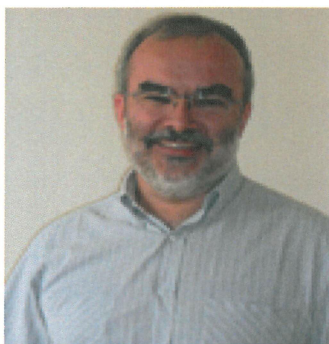


Abstract - Presentation for the Workshop " Early Discovery of New Antibiotics"
Paris 12-13 January 2017

Name of speaker:	Jean-Luc PERNODET
Name of presentation:	Exploring and exploiting the secondary metabolism of <i>Streptomyces</i> .



Abstract: Natural products (NPS), also called secondary metabolites constitute an important part of our pharmacopeia. Microorganisms are prolific NP producers and many of their products find applications as antibiotics. Micro-organisms possess the ability to produce a much wider spectrum of NPs than previously suspected (greater than 10 times as inferred from genomics). We aim at developing innovative genome-mining strategies to explore as thoroughly as possible the natural diversity of NP biosynthetic gene clusters. This should help to uncover the secondary metabolomes of antibiotic producers and to define antibiotic interactions and synergy. We also plan to use synthetic biology approaches (e.g. combinatorial biosynthesis and mutasynthesis) to increase the chemical diversity of NPs produced by bacteria belonging to the genus *Streptomyces*.