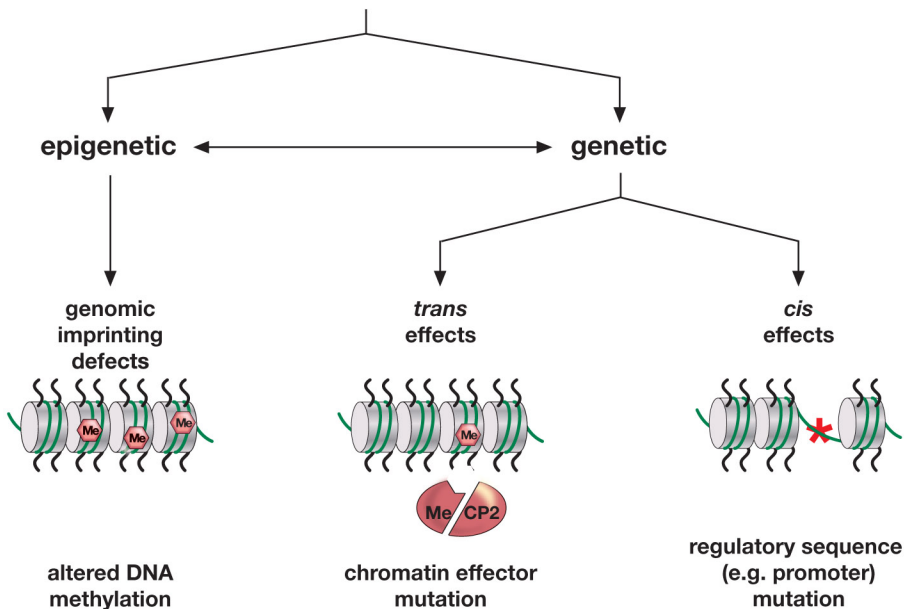


Figure 1. Genetic and Epigenetic Mechanisms Underlying Chromatin-related Disorders

Epigenetic mechanisms typically involve the alteration of DNA methylation or chromatin at imprinted loci, so disrupting monoallelic expression. Genetic mechanisms can be categorized into two classes. *trans* effects include the loss or dysfunction of chromatin-associated factors which can in turn alter chromatin structure and gene expression at certain genomic regions. *cis* effects represent mutations in noncoding regions that may be necessary for regulation. These mutations, which may include the expansion of DNA repeats, can lead to chromatin alterations which affect genome stability and gene expression.