NanoLSI
WPI KANAZAWA UNIVERSITY

NanoLSI Open Seminar

Structural insights into chromatin transcription revealed by cryo-EM

In eukaryotic cells, RNA polymerase II (RNAPII) transcribes the genomic DNA, which is packaged into chromatin. The basic unit of chromatin is the nucleosome, in which approximately 150 base-pairs of DNA are wrapped around histone proteins. However, how RNAPII passes through the nucleosome has not been understood.

To address this question, we performed the in vitro transcription assay on the nucleosomal template and visualized the structures of the transcribing RNAPII-nucleosome complexes by cryo-EM. We also analyzed the effects of transcription elongation factors and histone chaperones on nucleosomal transcription.

In this seminar, I will discuss the mechanism of transcription on chromatin.

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Time and Date
5:00 PM – 6:00 PM Wednesday, March 1, 2023

Format
Hybrid (Main Conference Room, NanoLSI 4F & Zoom meeting)

Language
English

Registration
https://forms.gle/NKTJSPAq5F9nnsbk7

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