Joint Bridging Topic Workshop of Antibody-Based Therapies & Vaccines

Artificial intelligence in antibodies & vaccines development

Scientific Program

Tuesday, 4th of November 2025

Arrival and check-in	
Lunch	11:45 - 12:45
Welcome Florian Klein (University Hospital Cologne) Klaus Schwamborn (DZIF-PDU, Brunswick)	12:45 - 13:00
Session I	
AI in modern vaccine design: from epitope discovery to vaccine assembly Benjamin Schubert (HZI, Munich)	13:00 - 13:30
Advancing treatment with AI Maren Lang (BioNTech, Mainz)	13:30 - 14:00
AI-driven immunogen design for next-generation PRRSV vaccine development Thomas Krey (University Lübeck)	14:00 - 14:30
TI BBD: Dynamic modeling to support development and targeting of vaccines Berit Lange & Alice McHardy (Helmholtz-HZI, Brunswick)	14:30 - 15:00
Coffee Break	15:00 - 15:30
Session II	
Pandemic preparedness engine: an integrated AI/ML platform for disease X Newton Wahome (CEPI, USA)	15:30 - 16:00
Leveraging AlphaFold3 to identify OPG153 as a target for poxvirus neutralizing antibodies Jason McLellan (University of Texas, USA)	16:00 - 16:30
Patenting of monoclonal antibodies: Core principles and the disruptive role of artificial intelligence Christoph Klöckner (df-mp, Munich)	16:30 - 17:00
Open discussion	17:00 - 18:30
Dinner and scientific networking	18:30

Wednesday, 5th of November 2025

Session III	
Distributed AI – the next frontier in precision medicine Joachim Schultze (DZNE, Bonn)	09:00 - 09:30
AI – a regulatory perspective Liam Childs (PEI, Langen)	09:30 - 10:00
Climate and society-driven vaccination strategies Katy Gaythorpe (Imperial College London, UK)	10:00 - 10:30
Designing vaccines against Infectious diseases with AI-Immunology™ Thomas Trolle (Evaxion Biotech, Denmark)	10:30 - 11:00
Coffee Break / Finger food	11:00 - 11:30
Closed Bridging Topic Session (11:30 - 12:30)	
Departure	

Venue

TRIO seminar room, building 66,

Robert-Koch-Str. 21, 50931 Cologne

ORGANIZERS

Bridging Topic Antibody-Based Therapies &

Bridging Topic Vaccines