Deep Dive into Case Studies part I: From Systems Immunology to Novel Therapeutic Insights – E. de Rinaldis

- 1. Personalized Immunomonitoring Uncovers Molecular Networks that Stratify Lupus Patients https://www.ncbi.nlm.nih.gov/pubmed/27040498
- 2. Genetics of rheumatoid arthritis contributes to biology and drug discovery https://www.ncbi.nlm.nih.gov/pubmed/24390342

Spatial Biology Methods and Analytics for Immunology and Oncology - G. Gaglia

- 1. Tertiary lymphoid structures generate and propagate anti-tumor antibody-producing plasma cells in renal cell cancer. https://www.sciencedirect.com/science/article/pii/S1074761322000814
- Lymphocyte networks are dynamic cellular communities in the immunoregulatory landscape of lung adenocarcinoma https://www.sciencedirect.com/science/article/pii/S1535610823000880

Artificial Intelligence – A Primer for Immunologists – S. Khader

- 1. Efficient evolution of human antibodies from general protein language models https://pubmed.ncbi.nlm.nih.gov/37095349/
- 2. The role of machine learning in clinical research: transforming the future of evidence generation https://pubmed.ncbi.nlm.nih.gov/34399832/

Interactive Data Analysis Session - M. Fontes

The session use the results and data from

1. "TGFβ attenuates tumour response to PD-L1 blockade by contributing to exclusion of T cells" https://www.nature.com/articles/nature25501

We will also compare with results from

 "Tertiary lymphoid structures marker CXCL13 is associated with better survival for patients with advanced-stage bladder cancer treated with immunotherapy" https://www.sciencedirect.com/science/article/abs/pii/S0959804921000678 2. "Meta-analysis of tumor- and T cell-intrinsic mechanisms of sensitization to checkpoint inhibition" https://www.sciencedirect.com/science/article/pii/S0092867421000027

Reviews for Reference:

- 1. Applications of single-cell RNA sequencing in drug discovery and development https://www.nature.com/articles/s41573-023-00688-4
- 2. A guide to systems-level immunomics https://www.nature.com/articles/s41590-022-01309-9
- 3. Sepsis in the era of data-driven medicine: personalizing risks, diagnoses, treatments and prognoses https://pubmed.ncbi.nlm.nih.gov/31190075/