

SUSANNE HEROLD

Academic Career

- 2018 W3 Professor for Pulmonary Infections,
Clinical Head of Infectious Diseases Section, Department of Medicine II,
UKGM
- 2017 Call for the Clinical Chair for Infections and Tropical Diseases, MedUniWien
- 2016 Board Certification, Pulmonary Medicine (LÄK Hessen)
- 2015 W2 Professor for Acute Lung Injury, Justus Liebig University of Giessen
- 2014 Call for W3 professorship "Klinische Infektiologie", Ulm University
- 2013 Oberärztin, Department of Internal Medicine II, Pulmonary and Critical Care
Medicine and Infectious Diseases, University Hospital of Giessen
- 2013 Adjunct Associate Professor, Northwestern University of Chicago, Feinberg
School of Medicine, Department of Pulmonary and Critical Care Medicine
- 2011, 2018 Infektiologin (DGI)
- 2010 Board Certification, Infectious Diseases (LÄK Hessen)
- 2010 Board Certification, Internal Medicine (LÄK Hessen)
- 2002 - 2013 Internship and Residency, Department of Internal Medicine II, Pulmonary and
Critical Care Medicine and Infectious Diseases, University Hospital of Giessen

Academic Degrees

- 2013 Habilitation: „Das mononukleäre Phagozytensystem der Lunge in der
Wirtsabwehr und Gewebereparatur bei Pneumonie“
- 2008 PhD: „Macrophage-epithelial interactions during influenza virus pneumonia:
Alveolar recruitment pathways and impact on epithelial barrier integrity“;
summa cum laude
- 2003 Dr. med.: „Transendo-/epitheliale Rekrutierung von Monozyten in die Lunge:
Phänotypische und funktionelle Charakterisierung“; magna cum laude

University Education

- 2004 - 2007 PhD Program of the Faculties of Human and Veterinary Medicine of the
University of Giessen
- 2003 - 2006 International Graduate Program „Molecular Biology and Medicine of the Lung“
(MBML) as part of the Giessen Graduate School of the Life Sciences (GGL)
- 1995 - 2002 Medical School, Justus Liebig University of Giessen

Other

- Steering Committee, Excellence Cluster Cardio-Pulmonary Institute
- Scientific Advisory Board, Robert Koch Institute, Berlin
- Member, `Fachkollegium Medizin` and Senate Commission on Clinical Research, DFG
- Board of Directors, European Scientific Working Group on Influenza (ESWI)
- Vice Speaker, Collaborative Research Center SFB TR84
- Coordinator German Center for Lung Research (DZL) Disease Area Pneumonia and
Acute Lung Injury
- Vice President, German Society for Infectious Diseases (DGI)
- Deputy Editor, American Journal of Respiratory Cell and Molecular Biology

- Editorial Board Member, American Journal of Respiratory and Critical Care Medicine
- Editorial Board Member, American Journal of Physiology (Lung Cellular and Molecular Physiology)
- Steering Committee, Universities Giessen and Marburg Lung Center (UGMLC)
- Steering Committee, Collaborative Research Center SFB1021
- Faculty Member of the German Center for Infection Research (DZIF)
- Appointed Member, DFG Senate Commission on Clinical Research Questions
- Appointed Member, DFG Commission on Pandemic Research
- Steering Committee, NUM (Netzwerk Universitätsmedizin) COVIM network; Coordinator of the AP4 work program “Determination and usage of SARS-CoV-2 immunity parameters”
- Steering Committee, NUM (Netzwerk Universitätsmedizin) NAPKON platform
- Advisory Board Member, AstraZeneca AZD1222 COVID-19 Vaccine Program
- Vice Chair of the Advisory Board and Member of the Supervisory Board (Aufsichtsrat), Helmholtz Center for Infection Research (HZI)

Reviewing Panel:

German Research Foundation, Cell Host and Microbe, Cell Reports, American Journal of Respiratory Cell and Molecular Biology, American Journal of Respiratory and Critical Care Medicine, European Respiratory Journal, PLoS Pathogens, Nature Microbiology, Journal of Clinical Investigation, Nature Communications, Science

Awards and honors

- 2010 Förderpreis `Klinische Infektionsforschung` of the German Society for Infectious Diseases (DGI)
- 2006 Young Investigator´s Award of the German Society of Internal Medicine (DGIM)

Important publications

Vázquez-Armendariz AI, Heiner M, El Agha E, Salwig I, Hoek A, Rupp MC, Shalashova I, Shrestha A, Carraro G, Mengel JP, Günther A, Morty RE, Vadasz I, Schwemmle M, Kummer W, Hain T, Goesmann A, Bellusci S, Seeger W, Braun T, **Herold S**. Multilineage murine lung stem cells generate 3D bronchioalveolar organoids for analysis of developmental processes and disease modeling. *EMBO J*, 39: e103476, 2020.

