

Single-Cell Microbiomics: From Genome to Metabolome

Challenges and Opportunities

DATE AND TIME

May 22, 2026
11:15 – 16:00

Friday | Europe/ Helsinki

VENUE AND LOCATION

MED D1016
Lauren – sali 2 (Medisiina D)
Kiinamylynkatu 10 D, 20500 Turku

ORGANIZER

BioCity Turku • Microbes and
Immunity Research Program MIRP
biocityturku.fi/research-programs/mirp/

This meeting aims to explore the prospects and challenges of applying single-cell approaches to prokaryotic systems, while also reflecting on what can be learned from recent advances in single-cell research on eukaryotic microorganisms. By bringing together expertise from genomics, transcriptomics, proteomics, and metabolomics, the seminar will highlight emerging technologies and discuss future opportunities for integrative single-cell microbiomics.

Programme

11:15 - 12:00 ● **Salad Buffet**

Lauren – sali 2 (MED D1016)

12:00 - 12:05 ● **Welcome & Opening Remarks**

Prof. Jukka Hytönen and Adj. Prof. Santosh Lamichhane

Session 1 – Eukaryotes

12:05 - 12:40 ● **Why Single-Cell Research Began: Lessons from Immune Cells**

Adj. Prof. Tapio Lönnberg, Turku Bioscience, University of Turku and Åbo Akademi University

12:40 - 13:00 ● **Decoding Borrelia infection – from transcriptomics to molecular mechanisms** **ECR**

Varpu Rinne, Institute of Biomedicine, University of Turku

13:00 - 13:40 ● **Mass spectrometry-based single-cell omics: Proteomics meets metabolomics**

Research Director, Otto Kauko & Adj. Prof. Alex Dickens, Turku Bioscience, University of Turku and Åbo Akademi University

13:40 - 14:00 ● **Coffee break**

Session 2 – Single-Cell Research to Prokaryotes

14:00 - 14:40 ● **Investigating microbial life in their natural habitats using single cell transcriptomics**

Adj. Prof. Manu Tamminen, Department of Biology, University of Turku

14:40 - 15:20 ● **Host-microbe metabolic interactions at the micrometer scale** **Guest Lecture** **ZOOM**

Prof. Manuel Liebeke, University of Kiel, Germany

15:20 - 15:45 ● **Discussion and Closing remarks**

Adj. Prof. Kirsi Gröndahl-Yli-Hannuksela and Adj. Prof. Santosh Lamichhane

CONTACT

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Register Here

Join us early · Salad buffet
provided · Limited to first 50
registrants.

Please register before 11.05.2026

