Program of the SFB/CRC-TR 128 International Symposium

Multiple sclerosis and related disorders in 2024: Past, present, and future

28 – 30 April 2024, Münster, Germany

For SFB/CRC-TR 128 "Initiating/Effector versus Regulatory Mechanisms in Multiple Sclerosis - Progress towards Tackling the Disease"

Monday, 29 April (venue: Castle of the Münster University, Schlossplatz 2, 48149 Münster, Aula)

Talks: 20 mins (15+5); Young Investigator Talks: 10 mins (7+3)

08:00-08:30 Welcome Coffee and Snacks

(08:30-10:10)	•	arned, what is to be expected?
08:30-08:50	Frauke Zipp + Heinz Wiendl	Looking back 10 years of evolution in the MS field:
		Where do we need to go?
08:50-09:10	Jonathan Kipnis	New insights into brain-immune interactions
09:10-09:30	Roland Liblau	Tissue-resident memory T cells and chronicity of
		CNS inflammatory diseases
09:30-09:50	Britta Engelhardt	Back to the future: The role of antigen-
		presentation at the brain barriers to MS
		pathogenesis
09:50-10:10	Burkhard Becher	Neuroprotection through inflammatory cytokines
10:10-10:30	Coffee Break	

Session 2: Understanding progression and repair: myelin in the focus

(10:30-11:50)

Chair: Lydia Sorokin

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10:30-10:50	Martin Kerschensteiner	Can surviving oligodendrocytes contribute to remyelination?
10:50-11:10	Tanja Kuhlmann	Consequences of inflammation for
		oligodendrocytes in MS lesions
11:10-11:30	Peter Calabresi	Complement component C3 defines disease
		associated glial subtypes mediating
		neuroinflammation and retinal pathology
11:30-11:50	Manuel Friese	Neuronal inflammatory stress response in
		multiple sclerosis

Poster session and lunch (Poster in the entrance hall, ground floor; lunch in the tent forecourt castle)

(11:50-13:20)

Session 3: Imaging in the focus

(13:20-14:20)

Chair: Albrecht Stroh, Sergiu Groppa	
13:20-13:40 Vinzenz Fleischer	Structural Brain Networks in Multiple Sclerosis
13:40-14:00 Benedetta Bodini	Positron Emission Tomography in Multiple
	Sclerosis: Past, Present, and Future
14:00-14:20 Alexander Flügel	Imaging T-cell-mediated autoimmunity
14:20-14:40 Coffee break	

Session 4: Young investigators' talks (10 mins (7+3))

(14:40-15:40) Chair: Ralf Gold

14:40-15:40 Beatrice Wasser: Interference with AMPA receptor signaling ameliorates

neuroinflammation via regulation of the immune compartment

Lisa Richter: Role of IL-6 in shaping local immune milieus in the CNS Louisa Müller-Miny: How can CSF flow cytometry help diagnose and understand neuroimmunology - usecase examples and perspectives

Timo Uphaus: BBB function and neuronal excitability in

neuroinflammation and ischemic stroke

Clara de la Rosa del Val: Essential cytokines driving macrophage

phenotypes in neuroinflammation

Andreas Schulte Mecklenbeck: Immune profiling matters - discrete cellular immune fingerprints indicate distinct disease trajectories in early MS

Session 5: Novel directions and technologies

(15:40-17:20)

Chair: Martin Kerschensteiner				
15:40-16:00	Alexandre Prat	Single cell RNA sequencing of human MS and ALS		
		brain endothelial cell		
16:00-16:20	Tobias Bopp	Metabolic Communication in the development		
		and manifestation of autoimmunity		
16:20-16:40	Gerd Meyer zu Hörste	Studying brain borders in neuroinflammation		
16:40-17:00	Jen Gommerman	B cell depletion therapies in MS – Exploring		
		mechanisms of action		
17:00-17:20	Sergio Baranzini	Integrating "omics" with AI for precision medicine		

08:00-08:30 Welcome Coffee and Snacks (in the tent forecourt castle)

Session 6: Is there still a role for T cell immunology or should we prioritize B cells in understanding MS?

(08:30-09:50) Chair: Sven Meuth

08:30-08:50 Jan Lünemann Functional signatures of encephalitogenic antibodies in CNS autoimmune disease 08:50-09:10 Fabienne Brilot Biomarkers of a relapsing course in MOG

antibody –associated disease (MOGAD)
09:10-09:30 Daniela Latorre Autoreactive T cell immunity in human

neurological disorders: novel insights from

Guillain Barré Syndrome

09:30-09:50 Stefan Bittner Balancing glutamate signaling in inflammatory

neuronal injury

9:50-10:20 Coffee Break

Session 7: Learning pathogenesis from therapeutic intervention (10:20-12:00)

Chair: Aiden Haghikia

10:20-10:40	Thomas Korn	A fresh look at B cells in autoimmunity
10:40-11:00	Ari Waisman	Inflammatory mediators affecting blood brain
11:00-11:20	Luisa Klotz	barrier function in autoimmunity Cellular immune fingerprints and their
		potential use in the evaluation of clinical prognosis and treatment decisions - fact or future?
11:20-11:40	Naoto Kawakami	Molecular mechanisms of autoreactive T cell
		infiltration to the CNS
11:40-12:00	Nicholas Schwab	What next-generation sequencing of treatment cohorts can teach us about pathology