



NOVEL FINDINGS ON THE GENOME-WIDE CORRELATION OF CHROMATIN MARKS AND CpGs

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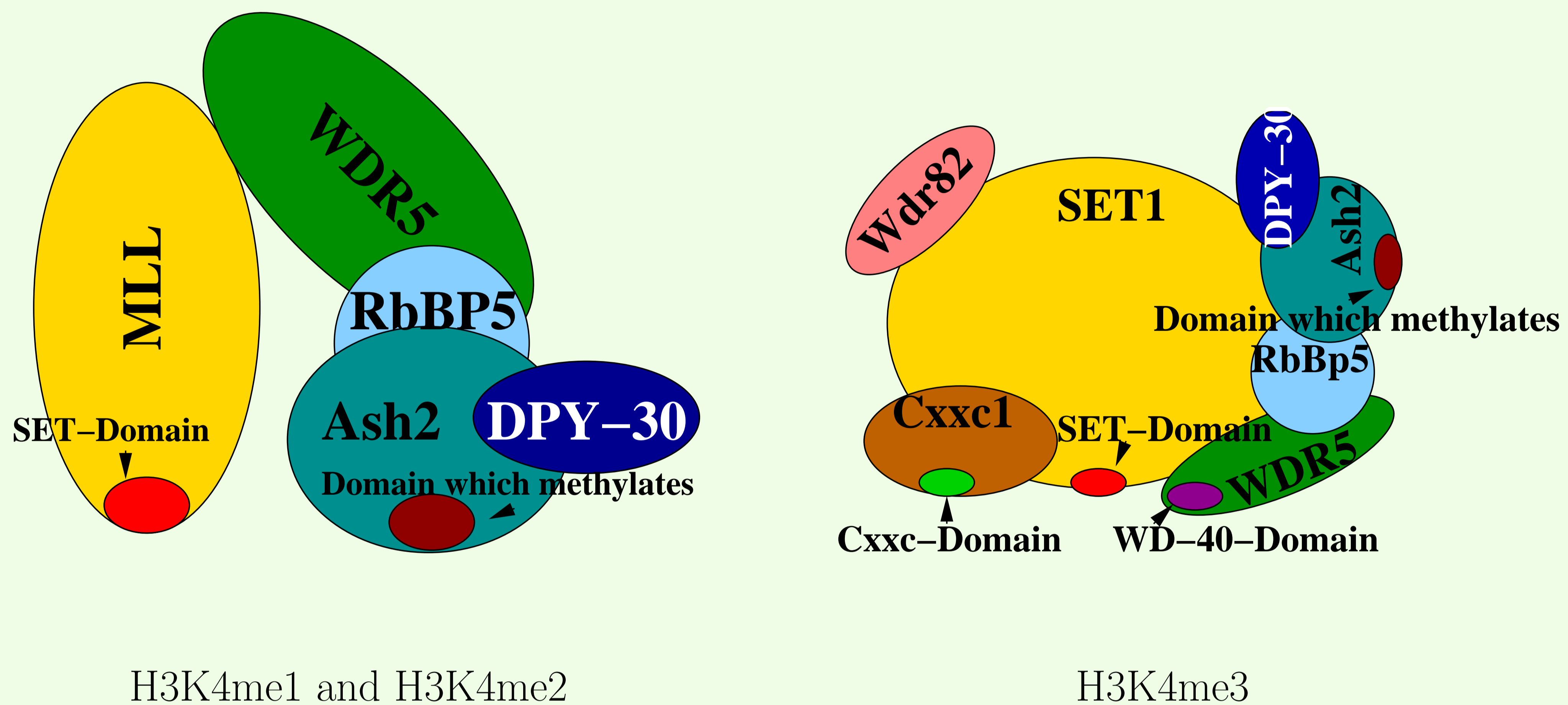
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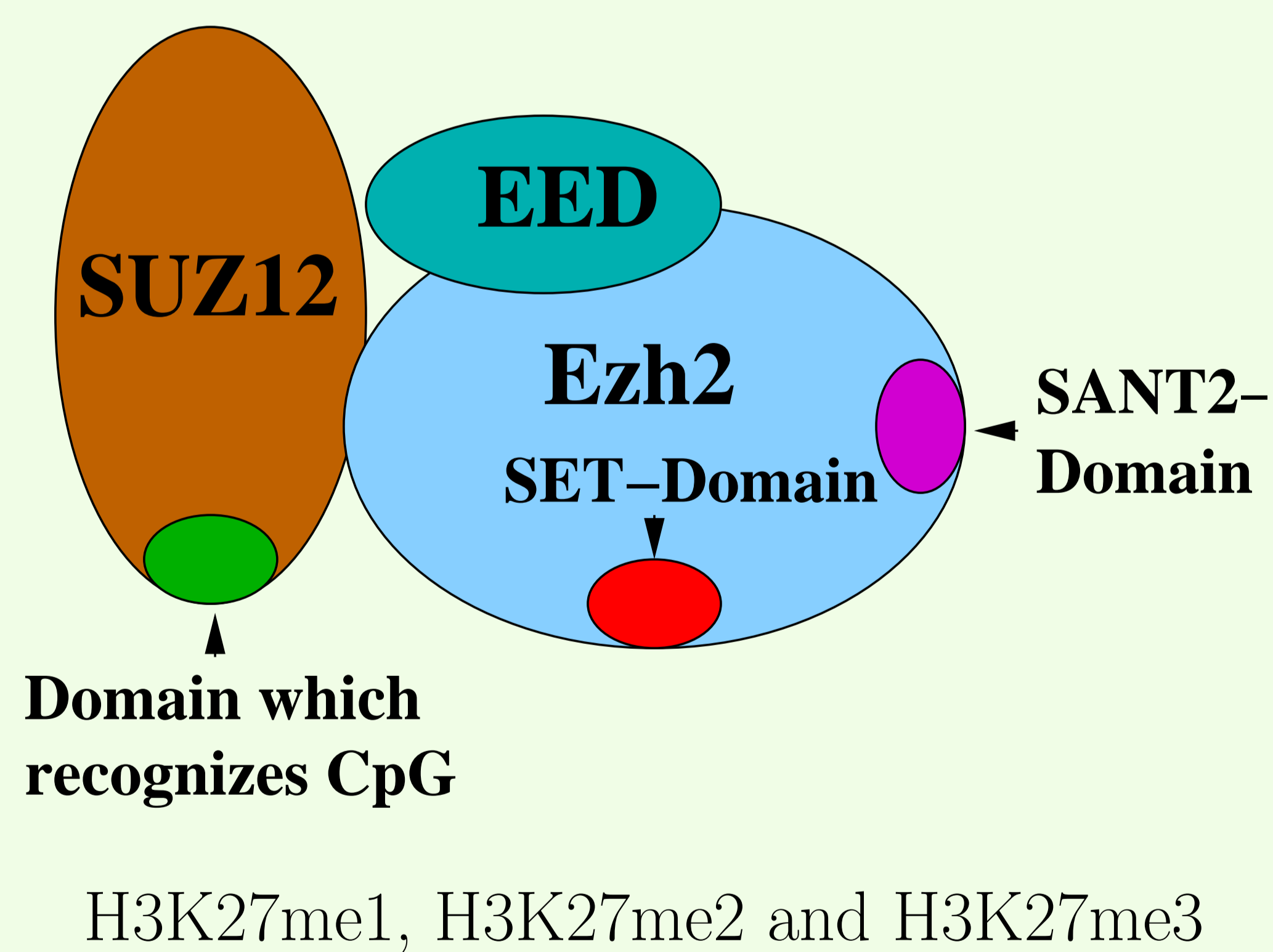
Analysing several histone methylations, we found correlations between CpG density and **trimethylations of lysine 4 and 27 of the histone H3** but could also show that not all steps leading to this trimethylations are **CpG-dependent**.

For example, **H3K4me1 and H3K4me2** are **CpG-independent**. Combining this information with the knowledge extracted from literature, we were able to create **models** for both processes including the **interactions of the main enzymes**.

MLL- and SET-Complex for H3K4me3



PRC2 for H3K27me3



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