



Module B – Tumors and the immune system 2026

High dimensional profiling of tumor microenvironment

Instructors

Dr. Karina Silina
Department of Chemistry and
Applied Biosciences,
Pharmaceutical Immunology
ETH Zürich

Prof. Chiara Magnani
Department Medical Oncology
and Hematology
University Hospital Zurich

Prof. César Nombela Arrieta
Department of Medical
Oncology and Hematology
University Hospital Zürich

karina.silina@pharma.ethz.ch

chiara.magnani@usz.ch

Cesar.NombelaArrieta@usz.ch

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Course Venue UZH City Center, Karl Schmid-Strasse 4, KO2-G-275

General Outline

- 09:00 – 10:15 The immune composition of tumor microenvironment (Karina Silina)
- 10:30 – 11:45 Multispectral microscopy and quantitative pathology analysis of tumor microenvironment (Karina Silina)
- 11:45 – 13:00 *Lunch*
- 13:00 – 14:15 Role of the immunosuppressive microenvironment in immunotherapy - Single cell transcriptomic and spectral flow cytometry (Chiara Magnani)
- 14:30 – 15:30 The stromal microenvironment in hematological malignancies (César Nombela Arrieta)

Learning outcomes

Understanding of basic principles of tumor heterogeneity and immune microenvironment and theoretical knowledge of multiparameter immunostaining, multispectral and 3D volumetric microscopy.

Students will get an overview of: i. the intrinsic mechanisms that prevent effective immunotherapies, ii. the most promising strategies to prevent tumor escape, iii. the remodeling and contribution of the stromal microenvironment to cancer progression, iv. the use of single cell techniques to unravel the complexity of the cancer microenvironment