

Press Release

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THIRD INTERNATIONAL HIPS-SYMPIOSIUM AT THE SAAR UNIVERSITY: NEW APPROACHES IN PHARMACEUTICAL RESEARCH

On Thursday, 18 July 2013, the campus of Saarland University will once again serve as the venue for renowned researchers and junior scientists from various areas of pharmaceutical research. They are assembling for the third international symposium of the Helmholtz Institute for Pharmaceutical Research Saarland (HIPS) – a branch of the Helmholtz Centre for Infection Research (HZI). The conference will take place from 9 am to 7 pm in the auditorium of the Saarland University in Saarbrücken (Building A3 3).



Drug research is the primary focus at HIPS and will also be in the spotlight at the HIPS symposium on 18 July. ©HIPS/Bellhäuser

Exploitation of previously undiscovered natural substances – for example from bacteria and fungi – and the synthesis of bioactive molecules that can serve as the basis for various drugs are central topics of the third HIPS symposium. The participants come from the three different pharmaceutical communities natural products, medicinal chemistry, and drug delivery. In Saarbrücken, they plan to introduce new procedures in genome research and bioinformatic tools for substance development. As in the two previous symposiums, the event offers a forum for experienced scientists to exchange ideas beyond the limits of classical disciplines. At the same time, junior scientists will have an opportunity to get valuable feedback on their projects from experts.

One of this year's speakers will be Dr. Rolf Apweiler from the EMBL-European Bioinformatics Institute in Hinxton, England. He will provide an overview of the services in bioinformatics offered at his institute, which support life science research. Professor Axel Brakhage, Leibniz Institute for Natural Product Research and Infection Biology in Jena will introduce a modern approach for the discovery of new drug molecules. This involves activation in the laboratory of so-called "sleeping" genes in fungi cultures, in order to "switch on" natural substance biosynthesis pathways. Streptomycetes, among bacteria, serve as a traditionally highly abundant source for natural substances. How they can be better exploited with the aid of genome research will be demonstrated by Professor David Hopwood from the John Innes Centre in Norwich, Great Britain.

Experts from the area of natural substance chemistry will introduce their latest research results as well. For example, Professor Gerhard Bringmann from the University of Würzburg will speak about his research activities regarding the elucidation of structure and (bio)synthesis of bioactive substances with complex three-dimensional structures. Professor Dirk Trauner from the Ludwig Maximilians University Munich will give a lecture on the chemical synthesis and multifaceted biological functions of "colour molecules" like Santalin A, the main colour component of red sandalwood. Professor Andreas Lendlein, Helmholtz Centre Geesthacht, will offer insights into polymer research and introduce so-called elastomers – elastically malleable plastics – and their pharmaceutical application.

The Helmholtz Centre for Infection Research:

At the Helmholtz Centre for Infection Research (HZI) in Braunschweig, scientists are studying microbial virulence factors, host-pathogen interactions and immunity. The goal is to develop strategies for the diagnosis, prevention and therapy of human infectious diseases. Researchers at HIPS - a branch of the HZI - contribute to developing new pharmaceuticals and therapies against infectious diseases. www.helmholtz-hzi.de/en