



Progetto VITALITY | Programma di Consulenza Specialistica | Seminario

Novel avenues in antibiotic drug discovery

Abstract

We are in the midst of the antimicrobial resistance crisis, which poses one of the biggest global health threats. The challenges associated with anti-infective drug-discovery are manifold and since the disinvestment of most pharmaceutical companies, the discovery and development is left to academic groups or small and medium enterprises. The talk will start with an introduction to the field and the current pipeline that is essentially empty when it comes to antibiotics with a novel mode of action. The Helmholtz Institute for Pharmaceutical Research Saarland (HIPS) addresses this gap by pursuing both natural product discovery and development as well as medicinal-chemistry programmes on a portfolio of un(der)explored targets by combining various hit-identification strategies with phenotypic antibacterial screening. This approach will be illustrated with a selection of projects that show the synergy between the two research lines and also how computational and artificial-intelligence approaches accelerate our endeavour.

lunedì 14 aprile 2025 - Ore 14.00

Aula VIII

Rettorato



Anna K. H. Hirsch

Helmholtz Institute for Pharmaceutical Research
Saarland (HIPS)

Anna Hirsch read Natural Sciences with a focus on Chemistry at the University of Cambridge and spent her third year at the Massachusetts Institute of Technology, doing a research project with Prof. Timothy Jamison. For her Master's project, She carried out her Master's research project in the group of Prof. Steven V. Ley at the University of Cambridge. She was awarded the Gratama Science Prize in 2014, the SCT-Servier Prize for Medicinal Chemistry in 2015, the Innovation Prize for Medicinal Chemistry of the GdCh/DPhG in 2017, the EFMC Young Medicinal Chemist in Academia Prize (runner-up) in 2019 and in 2024, the RSC-BMCS Capps Green Zomaya Award for Medicinal or Computational Chemistry.