Y C U B I O I N F O R M A T I C S L A B 主 催 共 同 利 用 ・ 共 同 研 究 拠 点

## STUDYING TUMOUR SUBCLONES AND THE TUMOUR MICROENVIRONMENT USING SPATIAL TRANSCRIPTOMICS

SPATIAL BIOLOGY

VISIUM HD MERSCOPE PAN-CANCER

CELL-CELL COMMUNICATION



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## <u>後</u> 11月28日(木) 16:00-17:00 ZOOM

一般公開・無料

The tumour microenvironment (TME) contains various immune and stromal cells and their interactions play a critical role in tumour progression, treatment response, and patient outcomes. For example, tumour-infiltrating T cells and tertiary lymphoid structures are often linked to improved cancer survival. Latest advances in spatial transcriptomics provide high-resolution insights into tumour-immune interactions and mechanisms of chemotherapy resistance.

We have recently applied spatial transcriptomics (Visium and CosMx) to map the TMEs of high-grade serous ovarian carcinoma. This analysis revealed subclones with distinct TMEs, suggesting that subclone-specific ligands may modulate TME composition (Denisenko et al., 2024).

Currently, we are using VisiumHD and MERSCOPE platforms to examine the TMEs of ovarian cancer, breast cancer, and mesothelioma. These platforms allow us to study the TME at single-cell resolution and to predict their cell-to-cell communication networks (Ramilowski et al., 2015; Hou et al., 2020).

## ZOOMの情報は当日にお送りします。

問い合わせ先

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