

Marsilius Academy 2014 Heidelberg – Summer School at Kurhaus Trifels

# SYNTHETIC BIOLOGY

September 1 – 5, 2014

Application  
deadline extended  
until June 22<sup>nd</sup>

## Promises and Perils of Modern Biotechnology

Since the “creation” of a bacterial cell from a synthetically synthesized genome in Craig Venter’s lab, synthetic biology has been made known to the public and popularized tremendously. The basic concept of synthetic biology can be regarded as a consequential advancement of an evolutionary biological approach in systems biology that intends to specifically use, modify, and combine biological systems in vitro (evolution in a test tube).

But to what extent does synthetic biology exceed previous breeding and genetic research and what perils might it cause? What promises does synthetic biology offer, and what is the potential for abuse? How can one guarantee that social and ecological consequences will be evaluated at an early stage in research?

Answers to these and other questions will be developed during interdisciplinary discussions at the Marsilius Academy 2014. These discussions will focus on current research approaches from the perspectives of the humanities and the life sciences in order to open up dialogue between economists, lawyers, and ethicists.

Participants will have the opportunity to discuss various questions and research approaches with experts from various disciplines and dive deeper into the topics during workshops.

The summer school will be presented by the Marsilius Kolleg in cooperation with the Verein Begegnungszentrum Kurhaus Trifels e.V.

### Organizers

Prof. Dr. Thomas Holstein (molecular evolutionary biology)  
Prof. Dr. Klaus Tanner (theology, ethics)

### Target audience

Doctoral candidates and junior scientists from the sciences and the humanities who are interested in an interdisciplinary exchange regarding the topic of the summer school. The number of participants is limited to 20.

The lectures will be held in German and in English. A working knowledge of both German and English is therefore expected. Input and questions during the discussions may be formulated in either English or German. Participation and housing are free of charge (stipend).

### Contributors i.a.

Florian Bauer, Stellenbosch University, South Africa (biology, enology)  
Jürgen Eck, Zwingenberg (CTO, BRAIN Biotech) | Roland Eils, Heidelberg University (bioinformatics) | Christa Schleper, University of Vienna (ecogenomics and systems biology) | Joachim Schummer, Berlin (philosophy) | Petra Schwille, MPI München (biophysics) | Victor Sourjik, MPI Marburg (molecular biology) | Oskar Zelder, BASF (biotechnology)

### Venue

Kurhaus Trifels Seminarhotel, [www.kurhaus-trifels.de](http://www.kurhaus-trifels.de)

### Application

Applications must be submitted online by May 31, 2014.

The online application and further information can be found at:  
[www.marsilius-akademie2014.uni-hd.de](http://www.marsilius-akademie2014.uni-hd.de)

### Contact

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