IMG

Institute of Molecular Genetics
of the Czech Academy of Sciences

Regular Wednesday IMG seminar

Kriti Attri

Laboratory of Tissue Morphogenesis and Cancer

"Deciphering contractile fibroblasts in the developing mammary gland"

Mammary gland development relies on coordinated interactions between the epithelium and its surrounding stroma. Although fibroblasts are key regulators of tissue morphogenesis, their diversity and specific functions during mammary development remain poorly understood. We recently uncovered previously unrecognized heterogeneity among mammary fibroblasts and identified a transient, niche-forming population of specialized contractile fibroblasts that localize around the tips of the growing epithelium (TEBs). These peri-TEB fibroblasts arise from preadipocytes. In this talk, I will present our ongoing efforts to define the molecular mechanisms governing peri-TEB fibroblast specification. Our preliminary data implicate WNT signaling and hormonal cues in regulating the peri-TEB fibroblast state, revealing new links between systemic developmental signals, local stromal regulation, and epithelial morphogenesis, with broader implications for fibroblast plasticity in breast disease and cancer.

The seminar will be held

on Wednesday 24 June 2026 at 15:00

in the Milan Hašek Auditorium at IMG

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