Oncode Institute

Imaging, Omics & AI in Single Cell Biology Symposium

Accelerator Building
Science Park - Utrecht

09.00 - 09.30 **Walk in, registration & coffee/tea**

09.30 - 09.40 **Welcome**

09.40 - 11.10 **Session I:**

09.40 - 10.10 *DynaScreen: an imaging-based pooled CRISPR screening platform for dynamic signaling phenotypes at single-cell resolution*

Speaker 1: Giulia Zanetti - Kees Jalink Group, NKI

10.10 - 10.30 *A Cooperative Mechanism of Eukaryotic Transcription Factor Target Search*

Speaker 2: Jos Meeussen - Tineke Lenstra Group, NKI

10.30 - 10.50 *Enhancing sensitivity in imaging-based spatial transcriptomics using machine learning models*

Speaker 3: Benedetta Manzato - Ahmed Mahfouz Group, LUMC

10.50 - 11.10 *Tracing clonal dynamics in normal human tissues using single-cell genomics*

Speaker 4: Sjors Middelkamp - Hugo Snippert Group, Princess Maxima Center

11.10 - 11.40 **Coffee break**

11.40 - 12.40 **Session II:**

11.40 - 12.00 *Integrating single-cell transcriptomics and AI-driven CT radiomics to resolve tumour phenotypes in canine (neuro)endocrine neoplasms*

Speaker 5: Phoebe Yuen Ka Chan - Floryne Buishand Group, Royal Veterinary College (UK)

12.00 - 12.20 *The Glioblastoma Hypoxic Niche Rewires Lipid-Laden Macrophages in an Ontogeny-Dependent Manner*

Speaker 6: Menno Boon - Leila Akkari Group, NKI

12.20 - 12.40 *Charting cell types in space to study mechanisms of immune checkpoint inhibitor resistance*

Speaker 7: Myrthe Jager - Jeroen de Ridder Group, Princess Maxima Center

12.40 - 13.40 **Lunch & networking**

13.40 - 15.00 **Session III:**

13.40 - 14.00 *A spatial single-cell transcriptomic atlas of metastatic breast cancer progression*

Speaker 8: Sebastian Gregoricchio - Wilbert Zwart Group, NKI

14.00 - 14.20 *Single-cell trajectories quantified by OrganoidTracker, a machine-learning based pipeline*

Speaker 9: Heidi Klumpe - Sander Tans Group, AMOLF

14.20 - 14.40 *Deciphering cancer growth patterns with tissue-structure-informed AI and spatial transcriptomics*

Speaker 10: Sander Goossens - Bioinformatics Lab, TU Delft

14.40 - 15.00 *Fate, Clonal Evolution, and Therapeutic Vulnerabilities of BRCA1-Deficient Cells in Early Breast Tumorigenesis.*

Speaker 11: Tatum van Maanen - Jos Jonkers Group, NKI

15.00 - 15.30 **Afternoon break**

15.30 - 17.00 **Session IV:**

15.30 - 15.50 *Tertiary lymphoid structures contain precursor-like T cell reservoirs and act as amplifiers of immunotherapy response*

Speaker 12: Nadine Slingerland - Daniela Thommen Group, NKI

15.50 - 16.10 *To be confirmed*

Speaker 13:

16.10 - 16.40 **Keynote Speaker: Marvin Tanenbaum - Decoding the sequence requirements for translation initiation**

16.40 - 16.50 Q&A

16.50 - 17.00 **Summary and closing**

17.00 - 18.00 **Networking drinks**