

## **Regular Wednesday IMG seminar**



Prof. Dirk Schübeler

## Friedrich Miescher Institute for Biomedical Research

"Finding your place: Transcription factors as sensors and modifiers of chromatin"

Transcription factors only bind a minority of their motifs in large mammalian genomes. One likely explanation is that many motifs are not accessible for binding due to the action of chromatin and DNA methylation. We are using mammalian stem cell models and their differentiation combined with genomics to understand this important interplay between gene regulation, chromatin structure and DNA methylation. We study the dynamics of the epigenome and test regulatory models in cellular models by genetic perturbation and genome editing approaches.

I will discuss our recent efforts in understanding how the sensitivity to DNA methylation and nucleosomes can limit transcription factor binding in the context of the cell and how TFs rely on specific chromatin remodelers for access to their binding sites.

## The seminar will be held

on Wednesday 26th June 2024 at 16:00

## in the Milan Hašek Auditorium at IMG

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