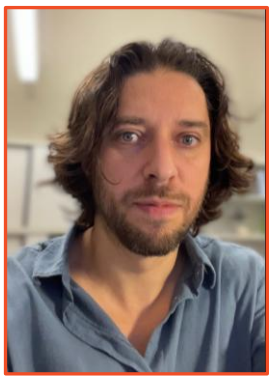
IMG

Institute of Molecular Genetics
of the Czech Academy of Sciences

Regular Wednesday IMG seminar



Igor Adameyko

Karolinska Institutet, Sweden
and Medical University of Vienna, Austria

"The atlas of placodal development helps to decipher their evolutionary origin"

In this talk I will present our single cell and spatial transcriptomics data, which I will place into the light of the current ideas about the placodal evolution. Neurogenic placodes are specialized embryonic ectodermal thickenings in the head that give rise to sensory neurons, sensory receptor and glial cell, and endocrine tissues. They, together with the neural crest, form the basis of the vertebrate cranial sensory and neurosecretory systems. Placodes are unique to vertebrates and represent a major evolutionary innovation that allowed the elaboration of the vertebrate "new head" - the complex sensory apparatus and associated ganglia that support the information flows necessary for effective predation and movement. They may have evolved from ancestral epidermal sensory cell fields present in protochordates (like tunicates or amphioxus).

The seminar will be held

on Wednesday 12th November 2025 at 15:00

in the Milan Hašek Auditorium at IMG

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