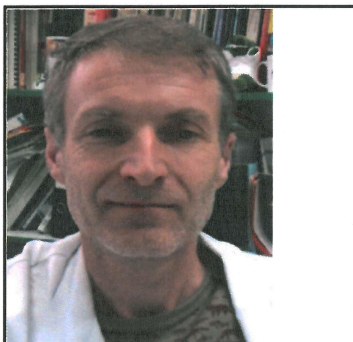


**Abstract - Presentation for the Workshop " Early Discovery of New Antibiotics"
Paris 12-13 January 2017**

Name of speaker:	Thierry Naas
Name of presentation:	DesInMBL: Design of inhibitors of Metallo-beta-lactamases



Abstract: The pandemic NDM-1 and other plasmid-borne metallo- β -lactamases (MBLs) disseminating worldwide in Gram-negative organisms worldwide threatens to take medicine back into the pre-antibiotic era since the mortality associated with infections caused by these "superbugs" is very high and the choices of treatment are very limited.

Using combined complementary approaches (microbiology, biochemistry, structural biology, molecular modelling and chemical synthesis) we gained vital insights into structure-function relationship of MBLs, allowing us to better understand substrate specificities, to determine key residues involved in carbapenem recognition and hydrolysis, and to foresee the impact of mutations on the hydrolysis profile, with the penultimate goal to finally develop an MBL pan inhibitor using a consensus pharmacophore common to all clinically-relevant MBLs.