

Biosketch: Alexandra Avgustinova graduated with a BA in Biological Sciences from the University of Oxford (Oxford, UK) in 2005. She undertook her PhD under the mentorship of Prof. Clare Isacke at the Institute of Cancer Research (London, UK) studying the role of the tumour stroma in breast cancer progression. In 2013 she joined the laboratory of Dr. Salvador Aznar Benitah at the Institute for Research in Biomedicine (Barcelona, Spain) as a postdoctoral fellow to investigate the repercussions of deregulated chromatin accessibility on development and disease. In 2020 she founded the Paediatric Tumour Epigenetics Group at the Institut de Recerca Sant Joan de Déu. Since 2024 the group enjoys double affiliation with IRB Barcelona.

The Paediatric Tumour Epigenetics Lab aims to elucidate how epigenetic parameters impact developmental tumour biology, and how epigenetic targeting can be used in the clinic to synergise with established standard-of-care treatments. Specifically, we are interested in (1) how epigenetic alterations can cause malignant transformation; (2) whether epigenetic deregulation alters the evolutionary potential of tumours by impacting their mutation rate; and (3) how the epigenomic landscape of the tumour influences the patient's anti-tumour immune response by altering tumour cell immunogenicity.