

Panel Discussion

### **The Future of Life is Synthetic: The Promises of Xenobiology**

A Science & Society Session fostering interdisciplinary perspectives on synthetic biology and promoting dialogue between the sciences and society – jointly organized by the projects “Gene Technology Report” and “Leibniz: The Task of Visions” of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) and the Second Conference on Xenobiology (XB2).

Wednesday, 25 May 2016, 6.00 pm–7.30pm

Berlin-Brandenburg Academy of Sciences and Humanities

Leibniz Hall, Markgrafenstrasse 38, 10117 Berlin

The life sciences have made tremendous technical advances in recent years. Scientists are now able to alter and analyze genes with an ease never seen before. Whole genomes can be built from scratch and transplanted into living cells. But has this brought us any closer to understanding life?

Synthetic biology in particular has been heralded as an exciting new field which will allow a deeper knowledge on how living systems “work”. Synthetic biologists extensively manipulate organisms at DNA level. Even bringing long lost species such as the woolly mammoth back to life from recovered DNA samples seems possible nowadays. The xenobiologists reach even further – aiming to create artificial life built out of synthetic chemicals instead of natural DNA.

Such new biologies promise groundbreaking solutions for pressing global problems. However, these possibilities have raised concern about their future environmental and societal impact, and how they might change the way we think about life, biodiversity and evolution. Our interdisciplinary panel will bring together renowned experts from xenobiology and the philosophy of the life sciences to explore these and other matters of humanly-created life.

#### Introduction

Bernd Müller-Röber      University of Potsdam, Ordinary Member of the BBAW

#### Panel Discussion

Philippe Marlière      Scientist of Fortune S.a., Luxembourg

Philipp Holliger      MRC Laboratory of Molecular Biology, Cambridge UK

Heiner Fangerau      Heinrich Heine University, Düsseldorf

Markus Schmidt      Biofaction, Vienna, Austria

Moderated by

Kai Kupferschmidt      Science journalist

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