
Regular Wednesday IMG seminar



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Laboratory of Mouse Molecular Genetics

“The role of the X-linked *Hstx2* locus in *Prdm9*-controlled hybrid male sterility”

Hybrid male sterility (HMS) between *Mus musculus* subspecies of the house mouse has been studied for a long time in the hybrids of inbred mouse strains and males caught in nature at the hybrid zone. In our laboratory, using inbred strain hybrids of distinct subspecies origin, we identified *Prdm9* as the first hybrid sterility gene in mice and in vertebrates. We have shown earlier that the impact of *Prdm9* on fertility is modulated by epistatic interaction with the second major HMS factor, the *Hstx2* genetic locus on chromosome X. Besides interacting with *Prdm9*, *Hstx2* also controls meiotic recombination rate and chromosome synapsis during meiotic prophase I. The 2.7 Mb *Hstx2* locus contains several protein-coding and microRNA genes expressed in the prophase I, hence representing the *Hstx2* candidates. I will talk about our new results in the study of mir465 microRNAs cluster.

The seminar will be held

on Wednesday 27th April 2022 at 15:00

in the Milan Hašek Auditorium at IMG

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