

Universität Heidelberg

## **HBIGS Lecture**

by

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## Human cells without gravity - the "immune problem" in space

Date: Wednesday, 14 Jan 2009

Time: 14:00

Venue: ZMBH, R001

## Abstract:

Life on Earth developed in the presence and under the constant influence of gravity, ob eof the most fundamental conditions of life on Earth. Technically, we are able to put ourselves in space ships for weeks up to months, and most probably, in the next decades we will be able to fly to Mars. But until now there is only limited knowledge about the biological and biomedical effects of weightlessness on organisms and humans, especially on the cellular and molecular level. Since the first space missions, it is known that immune function is severely suppressed in space on the cellular level. Our projects aim to elucidate gravity-sensitive molecular mechanism in human immune cells in order to explain the "immune problem" in space and to understand better the conditions of our life on Earth.