

CRCM

Cancer Research
Center of Marseille



External Seminar Series

Tuesday June 18th 2024
11h00 am, CRCM Library

Hosted by the Genome Integrity Department



Pr Petr Cejka

Mechanisms of DNA break processing for homologous recombination

Synopsis: My laboratory is using biochemical tools to understand mechanisms of DNA double-strand break repair by homologous recombination. In the first part of the seminar, I will talk about how the breast cancer suppressor BRCA1 promotes the initial processing (resection) of DNA breaks. I will show that BRCA1 directly promotes long-range resection by BLM/DNA2 in conjunction with CtIP. In the second part of my talk, I will show that DNA breaks formed by Cas9 cannot be immediately processed because Cas9 bridges the broken DNA together. I will show that HLF, a dsDNA translocase, can efficiently remove Cas9 from DNA, with potential implications for gene editing.

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