

UniCat Colloquium

PROF. CRAIG TOWNSEND

John Hopkins University, USA

Biosynthesis of β -Lactam Antibiotics and the Force of Convergent Evolution

Despite their use for more than 60 years, the β -lactam antibiotics, represented most familiarly by the penicillins and cephalosporins, remain the most widely used anti-infectives in human medicine. Four structurally distinct clans occur naturally, and the more recently discovered of these are vital to combatting the rising specter of bacterial resistance.

Members of this class of antibiotics contain strained monocyclic and bicyclic ring systems whose chemical potential is essential to their antimicrobial activity. Ingenious and efficient chemical strategies have been uncovered that assemble each of these four families and propel their thermodynamically uphill ascent during biosynthesis. These convergent evolutionary solutions will be described and discussed.

Wednesday, May 27, 2015 at 5:15 PM

TU Berlin, Institute of Chemistry
Straße des 17. Juni 115, 10623 Berlin

Building C, Lecture Hall **C 264**

Prof. Suessmuth (TUB)

Organizer

Coffee and cake will be served 30 minutes before the lecture. Guests are cordially invited to attend!
Prof. Dr. Matthias Driess - Chair of the Cluster of Excellence UniCat - www.unicat.tu-berlin.de



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