

## Scientists criticize New Yorker epigenetics article for ‘misleading’ information

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.**

A [story](#) about epigenetics in *The New Yorker* has been sharply criticized for inaccurately describing how genes are regulated. The article by Siddhartha Mukherjee — a physician, cancer researcher and award-winning author at Columbia University in New York — examines how environmental factors can change the activity of genes without altering the DNA sequence. Jerry Coyne, an evolutionary ecologist at the University of Chicago in Illinois, posted two widely discussed [blogposts](#) calling the piece “superficial and misleading”, largely because it ignored key aspects of gene regulation. Other researchers quoted in the blog posts called the piece “horribly damaging” and “a truly painful read”. Mukherjee responded by publishing a point-by-point [rebuttal](#) online. Speaking to *Nature*, he says he now realizes that he erred by omitting key areas of the science, but that he didn’t mean to mislead. “I sincerely thought that I had done it justice,” he says.

Coyne posted a lengthy, scathing [critique](#) written by molecular biologist Mark Ptashne at the Memorial Sloan Kettering Cancer Center in New York City and geneticist John Greally, who studies epigenetics and DNA methylation at Albert Einstein College of Medicine, also in New York City. Their main criticism was that Mukherjee’s article put too much emphasis on histone modification and DNA methylation, which they say are relatively minor contributors to gene regulation. They and other critics argued that Mukherjee ignored well-established mechanisms of gene regulation such as transcription factors — proteins that attach to specific sites on DNA to turn genes on and off — and certain RNA molecules.

**Read full, original post:** [Researcher under fire for New Yorker epigenetics article](#)