

## WEDNESDAY 9 APRIL 2025

12.00-13.00   Arrival     13.00-13.15   Welcome and introduction (Philipp Henneke & Markus Sperandio)     13.15-15.15   Session 1: Immunity at the materno-fetal interface (Chairs: Philipp Henneke & Markus Sperandio)     Petra Arck   Modulation of early life immunity by vertical transfer of maternal immune markers during pregnancy     Nardhy Gomez-Lopz   In utero sterile inflammation: How it shapes the offspring's immune system and prevention strategies     Roland Immler   Preimplantation factor (PIF) is an endogenous inhibitor of potassium channel KV1.3 regulating neutrophil function in vivo during pregnancy     Melanie Conrad   Antibiotic use during pregnancy influences placental morphogenesis and offspring immune system development     Koichiro Suzuki   Maternal gut microbiota induces γδT cells at the maternal-fetal interface to prevent pathogenassociated intrapartum complications     15.15-15.40   Ceffee break     Elisa Gomez Perdiguero   Title TBC     Claudia Waskow   The role of embryonic macrophages in the formation of a bone marrow niche key for the establishment of a hematopoletic stem cell pool     Eran Elinav   Neonatal monocytes and macrophages dijplay a diverse metabolic phenotype     Holstic genetic barcoding reveals a lineage tree of tissue macrophage development     17.50-18.15   Break			
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18.15-21.15 <b>Poster evening</b> with finger food	17.50-18.15	reak	
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## THURSDAY 10 APRIL 2025

8.45-10.45 Se	ssion 3: Development of macrophages and DC (Chairs: Katrin Kierdorf & Michele Proietti)
Guy Boeckxstaens	How resident macrophages shape and maintain the enteric nervous system
Steffen Jung	Monocytes and Macrophages – revisited
Barbara Schraml	RORyt-expressing dendritic cells are functionally versatile and evolutionarily conserved antigen presenting cells
Marco Prinz	Title TBC
Aaron Silva Sanche	Inhibition of TNFR2 signaling improves neonatal immune responses to vaccination and infection by limiting regulatory maturation of lung XCR1+ dendritic cells

10.45-11.10 Coffee break

## 11.10-13.10 Session 4: Maternal cues in early immune development (Chairs: Zsolt Ruzsics & Julia Kolter)

Galit Alter	Title TBC
Lindsay Hall	Pregnancy and early life microbiota and host interactions
Christian Schulz	Differential developmental paths and functions of cardiovascular macrophages (?)
Mikael Niku	Maternal microbial metabolites and extracellular vesicles in the fetal development of the intestinal
	immune system
Nicole Baumgarth	In utero infection modulates neonatal tissue-resident acetyl choline-producing B cells critical for
	regulating macrophage responses to influenza infection
13.10-14.15 Lunch	, Podium discussion with Editors (Chairs: Sarah Kim-Hellmuth & Ramin Shakiba) & Posters

14.15-16.15	Session 5: Prenatal immune development (Chairs: Sebastian Preissl & Thomas Böhm)
Muzlifah Haniffa Florent Ginhoux Yuval Rinkevich Katrin Kierdorf	The human prenatal immune system Interplay between the human fetal immune system and microbes Fibroblast-immune interactions guide skin development and healing response Early microglia progenitors colonize the embryonic CNS via integrin-mediated migration from the pial surface
Naomi McGovern	n Title TBC
16.15-17.15	Coffee break and Posters
17.15-19.15	Session 6: Early life intestinal immunity (Chairs: Natalia Torow & Kathy McCoy)
Dave Hackam	Early life risk factors in the pathogenesis of necrotizing enterocolitis, and the discovery of novel therapies (CIBSS sponsored talk)
Christina Stehle	Regulation of ILC differentiation and maintenance by the intestinal epithelium
Elise Saager	Naive T cell development in the gut
Chloe H. Lee	Spatio-temporal regulation of intestinal development
Ignacio Gonzalez	Perez A systemic wave of neonatal eosinophils promotes tissue homeostasis and commensalism
20.30 onwards	Speakers' Dinner (invitation only - invited speakers + PILOT PIs)

