



Figure 4. PTM of de novo synthesized histones prechromatin assembly. Histones H3 and H4 may have epigenetic marks added before chromatin assembly, which occurs after the replication fork. It is thought that H3K9 monomethylation and H4K5 and H4K12 acetylation are commonly added by modifying enzymes SetDB1 and HAT1, respectively, in complex with histone chaperones (e.g., Caf1 or Asf1). Once chromatin has been assembled, further modification may occur as illustrated in the case of heterochromatin formation.