



UNIVERSITÀ DI PAVIA
Dipartimento di
Biologia e Biotecnologie
“Lazzaro Spallanzani”

Seminar

Walking along an entire human chromosome at the nanoscale

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Recent advances in chromatin labelling, imaging and automated fluidics technologies have led to the development of chromatin tracing techniques, enabling direct mapping of the 3D chromatin folding in situ at the single-cell and single-molecule level. However, these techniques often pose challenges in post-processing and analysis. We implemented an ad-hoc library, Chromatin Imaging Analysis (CIMA), to speed up chromatin tracing analysis and quantification of chromatin organisation patterns. Here, we will show how utilising CIMA in conjunction with combinatorial barcoding allowed the first time to image the entire human chr19 at the nanoscale, unveiling heterogeneity in chromatin 3D spatial distribution and morphology

Wednesday 27th November 2024
02:30 PM

DBB, Jucci, Edificio Golgi-Spallanzani, Via Ferrata 9A

HOST: F. Forneris