

Aliens – from science fiction to science fact?

A NASA scientist has stirred debate over life forms from outer space. He claims to have found fossils of unknown bugs inside meteorites. Is he for real?



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Signs of extraterrestrial life? The jury's still out.

It isn't a spindly-legged alien with big eyes and a cute voice; but Astrobiologist Richard Hoover does claim to have found an extra-terrestrial on planet earth.

In a new study published in the *Journal of Cosmology*, he describes microfossils of bacteria found on a meteorite discovered in British Columbia, Canada.

The findings suggest that the bacteria grew on the rock before it entered Earth's atmosphere and that life can therefore exist in space. 'I interpret it as indicating that life is more broadly distributed than restricted strictly to the planet Earth,' says Hoover.

The scientist said he found the fossils, which are not visible to the naked eye, after splitting the meteorites in a laboratory and examining them using high-powered scanning electron microscopes.

'In many cases they are recognisable

and can be associated very closely with the generic species here on earth,' said Dr Hoover.

But not all the fossils are familiar. 'There are some that are just very strange and don't look like anything that I've been able to identify,' he adds, 'and I've shown them to many other experts that have also come up stumped.'

Hoover has looked inside a rare class of asteroids known as Cl1 carbonaceous meteorites, and it's here he claims to have found these bacteria 'indigenous' to the meteorite itself, not our planet.

In research that supports the 'panspermia' theory of life, he goes on to suggest that meteors spread organisms around the universe and that life on Earth could have been planted by bacteria in an asteroid hitting our planet in its infancy.

The scientific world, however, will need convincing. Astrobiologist Dr David

Marais, aware of many false claims in the past, is cool towards the latest research: 'It is an extraordinary claim and thus I'll need extraordinary evidence,' he says.

WE ARE NOT ALONE

The search for extra-terrestrial life is a human passion, intriguing cranks and scientists, film makers and philosophers alike. And many still believe.

'Given the millions of billions of earth-like planets,' said Albert Einstein, 'life elsewhere in the universe without a doubt, does exist. In the vastness of the universe we are not alone.'

Confident words. But evidence for such life has proved strangely elusive, hence both the interest and scepticism around Dr Hoover's findings. It sounds like big news, but only time – and scientific method – will tell.

Q & A

Q So what might extra terrestrials look like?

A According to scientists, they'd probably be simple bacteria-like organisms. But sci-fi writers imagine sapient beings far more advanced than humans, like Mr Spock in Star Trek.

Q And the 'panspermia' theory?

A It's the controversial hypothesis that bacteria travel dormant for long periods of

time before landing on other planets where, if they meet with ideal conditions, they can become active and evolve.

Q But people are sceptical of Hoover?

A If you look at the science blogs, very. As one says, 'Crackpot journal I'm afraid. I'm as excited about astrobiology as everyone else, but yeah, sceptical.'

Q Because there have been false claims in the past?

A A hoaxer claimed in the 1960s that a seed capsule was embedded in a meteorite, but it was later found to have been glued on.

SOME PEOPLE SAY...

'Only cranks are still looking for extra-terrestrials'

WHAT DO YOU THINK?