

Surrounded by sick coworkers? Your body is preparing for battle

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Surrounded by coworkers who are sniffing and sneezing?

You may not be able to ask for [sick leave](#) preemptively, but your body is already bracing for battle, says Patricia C. Lopes, assistant professor of biological sciences at Chapman University's Schmid College of Science

and Technology.

Lopes studies how our bodies and behaviors change once we become sick.

"Our [physiology](#), particularly the immune system—the system that protects the body from invaders—is tightly regulated," says Lopes. "Once we become sick, our physiology can drastically change to support recovery from the disease."

Lopes' article in the journal *Functional Ecology* highlights research showing that there are scenarios in which our physiology changes prior to becoming sick, when [disease risk](#) is high.

"In other words," Lopes, explains, "our brains can obtain information from diseased people and then elicit changes to our physiology. For example, observing images of sick people can already trigger activation of the [immune system](#)."

From a big picture perspective, this means that parasites affect our lives much more than previously considered, because they are already affecting our physiology even before they invade us, she says.

"How this ability to change physiology before getting sick helps animals cope with, or recover from disease is not well known, but could have major impacts on how diseases spread, and on how we care for and study sick humans and other sick animals," Lopes says.

More information: Patricia C. Lopes, Anticipating infection: How parasitism risk changes animal physiology, *Functional Ecology* (2022). [DOI: 10.1111/1365-2435.14155](https://doi.org/10.1111/1365-2435.14155)

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