

The Scientist > The Nutshell

Microbial Mediators

Researchers show that symbiotic bacteria can help hyenas communicate with one another.

By Tracy Vence | November 11, 2013

0 Comments

Like 8

g+1 0

Link this

Stumble

Tweet this



FLICKR, LAERTESCTB

Symbiotic bacteria that populate the scent glands of hyenas seem to aid chemical communication among the scent-marking mammals, according to a study published in the *Proceedings of the National Academy of Sciences* today (November 11). Michigan State University's Kevin Theis and his colleagues, who had previously shown that hyena social groups harbor unique communities of bacteria that produce signature smells, used next-generation sequencing to investigate the microbes found in the scent glands of wild spotted and striped hyenas. They found that the bacterial communities were dominated by fermentive species and that microbial profiles

between spotted and striped hyenas differed.

"It's an extremely important study showing the role of bacteria mediating interactions between mammals," Penn State University's David Hughes, who not involved in the work, told *LiveScience*. "Only now are we discovering the role of what we think of as inconsequential passengers—the bacteria—and how important they are."

Theis told *Nature* that his team was somewhat surprised by the bacterial communities it found. "The diversity of the bacteria is enough to potentially explain the origin of these [scent] signals," he said.

In their paper, the researchers suggested that their bacteria-based fermentation hypothesis of chemical communication may be "prove broadly applicable among scent-marking mammals."

Tags

microbiology, microbes, hyenas, genetics & genomics, communication, bacteria and animal behavior

0 Comments

Like 8

g+1 0

Link this

Stumble

Tweet this

Add a Comment



You

Sign In with your LabX Media Group Passport to leave a comment

Not a member? Register Now!

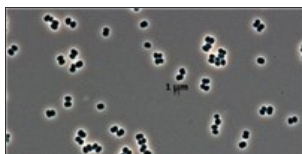
Related Articles



Retracing Steps

By Aimee Swartz

Sage Bionetworks aims to show that transparency and sharing are key to ensuring research reproducibility.



Astrogerm

By Bob Grant

Researchers find a new bacterial species lurking in clean rooms used to assemble spacecraft at NASA and the European Space Agency.



Week in Review: November 4–November 8

By Tracy Vence

Infant immune systems suppressed; why tissues are tough to freeze; silencing one gene causes secondary effects; estrogen's role in drug-resistant

Follow The Scientist



Subscribe!

Print or Digital

- iPad
- Kindle
- Tablet



Stay Connected with The Scientist

- f The Scientist Magazine
- f The Scientist Careers
- f Neuroscience Research Techniques
- f Genetic Research Techniques
- f Cell Culture Techniques
- f Microbiology and Immunology
- f Cancer Research and Technology

Popular Posts

1. [Dissection via Paintbrush](#)
2. [2013 Life Sciences Salary Survey](#)
3. [Doggie Dialogue](#)
4. [Is Cannabis Really That Bad?](#)
5. [Next Generation: Cancer Drug in Disguise](#)

Current Issue



[View the November 2013 contents.](#)

Subscribe to RSS feed

All

breast cancer

[The Nutshell](#)
[News & Opinion](#)
[Careers](#)

TheScientist

[Home](#) [News & Opinion](#) [The Nutshell](#) [Multimedia](#) [Magazine](#) [Advertise](#)
[About & Contact](#) [Privacy Policy](#) [Job Listings](#) [Subscribe](#) [Archive](#)



© 1986-2013 The Scientist

Now Part of the LabX Media Group: [Lab Manager Magazine](#) | [LabX](#) | [LabWrench](#)