

# **Regular Wednesday IMG seminar**



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#### Laboratory of Biology of the Cytoskeleton

#### "Differential roles of GIT1 and GIT2 adaptor proteins in regulating microtubule nucleation in glioblastoma cells"

Microtubules play a critical role in cell division and migration, impacting the viability and invasiveness of malignant tumors. Although the reorganization of highly dynamic microtubules is central to these processes, the precise mechanism underlying microtubule involvement in glioblastoma cell motility remains poorly understood. G protein-coupled receptor kinase-interacting proteins (GITs) are GTPase-activating proteins (GAPs) for ADP-ribosylation factor (Arf) small GTPases. GITs are structurally conserved multidomain scaffold/adaptor proteins that link Arf GTPases to other intracellular signaling events. Here we show that the signalling proteins GIT1 and GIT2 form complexes with γ-Tubulin ring complexes (γTuRCs), associate with centrosomes and differentially regulate microtubule nucleation and cell migration in glioblastoma cells.

#### The seminar will be held

### on Wednesday 22<sup>nd</sup> May 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)