

Course Description: BMB-B-1 Organismic models for bioscience research

3 ECTS

Course Coordinator: Prof. Dr. Janine Kirstein

Offer: winter semester

Assessment of module: written or oral examination

Related courses

- Organismic models for bioscience research (lecture)

Contents and Learning outcomes

The lecture course provides an introduction to model systems that are frequently used in biomolecular research as organisms to study modern research questions. For each model system basic information on the structure of the organism, on the handling of the organisms as well as on advantages and disadvantages of the organismic model for various types of biomolecular research will be given. In addition, examples for modern biomolecular research questions that have been addressed or are currently addressed by using the respective model organism will be presented and discussed.

The organisms addressed by this lecture course may include (but may be modified according to recent developments): Bacteria, Yeast, *C. elegans*, Drosophila, *Arabidopsis*, Poplar, Mouse, Rat, Monkey, Homo sapiens

At the end of the course the students know the organismic models that are frequently used for biomolecular research to study modern research questions. They are aware of the advantages and disadvantages of these models, know about safety, legal and ethical issues connected with the use of the various organismic models and are able to choose appropriate organismic models to answer new research questions in biomolecular research.