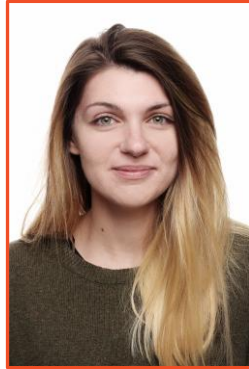

Regular Wednesday IMG seminar



Rositsa Maystorova

Laboratory of Cell Differentiation

“Ontogeny of zebrafish erythropoietic waves”

Hematopoiesis is the process of blood formation, which occurs in multiple waves during vertebrate development. In zebrafish, the first wave initiates before 24 hours post-fertilization with the generation of primitive myeloid cells from cephalic mesoderm and primitive erythrocytes in the intermediate cell mass. The first definitive wave is transient, and it produces erythro-myeloid progenitors in the posterior blood island at 26-30hpf. The next definitive wave forms hematopoietic stem cells from the aortic endothelium, which migrate to the caudal hematopoietic tissue, and later colonize the kidneys and thymus. Despite the importance of zebrafish as a model organism, it has been challenging to study the erythroid waves in fish in detail, and our knowledge about these processes is limited and predominantly focused on their emergence. Through our work, we are providing more information on the dynamics of the erythroid waves, as well as globin gene expression patterns in the primitive and definitive populations. Additionally, we have managed to identify novel factors playing a role in the globin switch from larval to adult globins.

The seminar will be held

on Wednesday 29th October 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)
