

## Whole Norway Immunology Journal Club

### List of papers already presented (and published in 2023 or 2024):

High-throughput, targeted MHC class I immunopeptidomics using a functional genetics screening platform, by Bruno et al, published in *Nature Biotechnology*, January 2023.

<https://www.nature.com/articles/s41587-022-01566-x>

Functional T cells are capable of supernumerary cell division and longevity, published in *Nature*, 2023

<https://www.nature.com/articles/s41586-022-05626-9>

Unique roles of co-receptor-bound LCK in helper and cytotoxic T cells, published in *Nature Immunology*, 2023

<https://www.nature.com/articles/s41590-022-01366-0>

Control of acute myeloid leukemia by a trifunctional NKp46-CD16a-NK cell engager targeting CD123, published in *Nature Biotechnology*, January 2023, <https://www.nature.com/articles/s41587-022-01626-2>

Reducing affinity as a strategy to boost immunomodulatory antibody agonism, published in *Nature*, February 2023. <https://www.nature.com/articles/s41586-022-05673-2>

Tissue CD14+CD8+ T cells reprogrammed by myeloid cells and modulated by LPS, published in *Nature* January 2023

<https://www.nature.com/articles/s41586-022-05645-6>

The X-linked epigenetic regulator UTX controls NK cell-intrinsic sex differences, published in *Nature Immunology*, March 2023. <https://www.nature.com/articles/s41590-023-01463-8>

Papers and patents are becoming less disruptive over time, published in *Nature*, January 2023.

<https://www.nature.com/articles/s41586-022-05543-x>

The transcription factor Mef2d regulates B:T synapse-dependent GC-TFH differentiation and IL-21-mediated humoral immunity, published in *Science Immunology*, March 2023.

<https://www.science.org/doi/10.1126/sciimmunol.adf2248>

The dietary sweetener sucralose is a negative modulator of T cell-mediated responses, published in *Nature*, March 2023. <https://www.nature.com/articles/s41586-023-05801-6>

Dectin-1 signaling on colonic  $\gamma\delta$  T cells promotes psychosocial stress responses, published in *Nature Immunology*, March 2023. <https://www.nature.com/articles/s41590-023-01447-8>

The NK cell receptor NKp46 recognizes ecto-calreticulin on ER-stressed cells, published in *Nature*, April 2023.

<https://www.nature.com/articles/s41586-023-05912-0>

A tissue injury sensing and repair pathway distinct from host pathogen defense, published in *Cell*, May 2023,

[https://www.cell.com/cell/pdf/S0092-8674\(23\)00328-8.pdf](https://www.cell.com/cell/pdf/S0092-8674(23)00328-8.pdf)

The gut microbiota promotes distal tissue regeneration via ROR $\gamma$ + regulatory T cell emissaries, published in

*Immunity*, April 2023, [https://www.cell.com/immunity/fulltext/S1074-7613\(23\)00045-6](https://www.cell.com/immunity/fulltext/S1074-7613(23)00045-6)

Spheromers reveal robust T cell responses to the Pfizer/BioNTech vaccine and attenuated peripheral CD8+ T cell responses post SARS-CoV-2 infection, published in *Immunity*, April 2023.

<https://doi.org/10.1016/j.immuni.2023.03.005>

Personalized RNA neoantigen vaccines stimulate T cells in pancreatic cancer, published in *Nature*, May 2023  
<https://www.nature.com/articles/s41586-023-06063-y>

B-1 plasma cells require non-cognate CD4 T cell help to generate a unique repertoire of natural IgM, published in the *Journal of Experimental Medicine*, February 2023  
<https://rupress.org/jem/article/220/4/e20220195/213884>

Inefficient exploitation of accessory receptors reduces the sensitivity of chimeric antigen receptors, published in *Proc Natl Acad Sci.*, January 2023  
<https://pubmed.ncbi.nlm.nih.gov/36598945/>

Molecular fate-mapping of serum antibody responses to repeat immunization, published in *Nature*, January 2023  
<https://www.nature.com/articles/s41586-023-05715-3>

