



# NVVI Annual Meeting 2025

10 & 11 December 2025

NH Leeuwenhorst, Noordwijkerhout

More info: [www.nvvi-dsi.nl](http://www.nvvi-dsi.nl)

## Wednesday 10 December 2025

09:00 09:45 Registration & coffee

**Room:** Rotonde

09:45 09:55 Opening by Wilfred Germeraad

09:55 10:50 **Keynote lecture 'Immunological control of host physiology'**  
*Yasmine Belkaid (Insitut Pasteur, France)*

### 11:00 12:35 Parallelsessions 1 - 5

#### 11:00 12:35 Session 1: Tumor Immunology & Immune Therapy

**Room:** Rotonde

**Chairs:** Sandra van Vliet & Ferry Ossendorp

11:00 11:30 **CD4 T cell immunity in cancer**  
*Ferry Ossendorp (LUMC)*

11:30 11:45 **Lymph node stromal cells shape a tumour-supporting niche promoting B-cell lymphoma survival and migration**  
*Lotte de Winde (Amsterdam UMC)*

11:45 11:50 *Sponsor pitch*

11:50 12:05 **XCL1-XCR1 and CXCR3-mediated bidirectional chemokine crosstalk between cDC1 and cytotoxic CD8 T cells and NK cells in human melanoma**  
*Georgina Flórez Grau (Radboudumc)*

12:05 12:20 **Blocking Diacylglycerol Kinase Allows for Enhanced T-cell Priming in Tumor-Draining Lymph Nodes Bolstering the Efficacy of Anti-PD-1 Therapy and Peptide Vaccination**  
*Mike Eterman (Erasmus MC)*

12:20 12:35 **Dual targeting of CD155/ TIGIT and PD-L1/ PD-1 immune checkpoints potentiates NK cell-mediated cytotoxicity in medulloblastoma**  
*Matthijs Monnikhof (UMC Utrecht)*

#### 11:00 12:35 Session 2: Adaptive Immunology

**Room:** Boston 9

**Chairs:** Balthasar Heesters & Ramon Arens

11:00 11:15 **Transcription factors cooperate to imprint epigenetic priming for memory recall in human CD8+ T cells**  
*Mieke Metzemaekers (Erasmus MC)*

11:15 11:30 **Unraveling the role of antigen-specific and antigen-non-specific T-cells in atherosclerosis**  
*Eveline de Vlieger (Leiden University - LACDR)*

11:30 11:45 **A naturally occurring high-avidity CD4+CD8- human T cell recognizing a SARS-CoV-2 peptide presented in autologous HLA class I**  
*Cilia Pothast (LUMC)*

11:45 11:50 *Sponsor pitch*

11:50 12:05 **Deciphering translational control of T cell function with an in vitro exhausted human T cell model**  
*Žan Hozjan (Sanquin)*

12:05 12:20 **Beyond classic Temra: KIR Expression Reveals a Distinct CD8+ T-Cell Subset Associated with Age-Related Immune Dysregulation and Impaired Vaccine Responses**  
*Tamara Schenk (RIVM)*

12:20	12:35	<b>Refined single-cell profiling captures a novel precursor of brain-homing CD4+ cytotoxic T cells in people with multiple sclerosis</b> <i>Fabienne van Puijfelik (Erasmus MC)</i>
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### **11:00 12:35 Session 3: Infection & Inflammation**

<b>Room:</b>	<b>Boston 19</b>		
<b>Chairs:</b>	<i>Bart Everts &amp; Joost Wiersinga</i>		
11:00	11:30	<b>Sepsis immunity: From dysregulation to targeted therapies</b> <i>Joost Wiersinga (Amsterdam UMC, Loc. AMC)</i>	
11:30	11:45	<b>Lineage memory shapes viral resistance barriers in human skin</b> <i>Laura van Eindhoven (Eindhoven University of Technology)</i>	
11:45	11:50	<i>Sponsor pitch</i>	
11:50	12:05	<b>Imaging TNF expression in Rheumatoid Arthritis using a novel Affibody-Based PET/CT Tracer</b> <i>Eva Philippon (Amsterdam UMC)</i>	
12:05	12:20	<b>Colonization-primed iBALT formation enhances lung clearance but increases pathology during Mycoplasma pneumoniae re-infection</b> <i>Larissa Maciel Bomfim (Erasmus MC - Tissuegnostics)</i>	
12:20	12:35	<b>Potent C5 conversion prevents C9 polymerisation and subsequent MAC-dependent killing of Klebsiella pneumoniae</b> <i>Kulsum Dawoodbhoy (UMC Utrecht)</i>	

