

Cancer can emerge from changes to epigenome, not just gene mutations

Doctors' ruling perspective on cancer has been that it is caused by a series of genetic changes. However, a team of researchers at the [University of Michigan \(UM\)](#) have shared a study that suggests that isn't always the case. They focused their research on ependymomas, a type of brain tumor affecting children and adults, and came to the conclusion that alterations in proteins that affect how genes are expressed could be causing the cancer and not genetic mutations themselves

After three separate research groups investigated ependymomas using advanced genome sequencing and were unable to identify any genetic mutations, the team at UM decided to...[focus] on the possibility of a link to epigenetics...[and] discovered that about 80 percent of ependymomas in children exhibited low levels of the histone H3K27me3 and that those patients had worse outcomes.

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This increased understanding of how epigenetics is linked to cancer can lead to more accurate prognosis of ependymomas, which are the third most common type of brain tumor in children. The researchers believe their discovery could have immediate implications for clinical use....

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [There's More to Cancer Than Just Genetic Mutations](#)