Oral mucosal breaks trigger anti-citrullinated bacterial and human protein antibody responses in rheumatoid arthritis, published in *Science Translational Medicine*, February 2023  
<https://www.science.org/doi/10.1126/scitranslmed.abg8476>

CD5 expression by dendritic cells directs T cell immunity and sustains immunotherapy responses, published in *Science*, February 2023  
<https://www.science.org/doi/10.1126/science.abg2752>

Lymphatic vessels in bone support regeneration after injury, published in *Cell*, January 2023  
[https://www.cell.com/cell/fulltext/S0092-8674\(22\)01574-4](https://www.cell.com/cell/fulltext/S0092-8674(22)01574-4)

CD4+ T cell-induced inflammatory cell death controls immune-evasive tumours, published in *Nature*, June 2023  
<https://www.nature.com/articles/s41586-023-06199-x>

CTLA-4 blockade induces a microglia-Th1 cell partnership that stimulates microglia phagocytosis and anti-tumor function in glioblastoma, published in *Immunity*, September 2023  
<https://www.cell.com/action/showPdf?pii=S1074-7613%2823%2900328-X>

Single-cell profiling identifies a novel human polyclonal unconventional T cell lineage, published in *Journal of Experimental Medicine*, March 2023.  
<https://rupress.org/jem/article/220/6/e20220942/213952/Single-cell-profiling-identifies-a-novel-human>

Polymorphic KIR3DL3 expression modulates tissue-resident and innate-like T cells, published in *Science Immunology*, June 2023.  
<https://www.science.org/doi/10.1126/sciimmunol.ade5343>

B cell receptor signaling in germinal centers prolongs survival and primes B cells for selection, published in *Immunity*, March 2023  
<https://www.sciencedirect.com/science/article/pii/S1074761323000778?via%3Dihub>

Germline-encoded amino acid-binding motifs drive immunodominant public antibody responses, published in *Science*, April 2023  
<https://www.science.org/doi/10.1126/science.adc9498>

A genome-wide in vivo CRISPR screen identifies essential regulators of T cell migration to the CNS in a multiple sclerosis model, published in *Nature neuroscience*, September 2023  
<https://www.nature.com/articles/s41593-023-01432-2>

Apoptotic contraction drives target cell release by cytotoxic T cells, published in *Nature Immunology*, July 2023

<https://www.nature.com/articles/s41590-023-01572-4>

Laboratory mice with a wild microbiota generate strong allergic immune responses, published in *Science Immunology*, September 2023

<https://www.science.org/doi/10.1126/sciimmunol.adf7702>

Human anti-N1 monoclonal antibodies elicited by pandemic H1N1 virus infection broadly inhibit HxN1 viruses in vitro and in vivo", published in *Immunity*, July 2023

<https://doi.org/10.1016/j.immuni.2023.07.004>

Influenza vaccine format mediates distinct cellular and antibody responses in human immune organoids, published in *Immunity*, July 2023

<https://doi.org/10.1016/j.immuni.2023.06.019>

Ag7  $\beta$ 56/57 polymorphisms regulate non-cognate negative selection to CD4+ T cell orchestrators of type 1 diabetes, published in *Nature Immunology*, February 2023

<https://www.nature.com/articles/s41590-023-01441-0>

Site-specific development and progressive maturation of human tissue-resident memory T cells over infancy and childhood, published in *Immunity*, August 2023

<https://doi.org/10.1016/j.immuni.2023.06.008>

Clinical efficacy and biomarker analysis of dual PD-1/CTLA-4 blockade in recurrent/metastatic EBV-associated nasopharyngeal carcinoma, published in *Nature Communications*, May 2023

<https://www.nature.com/articles/s41467-023-38407-7>

CXCL9:SPP1 macrophage polarity identifies a network of cellular programs that control human cancers, published in *Science*, August 2023

