
Regular Wednesday IMG seminar



Veronika Zimolová, M.Sc.

Laboratory of Cell and Developmental Biology

“Janus Kinase 2 (JAK2) mutations: implications for blood diseases”

The project aims to elucidate the impact of the germline Jak2 R1063H variant on myeloproliferative disorders and its potential implication in myeloid malignancy predisposition. Utilizing a mouse model harboring the Jak2 R1063H mutation, we observed higher mortality rate, elevated D-dimer levels indicative of thrombotic events, and increased platelets counts. Furthermore, metabolic profiling revealed alterations in platelet bioenergetics and gene expression patterns associated with fatty acid metabolism. Additionally, we showed aberrations in hematopoietic stem cell functionality, manifesting as a skewed myeloid progenitor cell expansion and bone marrow remodeling. These findings collectively suggest that Jak2 R1063H variant represents risk factor in the pathogenesis of myeloid cell transformation.

The seminar will be held

on Wednesday 27th March 2024 at 15:00

in the Milan Hašek Auditorium at IMG

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