Unravelling the complex networks of microbial and biomolecular interactions

Microorganisms such as bacteria and fungi are microscopic creatures, undistinguishable to the naked eye and yet they interact constantly with their neighbours - exchanging information, in peaceful coexistence or as aggressive pathogens. But how do these microbes actually communicate?

The aim of the International Leibniz Research School for Microbial and Biomolecular Interactions Jena - ILRS Jena is to understand communication processes among microorganisms. The ILRS PhD projects use interdisciplinary approaches, combining methods of microbiology, natural product chemistry, chemical ecology, bioinformatics and systems biology to decipher the underlying biological mechanisms.

ILRS Jena is the graduate training programme of the Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute (HKI) – in cooperation with the Friedrich Schiller University Jena and the Max Planck Institute for Chemical Ecology. The ILRS is part of the "**Jena School for Microbial Communication**" (JSMC) which has been established as an umbrella organisation for three existing Research Training Groups.