### **11:00 12:35 Session 4: Innate Immunity**

Room:		Cambridge 30
Chairs:		Jochem Bernink & Itziar Martinez Gonzalez
11:00	11:30	<b>Cross-tissue inflammation mediated by memory ILC2s</b> <i>Itziar Martinez Gonzalez (Karolinska Institutet, Sweden)</i>
11:30	11:45	<b>A double click-chemistry assay to track glutamine and fatty acid uptake at a single-cell level captures differences in nutrient uptake amongst different immune cell populations</b> <i>Martina Erbi (LUMC)</i>
11:45	11:50	<i>Sponsor pitch</i>
11:50	12:05	<b>Intracellular Biologicals Engage Innate Antiviral Mechanisms to Block HIV-1 Replication via Capsid Degradation</b> <i>Florence Stel (Amsterdam UMC)</i>
12:05	12:20	<b>Dissecting the Monocyte Landscape in Severe RSV Infection: Divergent Systemic and Airway Immune Responses in Infants</b> <i>Klasina Chappin (UMC Utrecht)</i>
12:20	12:35	<b>The Bacillus Calmette-Guérin Vaccine Drives Emergency Myelopoiesis in an Ex Vivo Model while Impairing Dendritic Cell Development</b> <i>Robbin Kramer (Radboudumc)</i>

<b>11:00</b>	<b>12:35</b>	<b>Session 5: Autoimmunity and Neuroimmunology</b>
<b>Room:</b>	<b>Cambridge 32</b>	
<b>Chairs:</b>	<i>Linda Slot &amp; Maartje Huijbers</i>	
11:00	11:30	<b>IgG4 and its role in health and disease?</b> <i>Maartje Huijbers (LUMC)</i>
11:30	11:45	<b>Complement inhibition by C3-siRNA treatment prevents AChR loss and reduces complement activation in the rat Passive Transfer Myasthenia Gravis (PTMG) model</b> <i>Marina Mane Damas (Maastricht University)</i>
11:45	11:50	<i>Sponsor pitch</i>
11:50	12:05	<b>Overcoming a limitation of multiple sclerosis treatment: gradually increased apoptotic and drug resistance of brain-infiltrating B cells</b> <i>Melanie Mueller (Erasmus MC)</i>
12:05	12:20	<b>Single-cell multi-modal analysis of CD8+ T lymphocytes in systemic sclerosis and Sjögren's disease reactive lymph nodes</b> <i>Anne van Essen (Radboudumc)</i>
12:20	12:35	<b>Dual dynamics of persistence and recruitment characterize the ACPA-expressing B cell response in rheumatoid arthritis</b> <i>Renee van de Wetering (LUMC)</i>
<b>Room:</b>	<b>Boston 9</b>	
12:35	13:15	General Assembly NVvI (lunch included)
<b>12:35</b>	<b>13:15</b>	<b>Lunch</b>
<b>Room:</b>	<b>Rotonde</b>	
	Introduction by Bart Everts	
13:15	14:10	<b>Keynote lecture 'Macrophage heterogeneity during health, disease and upon cure'</b> <i>Jo Van Ginderachter (VIB-UGent Center for Inflammation Research, Belgium)</i>
14:15	15:15	Poster viewing: Odd poster numbers
<b>15:00</b>	<b>15:30</b>	<b>Coffee/tea break</b>
<b>15:30</b>	<b>17:05</b>	<b>Parallelsessions 6 - 10</b>
<b>15:30</b>	<b>17:05</b>	<b>Session 6: Tumor Immunology / Immune Therapy</b>
<b>Room:</b>	<b>Rotonde</b>	
<b>Chairs:</b>	<i>Mirjam Heemskerk &amp; Sofia Ibanez Molero</i>	
15:30	15:45	<b>Ecosystems and cell states using single-cell spatial transcriptomics are associated with clinical response to therapeutic vaccination in patients with high-grade premalignant lesions</b> <i>Marij Welters (LUMC)</i>
15:45	16:00	<b>DNA damage induction and DNA damage response inhibition enhances innate immunity by cGAS/STING pathway activation in PDAC</b> <i>Paul Niemöller (Erasmus MC)</i>
16:00	16:15	<b>Immunoglobulin Constant Domains as Targets for T-Cell Receptor-Based Therapies of B-Cell</b> <i>Johannes Wellershof (LUMC)</i>
16:15	16:20	<i>Sponsor pitch</i>
16:20	16:35	<b>Proteomics of the neuroblastoma secretome reveals that extracellular vesicles inhibit T cell responses</b> <i>Judith Wienke (Prinses Máxima Centrum)</i>
16:35	16:50	<b>Changes in CD8 cell distributions upon immune therapy evaluated by anti-CD8α PET imaging</b> <i>Eva Peeters (Radboudumc)</i>
16:50	17:05	<b>HLA-DQ Chimeric HLA Antibody Receptor (CHAR) T cells target HLA-specific B cells to treat HLA sensitisation in solid organ transplantation</b> <i>Hannah Schenk (Erasmus MC - LUMC)</i>