FRIDAY 11 APRIL 2025			
8.45-10.45	Session	7: Development of adaptive immunity (Chairs: Claudia Nussbaum & Sagar)	
Thomas Boehm Deena Gibbons Natalia Torow Marta Rizzi Elena Boldrin		Evolutionary trajectory of vertebrate immunity Unique features of adaptive immune cells in human neonates Long-term induction of hepatic T cell homeostasis during an early neonatal time window A single-cell multiomics map of prenatal and adult human B-lymphopoiesis LIN28B constrains IgL receptor editing to accelerate B cell maturation in early life	
10.45-11.10	Coffee b	preak	
11:10-13.10	Session	8: Development of immunity at interfaces (Chairs: Sebastian Baasch & Dunja Bruder)	
Melanie Greter Christoph Thais Anne Hilgendor Elisabeth De Lee Jochen Hühn	s ff	Title TBC Title TBC Interleukin 7 signaling as a critical player in lung vascular disease connecting immune response and endothelial cell pathology Early life RSV infection as a preventable risk factor for asthma Title TBC	
13.10-14.10	Lunch &	Posters	
14.10-16.10	Session	9: Development and adaptation of myeloid cells (Chairs: Claudia Waskow & Melanie Börries)	
Paul Kubes Dorothee Viema Christoph Scheie Maria Ovezik Julia Kolter		A key role for Kupffer cells in early life intravascular infections Understanding adaptation processes in monocytes after birth to promote precision medicine Tracing the development of circadian rhythms in the immune system Contribution of pancreatic macrophages to neonatal islet maturation and long-term glucose homeostasis TGFb drives macrophage development in the skin	
16.10-16.55	Coffee b	preak and Posters	
16.55-18.55		10: Perinatal immune adaptation (Chairs: Gabriel Nunez & Konstantin Stark)	
Chiara Romagna Debby Bogaert Philipp Henneke Markus Sperand Hanno Steen	2	Dynamics and mechanisms of innate clonality Host-microbiome interaction in the respiratory tract in early life Development of barrier immunity against naturally colonizing streptococci How maternal neutrophils facilitate Listeria infection of the placenta and fetus Every Hour Counts: Mapping Neonatal Blood Plasma Proteome Changes during the First 2 Days of Life at Hourly Resolution	
20.00 onwards	20.00 onwards Social Evening & Prize Ceremony (Wodan Halle)		

SATURDAY 12 APRIL 2025			
8.45-10.45	Session 11	: Development of microbiome and metabolism (Chairs: Mathias Hornef & Carsten Marr)	
Christoph Härte	I	The role of probiotics in the microbial cloud of preterm babies	
Petter Brodin		Immune-microbe interactions during the first weeks of life in humans	
Mathias Hornef		The antimicrobial host response to infection in the neonatal small intestine	
Stephanie Gana	-Vonarburg	Microbiota during early life windows orchestrates intestinal maturation and barrier formation in the neonate	
Rasmus Kaae De	hli	Early-life bifidobacterial metabolite reduces IgE production and allergic sensitization	
10.45-11.10	Coffee brea	ak	
11.10-13.10	Session 12:	Microbiome and barrier immunity (Chairs: David Hackam & Stephan Rosshart)	
Gabriel Nunez Kathy McCoy		Microbiota-host interactions in Health and Intestinal Inflammatory Disease Title TBC	
Daniel Erny		Different impact of host microbiota on the CNS immune system across mouse strains	
Ziad Al Nabhani		The influence of T cell-microbial interactions during weaning on long-term diseases development	
Tom Clavel		Gut microbiome and microbe-host interactions in early life	
13.10-13.25	Closing ren	narks (Markus Sperandio & Philipp Henneke)	
From 13.30	Departure		



