

Séminaire

Institut de Biologie Structurale J.P. Ebel
41, rue Jules Horowitz
F-38027 GRENOBLE Cedex 1
Tél. +33 (0)4 38 78 95 50 - Fax +33 (0)4 38 78 54 94
www.ibs.fr

Conférencier invité

Mardi 20 Mars 2012

A 11h - Salle des séminaires de l'IBS

Par Pierre Cornelis
Vrije Universiteit Brussel
Microbiology

Iron uptake homeostasis in *Pseudomonas aeruginosa* and management of oxidative stress

Iron is both an essential nutrient for the growth of microorganisms, as well as a dangerous metal due to its capacity to generate reactive oxygen species (ROS) via the Fenton reaction. For these reasons, bacteria must tightly control the uptake and storage of iron in a manner that restricts the build-up of ROS. Therefore, it is not surprising to find that the control of iron homeostasis and responses to oxidative stress are coordinated. The presentation will cover the mechanisms of iron uptake by bacteria with the emphasis on *Pseudomonas aeruginosa*, the regulation of iron uptake, and the overlap between iron homeostasis, virulence, and the response to oxidative stress via the LysR regulator OxyR.

Hôte : Eve de Rosny (IBS/METALLO)