



26th Meeting on T Cells Subsets and Functions



Philipps University
Marburg

27th June & 28th June 2024



Conference Venue:

Aula of the Old University, Lahntor 3, 35037 Marburg

Organizers:

**Prof. Dr. Magdalena Huber / Philipps University Marburg
Prof. Dr. Tobias Bopp / Joh. Gutenberg-University Mainz**

Thursday, 27th June 2024

12:00 *“Welcome Address” by Magdalena Huber & Tobias Bopp*

TREGS REGULATION AND FUNCTION

Chair: Prof. Dr. Ingo Schmitz, Ruhr-University Bochum, Molecular Immunology

- 12:15 Deciphering the metabolic control of Treg function
Janika Härm, Luxemburg Institute of Health, Experimental and Molecular Immunology
- 12:30 Regulation of Treg cell subsets and function by the atypical I κ B protein Bcl-3
Mary Christina Cynthia Rohini Raj, University Medicine Mainz, Institute for Molecular Medicine
- 12:45 CREB regulates Foxp3⁺ST-2⁺ T_{regs} with enhanced IL-10 production
Sudheendra Hebbar Subramanyam, RWTH Aachen University Hospital, Centre for Rare Diseases
- 13:00 T cell receptor dependent activation of Lgp130⁺ T cells causes unrestricted Th17 cell formation and severe lung inflammation
Emily Huth, University Medical Center Hamburg-Eppendorf, Department for Immunology
- 13:15 Interleukin-6 and Treg cells: friends or foes?
David Uhlfelder, Johannes Gutenberg University Mainz, Institute for Molecular Medicine
- 13:30 Generation of human autoreactive Tregs by TCR replacement
Nora Kohlstedt, University Hospital Schleswig-Holstein, Institute of Immunology

13:45–14:15 *Break– please visit the stands of our sponsoring companies! VOTE for the NEW Chair of the AK T Zellen (Prof. Dr. Dr. Bertram Bengsch and Prof Dr. Dietmar Zehn)*

REGULATION OF T CELL DEVELOPMENT, ACTIVATION AND MEMORY FORMATION

Chair: Prof. Dr. Andreas Krueger, J-L University Gießen, Molecular Immunology

- 14:15 Comprehensive T Cell profiling by mass cytometry reveals exhaustion phenotypes and altered cytokine production of mucosal CD8 T cells in active UC
Lena S. Mayer, University Medical Center Freiburg, Hepatology, Endocrinology, and Infectious Disease
- 14:30 MicroRNA miR-181 controls development of conventional $\alpha\beta$ T cells
Sean Seeger, Justus-Liebig-University Giessen, Molecular Immunology
- 14:45 Controlling DNA-deletion sizes and chromosomal aberrations in CRISPR-edited human T cells by the strength of TCR stimulation and pifithrin- α
Kathrin Schumann, Technical University of Munich, Immunology and Hygiene
- 15:00 A distinct phase of CD8 T cell priming selects high affinity clones and scales effector cell formation.
Katarzyna Jobin, Julius-Maximilians-University Würzburg, Institute of Systems Immunology
- 15:15 SLAMF7 (CD319) is a key regulator of CD4 T-Cell differentiation
Irina Han, Otto-von-Guericke-University Hospital Magdeburg, Experimental Pediatrics and Neonatology
- 15:30 The role of PRMT1 in T cell-mediated immune responses
Inga Shcheglova, Philipps-University Marburg, Institute for Molecular Biology and Tumor Research
- 15:45 JIA T cells dispose mechanism to keep ferroptosis in check
C.T. Neullens, RWTH Aachen University, Faculty of Medicine
- 16:00 Diversity of circulating and bone marrow-resident memory T cells
Emilia Schneider Revueltas, German Rheumatism Research Centre Berlin (DRFZ)
- 16:15 T cells in lockdown - identification, characterization and regulation of human tissue resident T cells
Christina Zielinski, Leibniz Institute for Natural Product Research and Infection Biology

16:30 – 17:00 Break – please visit the stands of our sponsoring companies!

TUMOR IMMUNE RESPONSE

Chair: Prof. Dr. Karin Loser, University of Oldenburg, Immunology

- 17:00 *In vitro* induction of exhaustion in human CD8+ T cells via mitochondrial inhibition and ectopic TOX expression
Bettina Bernard, Technical University of Munich, Inst. for Medical Microbiology, Immunology and Hygiene
- 17:15 GDF-15 – a cytokine and its immunomodulatory potential
Beatrice Haack, University Hospital Würzburg, Department of Gynecology and Obstetrics
- 17:30 Cytotoxic CD4 T cells for direct targeting of melanoma cells
Alicia Brüggemann, University Hospital Essen, Clinic for Dermatology, Molecular Tumor Immunology
- 17:45 Commensal Metabolites inspire metabolic-epigenetic reprogramming in CAR T cells engineering
Maik Luu, Würzburg University Clinic, Medical Clinic and Polyclinic II
- 18:00 T cells in testicular germ cell tumors: New evidence of Treg and Tfh as functional players
Daniela Fietz, Justus-Liebig-University Giessen, Dep. of Veterinary Anatomy, Histology and Embryology

18:15 – 18:30 Break – please visit the stands of our sponsoring companies!

