

If you can't see me you can't bite me: CRISPR experiments target altering mosquitoes to make them blind to humans

For the first time, scientists have used the gene-editing tool Crispr-Cas9 to render humans effectively invisible in the eyes of *Aedes aegypti* mosquitoes, which use dark visual cues to hunt, according to a paper recently published in the [journal Current Biology](#). By eliminating two of that mosquito's light-sensing receptors, the researchers knocked out its ability to visually target hosts.

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"The better we understand how they sense the human, the better we can control the mosquito in an eco-friendly manner," said Yinpeng Zhan, a postdoctoral researcher at the University of California, Santa Barbara, and the lead author on the paper.

Anopheles mosquitoes, which spread malaria, hunt at night, whereas *Aedes aegypti* hunts under the sun, at dawn and dusk. The species depends on a fleet of senses to find blood. A mere whiff of carbon dioxide, a sign that someone or something has just exhaled nearby, sends the mosquito into a frenzied flight.

"They can also detect some of the organic cues from our skin," such as heat, humidity and stench, said Craig Montell, a neurobiologist at the University of California, Santa Barbara, and an author on the study. But if there is no suitable host, the mosquito will fly straight to the closest-seeming target: a dark spot.

[This is an excerpt. Read the original post here.](#)