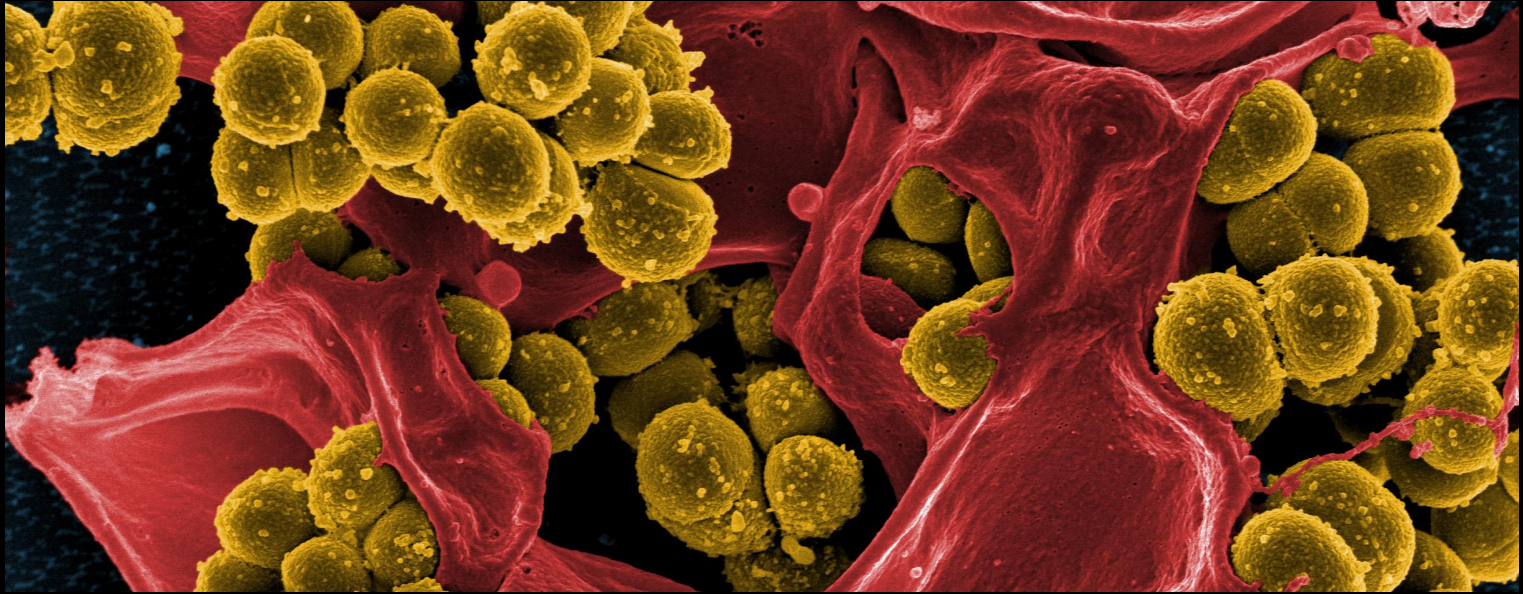


Science Fair Research * IB Biology 1



Miss Ronan & Ms. Toledo * Fall 2017

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Jack Andraka

What is scientific research?

Scholarly / Academic Resources

- * Written by an expert
- * Checked by experts
- * Higher level analysis
- * Vocabulary used by experts
- * Written with the expectation of prior knowledge

Popular Resources

- * Usually written by a journalist
- * Checked by editors
- * Mass readership
- * Popular / everyday vocabulary
- * Usually no prior knowledge necessary


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GOOGLE fracking

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Fracking is the process of drilling down into the earth before a high-pressure water mixture is directed at the rock to release the gas inside. Water, sand and chemicals are injected into the rock at high pressure which allows the gas to flow out to the head of the well.



www.huffingtonpost.com

What is fracking and why is it controversial? - BBC News
www.bbc.com/news/uk-14432401 British Broadcasting Corporation

More about Hydraulic fracturing

Feedback

Dangers of Fracking
www.dangersoffracking.com/

Hydraulic fracturing, or "fracking", is the process of drilling and injecting fluid into the ground at a high pressure in order to fracture shale rocks to release natural gas inside. There are more than 500,000 active natural gas wells in the US.

Hydraulic fracturing - Wikipedia, the free encyclopedia
https://en.wikipedia.org/wiki/Hydraulic_fracturing Wikipedia

Hydraulic fracturing (also hydrofracturing, hydrofracking, **fracking** or fraccing) is a well-

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- Limiting # of Students to 150
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www.gcmhslibrary.com/online-instruction/study-guides/science-fair/

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Fracking

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 Environmental Health Perspectives, September 2016 ▲

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Author abstract

...the multiple potential pathways leading to human health risks legislative method to mitigate potential risks.

...legal setback distances between well-pad sites and the

METHODS: We reviewed geography, current statutes and regulations, evacuations, thermal modeling, air pollution studies, and vapor cloud modeling within the Marcellus, Barnett, and Niobrara Shale Plays.

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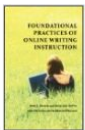
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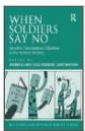


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SPREADING NEWS The controversial idea that a *Culex* mosquito (shown) can spread Zika is getting some reconsideration as new



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Science News Blogs

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BY TINA HESMAN SAEY 18 HOURS AGO

Works Cited

National Institute of Allergy and Infectious Diseases. "Micrograph of Methicillin-Resistant Staphylococcus aureus (MRSA)." Online image. *Flickr*. Yahoo!, 30 June 2006. Web. 1 Oct. 2015. <<https://flic.kr/p/dRtGwW>>.

Prata, Andre. "Piled Vitamins." Online image. *Flickr*. Yahoo!, 18 Apr. 2011. Web. 23 Sep. 2015. <<https://flic.kr/p/9zxm9v>>.