

## Regular Wednesday IMG seminar



**Kamila Burdová, Ph.D.**

**Laboratory of Genome Dynamics**

**“The role of FEN1 in DNA replication and repair”**

The role of FEN1 in the maturation of Okazaki fragments during lagging strand synthesis is efficient and well established. However, we recently showed that a small fraction of Okazaki fragments escapes canonical FEN1-dependent processing and must be repaired downstream of replication forks by PARP1/2-dependent DNA single-strand break repair mechanisms to maintain genome integrity. The role of FEN1 in DNA repair has been proposed but is still not well understood, especially in human cells, and is therefore the subject of our interest. We identified a role of FEN1 in the repair of DNA single-strand breaks after oxidative DNA damage which is strongly restricted to the G1 phase of the cell cycle, a function that may be essential in postmitotic neurons.

**The seminar will be held**

**on Wednesday 12<sup>th</sup> April 2023 at 15:00**

**in the Milan Hašek Auditorium at IMG**

(Institute of Molecular Genetics of the Czech Academy of Sciences, Vídeňská 1083, Prague 4)

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