

## 3<sup>rd</sup> INTERNATIONAL CONFERENCE

### INNATE IMMUNITY OF THE LUNG – IMPROVING PNEUMONIA OUTCOME

Berlin - Gendarmenmarkt,  
September 08–10, 2022



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organized by  
Transregional Collaborative  
Research Center SFB-TR 84

supported by



**Leopoldina**  
Nationale Akademie  
der Wissenschaften

## INVITATION

Welcome to Berlin! On behalf of the Collaborative Research Center SFB-TR84 “Innate Immunity of the Lung: Mechanisms of Pathogen Attack and Host Defense in Pneumonia” we cordially invite you to join us for our 3<sup>rd</sup> International Conference on “Innate Immunity of the Lung - Improving Pneumonia Outcome” which will take place from September 08-10, 2022 in Berlin, Germany.

## INFORMATION AND REGISTRATION

Registration is free of charge. Timely registration for the conference is recommended.

For more information, please visit  
[pneumonia2022.org](https://pneumonia2022.org).

## ORGANIZING COMMITTEE

Norbert Suttrop, Andreas Diefenbach, Stefan Hippenstiel, Andreas Hocke, Wolfgang Kübler, Bastian Opitz, Leif Erik Sander, Antigoni Triantafyllopoulou and Martin Witzernath (Charité – Universitätsmedizin Berlin), Susanne Herold and Trinad Chakraborty (Justus-Liebig-University Gießen), Bernd Schmeck (Philipps University Marburg).

## COORDINATION

Anna Oswald, M.A. and Katharina Richter, M.A.:  
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SFB-TR 84 "Innate Immunity of the Lung"  
Charité - Universitätsmedizin Berlin  
Augustenburger Platz 1, 13353 Berlin, Germany

## CONFERENCE VENUE

The symposium will be held at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) located at Gendarmenmarkt in the historic center of Berlin. Historic sites including Brandenburg Gate, Checkpoint Charlie, the Konzerthaus Berlin, the French and the German Cathedrals, and world-renowned museums are within walking distance.



<https://veranstaltungszentrum.bbaw.de/en/directions>

Entrance at Markgrafenstraße 38, 10117 Berlin.



**SFB-TR 84**  
Innate Immunity of the Lung

## SCIENTIFIC PROGRAM

**Thursday, 08-Sep-2022**

<b>The clinical need</b>	<b>09:00-09:30</b>
Medical need in pneumonia care	Martin Witzentrath
<b>Host-pathogen interaction</b>	<b>09:30-10:30</b>
Single-cell RNA-seq reveals the complexity and heterogeneity of infection processes	Antoine-Emmanuel Saliba
Phenotypic characterization of variants of SARS-CoV-2	Christian Drosten*
<b>Modeling lung infection</b>	<b>11:00-12:30</b>
Learning about innate immunity by experimental infection of volunteers	Peter Openshaw
Infection studies on bioprinted 3D lung models	Jens Kurreck
Infection models in human adult stem cell-derived organoids - pneumonia perspectives	Mirjana Kessler
<b>Poster presentations</b>	<b>13:00-14:30</b>

\*virtual talk

<b>Barrier dysfunction</b>	<b>14:30-16:00</b>
DAMPening inflammatory lung edema via cytoskeletal and innate immunity targeting	Joe GN Garcia
Subcellular control of endothelial cell junctions, an enhanced model for regulating integrity	Hans Schnittler
CFTR, a key regulator of barrier function in lung inflammation and infection	Wolfgang Kübler
<b>Deconstructing the lung</b>	<b>16:30-17:30</b>
Self-renewal and identity of alveolar macrophages	Michael Sieweke
Deconstructing lung cell plasticity - from cell atlasing efforts towards perturbation screens in organotypic ex vivo models	Herbert Schiller
<b>Leopoldina Evening Lecture</b>	<b>18:00-19:00</b>
Infection biology: from bench, computer and bedside	Stefan HE Kaufmann



For more information, please scan the QR code

## Friday, 09-Sep-2022

<b>Plasticity of innate immune cells</b>	<b>09:00-10:00</b>
Non-redundant functions of group 2 innate lymphoid cells	Christoph Klose

Macrophage plasticity in lung injury and repair	Susanne Herold
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## Host-pathogen interaction

<b>10:00-10:30</b>	
Pneumococcal interactions with the host	Birgitta Henriques-Normark

## Tolerance & resilience

<b>11:00-12:00</b>	
Disease tolerance in sepsis	Sebastian Weis

Metabolic reprogramming as a defense strategy against infection	Miguel P. Soares
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## Photo session

## Poster presentations

## Best abstract of poster presentation

## Vaccine

<b>12:00-12:30</b>	
<b>13:00-14:30</b>	
<b>14:30-16:00</b>	
<b>16:30-18:00</b>	
Research into policy: measuring impact of pneumococcal vaccines in Nepal	Andrew Pollard*

Development of a universal influenza virus vaccine based on the stalk domain of the hemagglutinin	Florian Krammer
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Innate and adaptive immune responses to COVID-19 vaccines	Leif Erik Sander
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## Poster awards and concert

## Get together

## Saturday, 10-Sep-2022

## Regeneration of the lung

<b>09:00-10:00</b>	
Transient reprogramming of niche cells facilitates airway epithelial regeneration	Elie El Agha

Defining the epigenetic state of alveolar progenitors during regeneration after influenza	William Zacharias
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## Microbiota - organ crosstalk I

<b>10:00-10:30</b>	
Intestinal microbes and resistance to respiratory infection	Eric Pamer

## Microbiota - organ crosstalk II

<b>11:00-11:30</b>	
The microbiota in pneumonia: from protection to predisposition	Bastian Opitz

## Microbiota - organ crosstalk III

<b>11:30-12:00</b>	
Long-term neuroinflammation induced by influenza A virus infection	Martin Korte

## Wrap up

<b>12:00-12:30</b>	
Pneumonia - past and future	Norbert Suttorp

\*virtual talk

We are looking forward to welcoming you to Berlin!