

## Vortragsankündigung

- im Rahmen des UniCat-Kolloquiums -

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Es spricht: Professor Peter Leadlay, Department of

Biochemistry, University of Cambridge, UK

Zeit: Mittwoch, 11. Februar 2009

17:15 Uhr

Ort: TU Berlin

Institut für Chemie, Altes Chemiegebäude

Straße des 17. Juni 115

10623 Berlin Raum C243

Thema: Molecular Assembly Lines for Drug

**Biosynthesis - Adventures in Synthetic** 

**Biology** 

Abstract:

Modular polyketide synthases and non-ribosomal peptide synthetases are giant multienzymes that offer a distinctive paradigm for enzymatic catalysis, and one uniquely adapted to the ideas of synthetic biology. By making non-natural combinations of the genes for such naturally modular systems, it should be possible to create bioactive analogues of clinically-validated drugs. In practice, there are a number of obstacles to be overcome to realise this ambitious goal, chiefly our lack of understanding of the details of the arrangement and orchestration of the individual enzymatic components within these multienzymes. Recent progress will be described in both analysing bacterial polyketide synthases, and exploiting them for biosynthesis of bioactive compounds as leads in drug discovery.

Organisator: Prof. Dr. R. Suessmuth (TUB)

Gäste sind herzlich willkommen!

Prof. Dr. Matthias Drieß
Sprecher des Exzellenz-Clusters UniCat