<https://www.science.org/doi/10.1126/science.ade2292>

Macrophage and neutrophil heterogeneity at single-cell spatial resolution in human inflammatory bowel disease, published in *Nature Communications*, July 2023

<https://www.nature.com/articles/s41467-023-40156-6>

Accelerated waning of the humoral response to COVID-19 vaccines in obesity, published in *Nature Medicine*, May 2023

<https://www.nature.com/articles/s41591-023-02343-2>

Obesity dysregulates the pulmonary antiviral immune response, published in *Nature Communications*, October 2023

<https://www.nature.com/articles/s41467-023-42432-x>

Exocrine gland-resident memory CD8+ T cells use mechanosensing for tissue surveillance, published in *Science Immunology*, December 2023

<https://www.science.org/doi/10.1126/sciimmunol.add5724>

Dictionary of immune responses to cytokines at single-cell resolution, published in *Nature*, December 2023

<https://www.nature.com/articles/s41586-023-06816-9>

Genetic variation in the immunoglobulin heavy chain locus shapes the human antibody repertoire, published in *Nature Communications*, July 2023

<https://www.nature.com/articles/s41467-023-40070-x>

Efficient evolution of human antibodies from general protein language models, published in **Nature Biotechnology**, April 2023

<https://www.nature.com/articles/s41587-023-01763-2>

Age-associated B cells are heterogeneous and dynamic drivers of autoimmunity in mice, published in the **Journal of Experimental Medicine**, February 2023

<https://doi.org/10.1084/jem.20221346>

Emergence and fate of stem cell-like Tcf7+ CD8+ T cells during a primary immune response to viral infection, published in **Science Immunology**, November 2023

<https://www.science.org/doi/10.1126/sciimmunol.adh3113>

Xist ribonucleoproteins promote female sex-biased autoimmunity, published in **Cell**, February 2024

<https://doi.org/10.1016/j.cell.2023.12.037>

Safety, efficacy and determinants of response of allogeneic CD19-specific CAR-NK cells in CD19+ B cell tumors: a phase 1/2 trial, published in **Nature Medicine**, January 2024

<https://www.nature.com/articles/s41591-023-02785-8>

Autoreactive T cells target peripheral nerves in Guillain–Barré syndrome, published in **Nature**, January 2024

<https://www.nature.com/articles/s41586-023-06916-6>

The gene regulatory basis of bystander activation in CD8+ T cells, published in **Science Immunology**, February 2024

<https://www.science.org/doi/10.1126/sciimmunol.adf8776>

Early human lung immune cell development and its role in epithelial cell fate, published in **Science Immunology**, December 2023

<https://www.science.org/doi/10.1126/sciimmunol.adf9988>

scGPT: toward building a foundation model for single-cell multi-omics using generative AI, published in **Nature Methods**, February 2024

<https://www.nature.com/articles/s41592-024-02201-0#Sec2>

An immunogenetic basis for lung cancer risk, published in **Science**, February 2024

<https://www.science.org/doi/10.1126/science.adi3808>

CD4+ T cell immunity against cutaneous melanoma encompasses multifaceted MHC II-dependent responses, published in **Science Immunology**, January 2024

<https://www.science.org/doi/10.1126/sciimmunol.adi9517>

T cell help shapes B cell tolerance, published in **Science Immunology**, February 2024

<https://www.science.org/doi/10.1126/sciimmunol.adj7029>

SARS-CoV-2-infection- and vaccine-induced antibody responses are long lasting with an initial waning phase followed by a stabilization phase, published in **Immunity**, March 2024

<https://doi.org/10.1016/j.immuni.2024.01.017>

Mitochondrial metabolism sustains CD8+ T cell migration for an efficient infiltration into solid tumors, published in **Nature Communications**, March 2024

<https://www.nature.com/articles/s41467-024-46377-7#Sec35>

Immunometabolic Adaptation of CD19-Targeted CAR T Cells in the Central Nervous System Microenvironment of Patients Promotes Memory Development, published in Cancer Research, April 2024  
<https://doi.org/10.1158/0008-5472.CAN-23-2299>