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The name is Horneckiae, Bacillus Horneckiae

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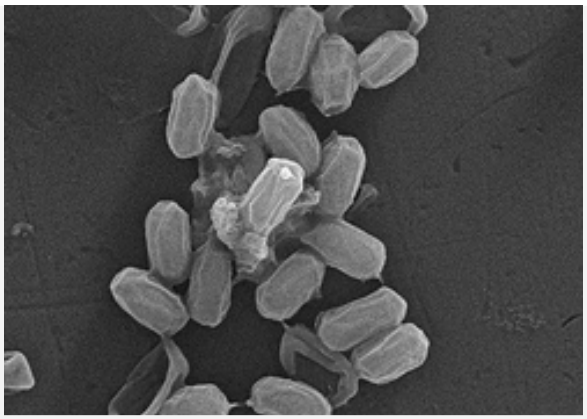
DLR radiation biologist Dr Gerda Horneck

American scientists pay tribute to DLR radiation biologist Dr Gerda Horneck

Back in July 2007, Professor Kasthuri Venkateswaran and his group of American scientists of the Jet Propulsion Laboratory (JPL) discovered a hitherto unknown species of bacillus. After investigating its genetic makeup, JPL has now arranged for the bacillus species to be registered in specialised databases as "Bacillus horneckiae". It is named after recently retired radiation biologist Dr Gerda Horneck of the German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt; DLR).

Professor Venkateswaran, who discovered the bacillus - a rod-shaped bacterium -, cooperated with Dr Horneck on a large number of international space exploration projects. Together, they investigated how micro-organisms react to orbital conditions, such as those obtained on board the International Space Station ISS. By naming the bacillus after Dr Horneck, the American scientist pays tribute to the scientific achievements of his German colleague, who has extensive expertise in radiation biology. "This is an extraordinary distinction, not just for me but for the DLR Institute of Aerospace Medicine as a whole," according to an enthusiastic Dr Horneck.



A space-tested bacillus

Together with their colleagues, DLR radiation biologists are conducting extensive experiments on the International Space Station (ISS) in order to investigate the origin and distribution of life. In her last project before retirement, Dr Horneck worked on a series of radiation biological experiments for the EXPOSE mission. In these experiments, the *Bacillus subtilis* is exposed - in different experimental configurations - to the extremely intensive cosmic radiation for different lengths of time. The *Bacillus subtilis* is less robust than the newly discovered *Bacillus horneckiae*. "It is a shame that this bacillus was only discovered after the EXPOSE series of experiment had already started. We would have liked to be able to do research on this robust bacillus", Dr Horneck says.

JPL scientists discovered *Bacillus horneckiae*, when they were checking the American Phoenix Mars probe for organic contaminants in July 2007. On behalf of NASA, they were investigating if the directives of the UN Outer Space Treaty were being complied with. This UN treaty sets out rules concerning the contamination of spacecraft by terrestrial organisms in order to avoid contamination of other planets by terrestrial organisms, which would lead to distorted measurements.

JPL scientists discovered Bacillus horneckiae Dr Horneck does not yet want to address the question of possible scientific uses for the newly discovered bacillus. "First of all, we should conduct chemical and biological investigations in order to find out what made this bacillus so tremendously robust," according to the scientist. A team of DLR early stage researchers is now trying to figure out these questions.

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