



Seminar Series Program—Invited Speaker Series

Epigenetic Heterogeneity in Cancer: From Basic Science to Cancer Diagnosis

Efrat Shema

Weizmann Institute of Science



Monday, February 9, 2026, 4-5 pm

Lecture Hall (Hörsaal), University Hospital Heidelberg

Im Neuenheimer Feld 410, 69120 Heidelberg

Efrat Shema is a leader in the field of single-cell epigenomics and biomarker development. She is based at the Weizmann Institute of Science in Rehovot, Israel (<https://www.weizmann.ac.il/dept/irb/shema/>), and is currently on sabbatical at the Max Planck Institute for Molecular Genetics in Berlin (<https://www.molgen.mpg.de/shema-lab>).

Following her PhD at the Weizmann Institute, Efrat Shema moved to a postdoctoral position at Massachusetts General Hospital and Harvard Medical School, where she was introduced to the field of single-cell and single-molecule epigenomics in the laboratories of leading experts (Dr. Bernstein and Dr. Buenrostro). During this time, she began developing technologies that enable the assessment of epigenetic heterogeneity at single-cell resolution.

Her research on epigenetics at single-cell resolution closely aligns with the work of many groups within CRC1709 and is expected to be of strong interest to students, postdocs, and PIs.