

GENETICS

HERITABLE MUTATION OR NOT?

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moblog - Tsun Leung Chan is now reporting a heritable germline epimutation of MSH2 in a family with hereditary colorectal cancer another case of "[paranormal](#)" inheritance. They find a mosaic germline methylation pattern (which might even be a symptom of another mutation that affects the demethylation-de novo methylation pattern of MSH2 during embryogenesis?). If my hypothesis is true these families should even show more genes with different methylation patterns, yea, yea.

Addendum 28/5/08

Another attempt to answer this question comes by a study of the [MLH1 promotor](#)

Pro: MLH1 promoter methylation was found in a patient and his mother giving evidence for a familial predisposition for an epimutation in MLH1.
Contra: a de novo set-up of methylation in one patient, a mosaic or incomplete methylation pattern in six patients, and no evidence for inheritance of MLH1 promoter methylation in the remaining families.