

Ants can 'sniff out' cancer

March 9 2022



Formica fusca. Credit: Paul Devienne, Laboratoire d'Ethologie Expérimentale

Cancer detection is a major public health challenge, and the methods currently available to achieve it, for example MRIs and mammograms, are often expensive and invasive. This limits their large-scale use. To bypass these constraints, alternative methods are being studied, like the use of animals' sense of smell.

A team of scientists from the CNRS, Université Sorbonne Paris Nord, Institut Curie and Inserm1 have demonstrated how a species of ants, *Formica fusca*, has performed in the area. After a few minutes of training, these insects, which use [smell](#) for daily tasks, were able to differentiate healthy human cells from cancerous human cells.

By analyzing the compounds emitted by various cells, the scientists have shown that each cell line had its own smell that could be used by the ants to detect them. The efficacy of this method must now be assessed using [clinical trials](#) on a human being but this first study shows that ants have high potential, are capable of learning very quickly, at lower cost, and are efficient. The results are published in *iScience*.

More information: Baptiste Piqueret et al, Ants detect cancer cells through volatile organic compounds, *iScience* (2022). [DOI: 10.1016/j.isci.2022.103959](https://doi.org/10.1016/j.isci.2022.103959)

Provided by CNRS

Citation: Ants can 'sniff out' cancer (2022, March 9) retrieved 2 May 2024 from <https://phys.org/news/2022-03-ants-cancer.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.