15:30	17:05	Session 7: Adaptive Immunology
Room:	Boston 9	
Chairs:	Bart Everts & Lotte de Winde	
15:30	15:45	<b>The Human Thymus is a Niche for Specialized B Cell Differentiation</b> <i>Martijn Cordes (LUMC)</i>
15:45	16:00	<b>Multimodal single-cell analysis following SARS-CoV-2 breakthrough infection reveals distinct B cell populations</b> <i>Andreas Chrysostomou (AmsterdamUMC)</i>
16:00	16:15	<b>Age-Associated B Cells Drive Atherosclerosis Progression and Predict Coronary Events in Humans</b> <i>Jill de Mol (LACDR)</i>
16:15	16:20	<i>Sponsor pitch</i>
16:20	16:35	<b>Modeling early human B cell differentiation in a 3D in vitro system incorporating stromal and T cell interactions</b> <i>Laura Fernandez Blanco (Sanquin)</i>
16:35	16:50	<b>Cholesterol efflux pathways maintain T cell receptor surface expression</b> <i>Daisey Methorst (UMC Groningen)</i>
16:50	17:05	<b>PDCD4 controls the T helper 1/T follicular helper fate decision in CD4 T cells</b> <i>Mirna Reljic (LUMC)</i>

15:30	17:05	Session 8: Innate Immunity
Room:	Boston 19	
Chairs:	Coen Govers & Izabela Rodenhuis-Zybert	
15:30	15:45	<b>Exploring OM-85's Immune Mechanisms in Allergic Asthma</b> <i>Oscar van Hengel (LUMC)</i>
15:45	16:00	<b>Siglec-1 functions as a sensor inducing innate and adaptive immunity to HIV-1</b> <i>Bart Grijmans (Amsterdam UMC)</i>
16:00	16:15	<b>Mapping the dark proteome in macrophages: Could microproteins regulate immune function?</b> <i>Ana Pinheiro Lopes (Princess Máxima Center for Pediatric Oncology)</i>
16:15	16:20	<i>Sponsor pitch</i>
16:20	16:35	<b>Cytotoxic Lymphocytes Counteract Viral Type I Interferon Immune Evasion</b> <i>Michael Schakelaar (UMC Utrecht)</i>
16:35	16:50	<b>In Vitro Recapitulation of Anergic Lamina Propria Subepithelial Macrophages</b> <i>Donovan O'Brien (WUR)</i>
16:50	17:05	<b>How are the transmembrane proteins processed for antigen (cross)presentation in moDCs?</b> <i>Tongxiang Chen (University of Groningen)</i>

