Bf3R – German Centre for the Protection of Laboratory Animals

The BfR performs the role of the "German Centre for the Protection of Laboratory Animals (Bf3R)" and coordinates all associated activities nationwide with the goal of:

- Reducing animal experiments to the necessary minimum
- Providing the best possible protection for laboratory animals.

Furthermore, national and international research activities and a scientific dialogue shall be encouraged by the work of the Centre.

Bf3R Seminars

The Bf3R seminars address issues related to the use of animal experiments and alternative methods in basic research and toxicology, as well as the 3Rs. They take place four times a year and include a lecture of approx. 30–60 min, followed by a discussion.

Venue:

Federal Institute for Risk Assessment Room D146 Diedersdorfer Weg 1, 12277 Berlin (Marienfelde)

Directions: www.bfr.bund.de/en/location marienfelde-5533.html

Destination stop (<u>www.bahn.de</u>, <u>www.bvg.de/en</u>) "Nahmitzer Damm/Marienfelder Allee (Berlin)"

Registration:

Please register online by 16.03.2017 respectively 07.06.2017. http://www.bfr.bund.de/en/events.html

Contact:

BfR Academy Tel.: +49 (0)30 18 412 3456 Fax: +49 (0)30 18 412 63456 academy@bfr.bund.de

Organiser:

Federal Institute for Risk Assessment (BfR) Max-Dohrn-Straße 8–10 10589 Berlin Germany www.bfr.bund.de



Bf3R Seminars 2017

21 March 2017 16 June 2017 Berlin

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Tuesday, 21 March 2017

1:00–2:00 p.m. **Dr Adelheid Lempradl** *Max Planck Institute of Immunobiology and Epigenetics, Freiburg, Germany*

Epigenetic Inheritance in Drosophila

We established a *Drosophila* model for intergenerational metabolic reprogramming (IGMR) and showed that as little as two days of high paternal dietary sugar causes obesity in the offspring. This phenotype requires highly selective de-silencing of an entire chromatin state-defined regulatory program. Evidence of conservation to mouse and man established *Drosophila* as a relevant model of epigenetic inheritance. New results implicated an involvement of the small RNA machinery in IGMR and analysis of total RNA, small RNA and ChIP sequencing data provides additional mechanistic insights.

Friday, 16 June 2017

1:00–2:00 p.m. **Dr Henrik Bringmann** *Max Planck Institute for Biophysical Chemistry, Göttingen, Germany*

Studying sleep by using a worm

Sleep is a behavior that affects the physiology of the entire organism. It is essential and likely serves many functions from higher brain functions to basic cell biological functions including learning and memory, development, and regeneration. However, little is known about how sleep is controlled and how it exerts its functions. Central to the control of sleep are sleep-active sleep-promoting neurons that are active at the onset of sleep and that actively induce sleep through inhibitory transmitters such as GABA and neuropeptides. Caenorhabditis elegans is one of the most simple organisms that sleeps. Sleep is induced by just one single sleep-active neuron called RIS. C. elegans is amenable to molecular dissection and genetic screening identified conserved sleep regulatory genes. To study its functions, sleep can be ablated and the phenotypes caused by sleep loss can be studied. Because of its simplicity, the molecular basis of sleep regulation and functions should be straightforward to solve in the worm.