

## Conférencier invité

Vendredi 24 Fév. 2012

A 11h - Salle des séminaires de l'IBS

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## The mechanism of transport of cell wall subunits across the bacterial membrane

Bacterial cell growth necessitates synthesis of peptidoglycan, an essential structure of bacteria and consequently a major target for antibiotic development. Assembly of this major constituent of the bacterial cell wall is a multistep process starting in the cytoplasm and ending in the exterior cell surface. The intracellular part of the pathway results in the production of the membrane-anchored cell wall precursor, Lipid II. After synthesis this lipid intermediate is translocated across the cell membrane. The translocation (flipping) step of Lipid II was demonstrated to require a specific protein (flippase). Yet, the identity of this flippase remained obscure for decades. The road to the identification of this flippase will be presented, as well as ongoing research to establish the mechanism of transport.

**Hôte: Thierry Vernet (IBS/Groupe Pneumocoque)**