<b>15:30</b>	<b>17:05</b>	<b>Session 9: Vaccinology</b>
<b>Room:</b>	<b>Cambridge 30</b>	
<b>Chairs:</b>	<i>Jelle de Wit &amp; Matthew McCall</i>	
15:30	16:00	<b>Better late than never? The (still) long road to a malaria vaccine for Africa</b> <i>Matthew McCall (Radboudumc)</i>
16:00	16:15	<b>Integrated single-cell omics reveal quantitative, qualitative, and functional heterogeneity in CD4 T cell responses to primary mRNA-1273 COVID-19 vaccination in older adults</b> <i>Jolanda Brummelman (RIVM)</i>
16:15	16:20	<i>Sponsor pitch</i>
16:20	16:35	<b>Characterizing existing immune responses against a novel HIV immunogen in people with acute HIV to inform vaccination studies</b> <i>Eva Schumacher (Amsterdam UMC)</i>
16:35	16:50	<b>Adenoviral vector oropharyngeal spray immunization elicits mucosal immunity and protects against heterologous SARS-CoV-2 infection</b> <i>Gerrit Koopman (BPRC)</i>
16:50	17:05	<b>Interindividual variation in infection- and vaccine-induced mumps-specific humoral and cellular responses exposes subgroups at risk</b> <i>Rene Raeven (RIVM)</i>

<b>15:30</b>	<b>17:00</b>	<b>Session 10: Clinical &amp; Medical Immunology</b>
<b>Room:</b>	<b>Cambridge 32</b>	
<b>Chairs:</b>	<i>Bram Rutgers &amp; Sebastiaan Heidt</i>	
15:30	16:00	<b>Towards epitope matching in kidney transplantation</b> <i>Sebastiaan Heidt (Erasmus MC)</i>
16:00	16:15	<b>Artificial B-cell organoids enable in vitro model modelling of B lymphopoiesis for gene therapy development</b> <i>Merijn Braams (LUMC)</i>
16:15	16:30	<b>A novel biomarker for inflammation: measuring reactive oxygen species in immune cells using nanoscale MRI</b> <i>Britt Coenen (University of Groningen)</i>
16:30	16:45	<b>Dominant Extrafollicular B Cell Responses in High-Risk Patients Following SARSCoV-2 Vaccination</b> <i>Rebeca Gutiérrez Cozar (Sanquin)</i>
16:45	17:00	<b>Immunogenicity of human iPSC-derived chondrocytes: evidence for allogeneic T cell activation in vitro</b> <i>Emma Bristow (LUMC)</i>

17:05	17:45	Friendship Drinks at the exhibition
17:45	19:20	Dinner at North & South beach restaurant

<b>Room:</b>	<b>Rotonde</b>	
19:40	20:00	<b>Van Bekkum Thesis Award Ceremony</b> ( <i>Chair: Linde Meyaard</i> ) <b>Modelling stromal-competent human lymph nodes in vitro</b> <i>Andrew Morrison (Amsterdam UMC)</i>
20:00	21:00	<b>Van Loghem Lecture</b> ( <i>Chair: Annemiek van Spriel</i> ) <b>Cancer Immunotherapy: From tolerance to triumph</b> <i>John Haanen (AvL-NKI, Amsterdam and LUMC, Leiden)</i>
21:00	01:00	Congress Party with the band 'Rock-it Science' at Room Sorbonne 2



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## Thursday 11 December 2025

08:15 09:00 Registration & coffee

**Room:** Rotonde

**Session:** Bright Sparks session

**Chairs:** Marianne Boes & Melissa van Gool

09:00 09:15 **A novel approach to capture immune cell clusters from clinical biopsies reveals a targetable tumor-reactive T cell-inflammatory macrophage crosstalk**  
*Sofia Ibanez Molero (Amsterdam UMC)*

