

# Major biofilm dispersion finding announced

October 12 2006

---

A U.S. biologist says his discovery of a molecule that induces the dispersion of biofilms will affect numerous industries during coming years.

Binghamton University Associate Professor David Davies says he has found -- and is in the process of synthesizing -- a compound that causes biofilm colonies to disperse, thus leaving individual bacteria up to 1,000 times more susceptible to disinfectants, antibiotics and immune functions.

Biofilms are complex aggregations of bacteria marked by the excretion of a protective and adhesive matrix. They develop almost anywhere that water and solids, or solids and gases meet, which means they are virtually everywhere.

The small molecule Davies is working with appears to be one of the few known examples in nature of a communication signal that remains effective across species, family and phyla. Davies predicts the compound might also prove to have communicative effect even across bacterial kingdoms.

"I consider this the Holy Grail of research in biofilms," he said. "It's a new paradigm in the way we look at how bacteria regulate their behavior."

*Copyright 2006 by United Press International*

Citation: Major biofilm dispersion finding announced (2006, October 12) retrieved 3 May 2024 from <https://phys.org/news/2006-10-major-biofilm-dispersion.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.