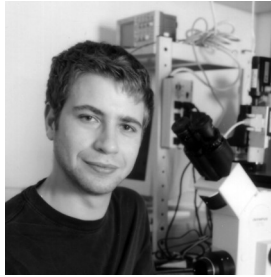




Séminaire externe



"Single-molecule reconstruction of the transcription-coupled repair pathway."



Transcription-coupled DNA repair (TCR) is a complex multi-component, multi-step process. In *E. coli*, TCR begins when RNA polymerase (RNAP) stalls on a DNA lesion, and thereby becomes a target for the Mfd translocase first identified genetically by Evelyn Witkin in the 1960s. We reconstruct the process step-by-step in a bottom-up, single-molecule approach enabling us to observe both formation of a stable Mfd-RNAP repair intermediate and downstream interactions of the intermediate with the UvrABC excisome. Single-molecule strand incision assays finally allow us to quantitatively compare and contrast GGR (for global genome repair, i.e. to carried out by the excisome alone) and TCR.

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Invité par Rachid Rahmouni

Vendredi 25 novembre 2016 à 11h
Salle de conférence du CBM