18:30 KEYNOTE TALK: PROF. DAVID MASOPUST, UNIVERSITY OF MINNESOTA

“MEMORY CD8 T CELLS: QUANTITY, QUALITY AND LOCATION”

20:00 Conference Dinner – Landgrafenschloss, Fürstensaal

Friday, 28th June 2024

TFH, TH17 CELLS AND AUTOIMMUNITY OF THE CENTRAL NERVOUS SYSTEM

Chair: Prof. Dr. Monika Brunner-Weinzierl, Otto-von-Guericke-University Hospital Magdeburg, Experimental Paediatrics and Neonatology

- 08:30 Oligoclonal CD4⁺CXCR5⁺ T cells with a cytotoxic phenotype appear in tonsils and blood
Friederike Berberich-Siebelt, Julius-Maximilians-University Würzburg, Institute of Pathology
- 08:45 TGFβ specifies Tfh versus Th17 cell fates of murine CD4⁺ T cells through c-Maf
Luisa Bach, University Hospital Bonn, Medical Clinic III
- 09:00 Th17 cells requires the DNA repair protein XPC to control oxidative DNA damage
Jefferson Antônio Leite, Johannes Gutenberg University Mainz, Institute for Molecular Medicine
- 09:15 CD96 – a checkpoint inhibitor of effector T-cell responses during autoimmune neuroinflammation
Sylvia Heink, Klinikum rechts der Isar, Technical University of Munich, Experimental Neuroimmunology
- 09:30 Novel K-Opioid Receptor Agonists for the Treatment of Neuroinflammation
Katharina Hoffmann, University of Oldenburg, Institute of Immunology
- 09:45 Uncovering the brain-homing nature of T cells at single-cell resolution in people with multiple sclerosis
Jasper Rip, Erasmus MC, MS Center ErasMS, Department of Immunology
- 10:00 Deciphering the altered T-cell response against EBV in MS through disease-associated HLA alleles
Sanne Reijm, Erasmus MC, MS Center ErasMS, Department of Immunology
- 10:15 A tissue-specific molecular program governs the formation and function of brain-resident CD8⁺ T cells
Tarek Elmzahi, University Hospital Bonn, DZNE

10:30 – 11:00 Break – please visit the stands of our sponsoring companies!

NON-CONVENTIONAL T CELLS

Chair: Prof. Dr. Immo Prinz, MHH Hannover, Institute of Immunology

- 11:00 The role of γδT cells in autoantibody-mediated blistering diseases of the skin
Gabriela Farias Gubert, University of Würzburg, Institute for Systems Immunology
- 11:15 γδ T cell profiling in a cohort of preterm infants reveals elevated frequencies of CD83⁺ γδ T cells in sepsis
Sarina Ravens, Hannover Medical School, Institute of Immunology
- 11.30 Ligand identification for an invariant Vδ1⁺ γδ T cell receptor in the context of CMV infection
Rixa-M. Köhn, University Medical Center Hamburg-Eppendorf
- 11:45 Deciphering the tumor-promoting activity of NKG2D/NKG2D-ligand system in ovarian cancer
Celina Meena, Philipps-University Marburg, Institute for Tumor Immunology
- 12:00 Spectral cytometry reveals reduced MAIT17 frequencies in PDAC patients compared to HD
Teresa Ruckebrod, Philipps-University Marburg, Institute of Systems Immunology
- 12:15 Canine peripheral non-conventional TCRαβ⁺ CD4⁻CD8α⁻ double-negative T cells show T helper 2-like and regulatory properties
Maria Eschke, Leipzig University, Center for Biotechnology and Biomedicine, Institute of Immunology
- 12:30 Rixa-M. Köhn: *Introduction for Young Immunologists (YI) group to support early-career scientists*

12:35 – 12:45 Short break

ALLERGY, ATOPY AND INFECTION

Chair: Prof. Dr. med. Georg Gasteiger, Würzburg University Clinic, Institute for Systems Immunology II

- 12:45 Tcf7^{hi} stem-like cells give rise to Th2 effector cells in allergic asthma
Emilia Vendelova, Max Planck Research Group at the Julius-Maximilians-Universität Würzburg, Institute of Systems Immunology
- 13:00 Phenotypically and functionally distinct Th2 cell subpopulations in patients with birch pollen allergy
Jasper Einfeldt, Philipps-University Marburg, Department of Dermatology and Allergology
- 13:15 Microbiota-specific T cell responses in inflammatory skin disease
Laura Rathjens, Kiel University, Institute of Immunology
- 13:30 Comparison of Host Adaptive Immunological Responses to SARS-CoV-2 Infection and Vaccination in Kenyan and German Populations
Tabitha Kavuli Itotia, Paul-Ehrlich-Institute, Federal Institute for Vaccines and Biomedicines
- 13:45 A small recap of Lassa fever T cell research
David M. Wozniak, Bernhard Nocht Institute for Tropical Medicine, Department of Virology
- 14:00 **AWARD FOR BEST TALK!**

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