



University
of Basel

Department
Biozentrum



Swiss Institute of
Bioinformatics

BIOZENTRUM

The Center for
Molecular Life Sciences

Basel Computational Biology Seminar

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Emergent cellular ecosystems in melanoma revealed by single cell analysis

Anti-cancer therapies can often kill the vast majority of tumor cells but a few rare cells remain and grow despite treatment. Non-genetic variability has emerged as a potential contributor to this behavior. However, it remains unclear what drives this variability, and what the ultimate phenotypic consequences are. We have developed a set of new single cell barcoding technologies (Rewind and FateMap) that have enabled us to show how different types of variability can translate into different drug-resistant outcomes upon treatment with drug. We found that even a genetically and epigenetically clonal population harbors latent variability that can produce an entire ecosystem of different resistant cell types.

Date: Monday, May 23, 2022

Time: 16:15 h – 17:15h

Location: Online via Zoom

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