09:15 09:30 **Pyoderma gangrenosum caused by the molecular uncoupling of OTULIN catalytic activity and LUBAC binding**  
*Barathram Swaminathan (UMC Utrecht)*

09:30 09:45 **Tailpiece-mediated dimerization: a cornerstone of IgA biology**  
*Anouk van Mourik (LUMC)*

09:45 10:00 **Behind the scenes of T cell activation: mapping the RNA-binding proteome**  
*Maria Valeria Lattanzio (Sanquin)*

10:00 10:30 Coffee/tea break

**Room:** Rotonde

Introduction by Balthasar Heesters

10:30 11:25 **Keynote lecture 'Transient disruption of T cell help impairs germinal center dynamics and memory responses'**  
*Michelle Linterman (Babraham Institute, United Kingdom)*

**Room:** Atrium

11:25 12:25 Poster Viewing: Even numbers

**Room:** Boston 9

12:00 12:45 yNVVI Event – AI in immunological research (lunch included)

12:00 12:45 Lunch

**12:45 14:15 Parallelsessions 11 - 15****12:45 14:15 Session 11: Tumor Immunology & Immune Therapy****Room:** Rotonde**Chairs:** Sandra van Vliet & Georgina Florez Grau

12:45 13:00 **Proteomics of human cancer-associated T cells identifies regulators of effector function**  
*Kaspar Bresser (Sanquin / Amsterdam UMC)*

13:00 13:15 **Identification and characterization of tumor-reactive CD8 and CD4 T cells in hepatocellular carcinoma**  
*Luc Magré (Erasmus MC)*

13:15 13:30 **Neoantigen-specific T-cell receptors targeting recurrent mutations in acute myeloid leukemia**  
*Nadine Struckman (LUMC)*

13:30 13:45 **Beyond tumor cells: B7-H3 CAR-T cells target macrophages and remodel the tumor microenvironment in pediatric brain tumors**  
*Tiago Carneiro (Princess Máxima Center for Pediatric Oncology)*

13:45 14:00 **The scavenger receptor MARCO is a novel ligand for the immune inhibitory receptor LAIR-1 and regulates LAIR-1 function in cis**  
*Saskia Vijver (UMC Utrecht)*

14:00 14:15 **T-Cell receptors for new hematopoietic-restricted minor histocompatibility antigens to target acute myeloid leukemia after allogeneic stem cell transplantation**  
*Georgia Koutsoumpli (LUMC)*

**12:45 14:15 Session 12: Adaptive Immunology****Room:** Boston 9**Chairs:** Ralph Stadhouders & Femke van Wijk

12:45 13:15 **The persistence and plasticity of (regulatory) T cells**  
*Femke van Wijk (UMC Utrecht)*

13:15 13:30 **Deciphering antibody repertoire evolution using protein language models and B cell lineage inference with AntibodyForests**  
*Daphne van Ginneken (UMC Utrecht)*

13:30 13:45 **IL-18–Driven Antigen-Independent Activation of Memory CD8<sup>+</sup> T Cells**  
*Shengchun Cai (LUMC)*

13:45 14:00 **Antigen-dependent regulation of the early stages of human T cell-dependent B cell responses**  
*Charlotte Menage (Sanquin)*

14:00 14:15 **Systemic sclerosis patients exhibit elevated serum baf levels and a b cell subset-wide downregulation of baf receptor expression**  
*Abdullellah Alzahrani (LUMC)*

