

Séminaire



CONFÉRENCIER
INVITÉ

Vendredi 09 Décembre 2022 à 11h

Salle des
séminaires IBS

Institut de biologie structurale - 71 avenue des Martyrs CS 10090 38044 Grenoble Cedex 9 - T.+33 (0)4 57 42 85 00

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Visualization of Competence Development and Transformation in *Streptococcus pneumoniae*

Natural genetic transformation is a conserved mechanism of horizontal gene transfer enabling bacteria to acquire new traits. It requires the development of competence, a specialized physiological state during which exogenous DNA is imported into the cytoplasm and integrated into the chromosome by homologous recombination. In the human pathogen *Streptococcus pneumoniae*, competence is induced during exponential growth in response to stresses and propagates through the whole population for a short period of time (~25 min, shorter than the generation time of a single cell). Here, I will present different strategies based on fluorescence microscopy that we have developed to monitor the entire transformation process in live pneumococcal cells at the single cell level.

Hôte : Cécile Morlot (IBS/groupe Pneumocoque)