Montag 30. März 2015 18.00 Uhr Öffentlicher Abendvortrag im Rahmen der Vortragsreihe "Molekulare Grundlagen des Lebens"

Professor Dr. Peter Graumann

Bacterial cytoskeletal elements confer diverse functions from cell shape maintenance to cell cycle control

Cytoskeletal elements refer to proteins that form polymeric structures in cells, which confer spatial or even motor-like functions. Bacteria contain all cytoskeletal elements known from eukaryotic cells, and even several proteins that do not have counterparts in eukaryotes. This lecture briefly introduces bacterial cytoskeletal elements and focusses on bacterial actin-like proteins, which form dynamic filaments underneath the cell membrane which dictate the shape of the cell, or move plasmids within cells. It will be discussed how these different functions can be generated from an ancient sugar kinase that learnt to form polymers.

Peter Graumann studied biology and biochemistry in Marburg and London. After his diploma 1997 he received his PhD in Chemistry/Biochemistry from the Philipps University of Marburg. He was a full professor for Biology at the Albert-Ludwigs University of Freiburg (2004–2012). Since 2012 he is a full professor at the Faculty for Chemistry and SYNMIKRO at the Philipps University of Marburg.

Moderation: Professor Dr. Uwe Völker

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