12:45	14:15	Session 13: Infection & Inflammation
<b>Room:</b>	<b>Boston 19</b>	
<b>Chairs:</b>	<i>Marianne Boes &amp; Melissa van Gool</i>	
12:45	13:00	<b>Epigenetic control of IFN-I response initiation in plasmacytoid dendritic cells</b> <i>Laura Roosenboom (Eindhoven University of Technology)</i>
13:00	13:15	<b>Reduced mitochondrial markers in various immune cell types in lean South Asians compared to Europids: implications for their high cardiovascular disease risk</b> <i>Nico Hahn (Amsterdam UMC)</i>
13:15	13:30	<b>Uncovering the X Factor: ZFX as an X chromosome escapee linking sex differences in inflammation and immune exhaustion</b> <i>Nila Servaas (Sanquin)</i>
13:30	13:45	<b>Inflammasome Activation Triggers an IL-18-Driven IFN<math>\gamma</math> Response in Mevalonate Kinase Deficiency</b> <i>Marianne Boes (UMC Utrecht)</i>
13:45	14:00	<b>Using B cells reactive to EBNA1 fine-specificities to elucidate the aberrant anti-EBV antibody response in people with multiple sclerosis</b> <i>Sanne Reijm (Erasmus MC)</i>
14:00	14:15	<b>Phage-display immunoprecipitation sequencing reveals distinct antibody repertoire patterns across a rural-urban gradient</b> <i>Ross Laidlaw (LUMC)</i>

12:45	14:15	Session 14: Mucosal immunity & Allergy
<b>Room:</b>	<b>Cambridge 30</b>	
<b>Chairs:</b>	<i>Sharon Veenbergen &amp; Lilly Verhagen</i>	
12:45	13:15	<b>At the frontline: The overlooked mucosal immune system in childhood respiratory infections</b> <i>Lilly Verhagen (Radboudumc)</i>
13:15	13:30	<b>Distinctive pathogenic memory T cell and neutrophil responses at diagnosis identify Crohn's disease</b> <i>Beatriz Calado (Erasmus MC)</i>
13:30	13:45	<b>Reduced epithelial TGF-beta secretion inhibits the formation of nasal tissue-resident memory T cell immunity in older adults</b> <i>Wesley Huisman (LUMC)</i>
13:45	14:00	<b>IL-18 as an enhancer of the pathogenic Thm1/Thm17 phenotype in pediatric inflammatory bowel disease</b> <i>Meike Grillmaier (Erasmus MC)</i>
14:00	14:15	<b>Niche-specific immune signatures across the healthy upper respiratory tract mucosa associate with microbial profiles</b> <i>Nafsika Kardomatea (RIVM)</i>



<b>12:45</b>	<b>14:15</b>	<b>Session 15: Autoimmunity &amp; Neuroimmunology</b>
<b>Room:</b>		<b>Cambridge 32</b>
<b>Chairs:</b>		<i>Leendert Trouw &amp; Jolien Suurmond</i>
12:45	13:00	<b>Anti-citrullinated protein antibodies show an expansion of antibodies with multiple glycans in their variable domain</b> <i>Eva Maria Stork (LUMC)</i>
13:00	13:15	<b>Lymph node neutrophils in inflammatory arthritis: the missing link between innate and adaptive autoimmunity?</b> <i>Nia Hudson (Amsterdam UMC)</i>
13:15	13:30	<b>Age-associated B-cells are highly activated and differentiate into antibody-secreting cells in atherosclerosis</b> <i>Anna Witteveen (LACDR)</i>
13:30	13:45	<b>Natural killer cells display an activated phenotype in multiple sclerosis with changes in inhibitory profile across disease duration</b> <i>Chaja van Ansenwoude (Amsterdam UMC loc. Vumc)</i>
13:45	14:00	<b>Common <math>\gamma</math>-chain cytokines induce a precursor-like and epigenomically primed KIT<sup>+</sup> ILC2 state associated with severe asthma and autoimmunity</b> <i>Simone Olsthoorn (Erasmus MC)</i>
14:00	14:15	<b>Developing two distinct organoid-based models to study failing maternal-fetal tolerance in systemic lupus erythematosus</b> <i>Wendy Dankers (Amsterdam UMC)</i>
14:15	14:30	Coffee/tea break

<b>Room:</b>	<b>Rotonde</b>
	Introduction by Marianne Boes
14:30	15:25 <b>Keynote lecture 'What the malaria parasite is teaching us about the immunological synapse'</b> <i>Mike Dustin (Kennedy Institute of Rheumatology, UK)</i>
15:25	15:45 Awards ceremony & Closing by Wilfred Germeraad