

Call for PostDoc and PhD student positions Formation of polarized cellular structures

Laboratory of Adaptive Immunity
Institute of Molecular Genetics, Czech Academy of Sciences, Prague

Research project: Primary cilium and immunological synapse are related structures. Both organelles concentrate sensory and signaling receptors of multiple signaling pathways. In addition, structural and functional establishment of these structures is dependent on polarized protein transport and remodeling of actin cytoskeleton. Bardet-Biedl syndrome (BBS) is a severe multiorgan disease (ciliopathy) caused by loss-of-function mutations in several BBS related proteins. BBSome is a complex of eight BBS proteins and regulates two key processes during ciliogenesis. First, BBSome transports multiple receptors to the ciliary membrane. Second, BBSome inhibits activity of RhoA GTPase, which regulates F-actin polymerization. Major goals of the project are to reveal the mechanism of BBSome assembly, understand the actin-BBSome interplay during ciliogenesis, and explore the role of BBSome in the formation of the immunological synapse between T cells and anti-gen-presenting cells.

We are looking for a PhD student and a postdoctoral scientist to accomplish the goals of the project.

Offer: IMG is a modern institute with state-of-the-art facilities. We offer work in enthusiastic young research group, sufficient funding, and competitive salary.

PhD candidate profile: M.Sc. or equivalent in cell biology and related fields. Highly motivated student with a strong commitment to science, wet lab experience, good laboratory practice and ethics. Experience with cell cultures, animal models, and fluorescence microscopy is an advantage. Please, apply through the IMG PhD Program (<http://www.img.cas.cz/education/phd-programme/application/> - the 2017 call will open soon), but we encourage the candidates to contact us directly as well.

PostDoc candidate profile: PhD degree in cell biology or related field and expertise in fluorescence microscopy are required. Experience with quantitative fluorescence techniques (FCS, FRAP) and superresolution microscopy is an advantage. We expect strong commitment to science and high level of research ethics. The position is for 18 month period with a possible prolongation. Suitable for, but not limited to, fresh PhD graduates.

Contact persons:

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