Sauerhering L, Kupke A, Meier L, Dietzel E, Joppe J, Gruber AD, Gattenloehner S, Witte B, Fink L, Hoffmann N, Zimmermann T, Goesmann A, Nist A, Stiewe T, Becker S*, **Herold S***, Peteranderl C*. Cyclophilin Inhibitors restrict Middle East Respiratory Syndrome Coronavirus via Interferon lambda. *equal contribution. *Eur Resp J*, 56:1901826, 2020

Herold S, Sander LE. Toward a universal flu vaccine. *Science* 367(6480):852-3, 2020

El Agha E, Moiseenko A, Kheirollahi V, De Langhe S, Crnkovic S, Kwapiszewska G, Kosanovic D, Schwind F, Schermuly RT, Henneke I, MacKenzie B, Quantius J, **Herold S**, Ntokou A, Ahlbrecht K, Morty RE, Gunther A, Seeger W, Bellusci S. Two-Way Conversion between Lipogenic and Myogenic Fibroblastic Phenotypes Marks the Progression and Resolution of Lung Fibrosis. *Cell Stem Cell* 20(2):261-73 e3, 2017

Quantius J, Schmoldt C, Vazquez-Armendariz AI, Becker C, El Agha E, Wilhelm J, Morty RE, Vadasz I, Mayer K, Gattenloehner S, Fink L, Matrosovich M, Li XK, Seeger W, Lohmeyer J, Bellusci S, **Herold S**. Influenza Virus Infects Epithelial Stem/Progenitor Cells of the Distal Lung: Impact on Fgfr2b-Driven Epithelial Repair. *PLoS Pathog* 12(6):e1005544, 2016

Peteranderl C, Morales-Nebreda L, Selvakumar B, Lecuona E, Vadasz I, Morty RE,

Schmoldt C, Bespalowa J, Wolff T, Pleschka S, Mayer K, Gattenloehner S, Fink L, Lohmeyer J, Seeger W, Sznajder JI, Mutlu GM, Budinger GR, **Herold S**. Macrophage-epithelial paracrine crosstalk inhibits lung edema clearance during influenza infection. *J Clin Invest* 126(4):1566-80, 2016

Herold S, Hoegner K, Vadasz I, Gessler T, Wilhelm J, Mayer K, Morty RE, Walmrath HD, Seeger W, Lohmeyer J. Inhaled granulocyte/macrophage colony-stimulating factor as treatment of pneumonia-associated acute respiratory distress syndrome. *Am J Respir Crit Care Med* 189(5):609-11, 2014

Unkel B, Hoegner K, Clausen BE, Lewe-Schlosser P, Bodner J, Gattenloehner S, Janssen H, Seeger W, Lohmeyer J, Herold S. Alveolar epithelial cells orchestrate DC function in murine viral pneumonia. *J Clin Invest* 122(10):3652-64, 2012

Herold S, Tabar TS, Janssen H, Hoegner K, Cabanski M, Lewe-Schlosser P, Albrecht J, Driever F, Vadasz I, Seeger W, Steinmueller M, Lohmeyer J. Exudate macrophages attenuate lung injury by the release of IL-1 receptor antagonist in gram-negative pneumonia. *Am J Respir Crit Care Med* 183(10):1380-90, 2011

Cakarova L, Marsh LM, Wilhelm J, Mayer K, Grimminger F, Seeger W, Lohmeyer J, **Herold S**. Macrophage tumor necrosis factor-alpha induces epithelial expression of granulocyte-macrophage colony-stimulating factor: impact on alveolar epithelial repair. *Am J Respir Crit Care Med* 180(6):521-32, 2009

Herold S, Steinmueller M, von Wulffen W, Cakarova L, Pinto R, Pleschka S, Mack M, Kuziel WA, Corazza N, Brunner T, Seeger W, Lohmeyer J. Lung epithelial apoptosis in influenza virus pneumonia: the role of macrophage-expressed TNF-related apoptosis-inducing ligand. *J Exp Med* 205(13):3065-77, 2008