

## Epigenetic mark reduces DNA mutation rate

**May 16, 2016** - A study by Benjamin Schuster-Boeckler, Skirmantas Kriaucionis and colleagues at Ludwig Oxford gives new twist on how chemical modifications on DNA alter the rate of mutations. Their work – now published in [eLife](#) – investigated the effect of the epigenetically modified DNA base 5-hydroxymethylcytosine (5hmC) on the frequency of mutations in cancer and normal tissues. They show that 5hmC is associated with decreased mutations; the opposite effect to the better-studied epigenetic modification 5-methylcytosine.