Institute of Molecular Genetics
of the Czech Academy of Sciences

Regular Wednesday IMG seminar

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"CRL4^{COP1} ubiquitination complex as a balancer of early odontogenesis"

C*ullin-RING ubiquitin ligase (CRL)* complexes have been heavily studied in connection to cancer progression but there is limited evidence about their physiological role*s*. One of the exceptions is disruption of limb development by thalidomide induced by inhibition of CRL4 complex via regulation of *Fgf8* (Ito et al., 2010). Notably, *Fgf8* expressing population is essential also for development of tooth primordia and we found CRL4 genes to be specifically expressed within odontognic epithelium. We further identified COP1 as a substrate binding protein which can bind ETS transcription factors, downstream targets of Fgf pathway, and unveiled that conditional deletion of CRL4 genes severly affects size and morphology of molar primordia and future teeth.

The seminar will be held

on Wednesday 27th November 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)