

Curriculum Vitae

Tobias Stöger Dr. rer. nat.
d.o.b. December 29th, 1966, in Gräfelfing, Germany

University Education

1999 Doctorate, Genetics, Technical University of Munich
1994 Dipl. Biology, Technical University of Munich

Scientific Career

2009 – present Group leader “Dynamics of Pulmonary Inflammation” Institute of Lung Health and Immunity, Helmholtz Zentrum München, Germany
2003 – 2008 Group leader ‘Health Effects of Nanoparticles’, Institute of Inhalation Biology, Helmholtz Zentrum München, Germany
2001 – 2002 Group leader ‘Gene Targeting’, Genomics Department, Ingenium Pharmaceuticals AG, Martinsried, Germany
1999 – 2001 Senior Scientist, Germany Genomics Department, Ingenium Pharmaceuticals AG, Germany

Editorial board

Since 2010 Associate Editor, Taylor & Francis, Journal: Nanotoxicology
Since 2013 Associate Editor, Public Library of Science, Journal: PLOS ONE
Since 2022 Associate Editor, Frontiers, Frontiers in Toxicology - Nanotoxicology
Since 2017 Editorial board, BioMed Central, Journal: Particle and Fibre Toxicology

Awards Honors

2022 PHOENIX Pharmazie Wissenschaftspreis for “Polymer-related Off-Target Effects in Non-Viral siRNA Delivery”, Berlin, Germany
2018 Particle and Fibre Toxicology “Best Paper of the Year 2017”, Germany
1995 Ph.D.-scholarship of the “Boehringer Ingelheim Fonds”

Citation Record

Total citations: 9615; h-index: 50; h-index since 2021: 34 (Google Scholar March 5th, 2025)

Top 10 selected publications

Liu Q, Yang L, Li C, Han L, Wilmot J, Yang G, Leinardi R, Zhou Q, Schröppel A, Kutschke D, Secklehner J, Yldirim AÖ, Huaux F, Zeuschner D, Carlin LM, Sperandio M, Schmid O, **Stoeger T**[#], Rehberg M[#]. Alveolar macrophages initiate the spatially targeted neutrophil recruitment during nanoparticle inhalation. *SciAdv* 11, eadx8586. Doi: [10.1126/sciadv.adx8586](https://doi.org/10.1126/sciadv.adx8586)

Voss C*, Han L*, Ansari M, Strunz M, Haefner V, Angelidis I, Mayr CH, Berthing T, Zhou Q, Guenther EM, Huzain O, Schmid O, Vogel U, Gote-Schniering J, Gaedcke S, Theis FJ, Schiller HB[#], **Stoeger T**[#]. Towards a ToxAtlas of Carbon-Based Nanomaterials: Single-Cell RNA Sequencing

Reveals Initiating Cell Circuits in Pulmonary Inflammation. *ACSnano* 2025 Nov 18;19(45):39139-39156. doi: [10.1021/acsnano.5c12054](https://doi.org/10.1021/acsnano.5c12054)

Russo RC, Togbe D, Couillin I, Segueni N, Han L, Quesniaux VFJ, **Stoeger T**, Ryffel B. Ozone-Induced Lung Injury and Inflammation: Pathways and Therapeutic Targets for Pulmonary Diseases Caused by Air Pollutants. *Environ Int.* 2025 Mar 20;198:109391. doi: [10.1016/j.envint.2025.109391](https://doi.org/10.1016/j.envint.2025.109391)

Han L, Haefner V, Yildirim AÖ, Adler H, **Stoeger T**. Carbonaceous particle exposure triggered accumulation of Osteopontin/SPP1+ macrophages contributes to emphysema development. *MedComm (2020)*. 2025 Jan 28;6(2):e70061. doi: [10.1002/mco2.70061](https://doi.org/10.1002/mco2.70061)

Yang L, Liu, Q, Kumar, P, Sengupta A, Farnoud A, Shen R, Trofimova D, Ziegler S, Davoudi N, Doryab A, Yildirim AÖ, Diefenbacher ME, Schiller HB, Razansky D, Piraud M, Burgstaller G, Kreyling WG, Isensee F, Rehberg M, **Stoeger T**, Schmid O. LungVis 1.0: an automatic AI-powered 3D imaging ecosystem unveils spatial profiling of nanoparticle delivery and acinar migration of lung macrophages. *Nat Commun.* 2024 15, 10138. doi: [10.1038/s41467-024-54267-1](https://doi.org/10.1038/s41467-024-54267-1)

Li C, Liu Q, Han L, Zhang H, Immler R, Rathkolb B, Secklehner J, de Angelis MH, Yildirim AÖ, Zeuschner D, Nicke A, Carlin LM, Sperandio M, **Stoeger T**, Rehberg M. The eATP/P2×7R Axis Drives Quantum Dot-Nanoparticle Induced Neutrophil Recruitment in the Pulmonary Microcirculation. *Adv Sci (Weinh)*. 2024 Oct 4:e2404661. doi: [10.1002/advs.202404661](https://doi.org/10.1002/advs.202404661)

Song S, van Dijk F, Vasse GF, Liu Q, Gosselink IF, Weltjens E, Remels AH, de Jager MH, Bos S, Li C, **Stoeger T**, Rehberg M, Kutschke D, van Eck G, Wu X, Willems SH, Boom D, Kooter IM, Spierings D, Wardenaar R, Cole M, Nawijn MC, Salvati A, Gosens R, Melgert BN. Inhalable Textile Microplastic Fibers Impair Airway Epithelial Differentiation. *Am J Respir Crit Care Med.* 2023 Nov 16. doi: [10.1164/rccm.202211-20990C](https://doi.org/10.1164/rccm.202211-20990C)

Kokot H, Kokot B, Sebastijanović A, Voss C, Podlipec R, Zawilska P, Berthing T, López CB, Danielsen PH, Contini C, Ivanov M, Krišelj A, Čotar P, Zhou Q, Ponti J, Zhernovkov V, Schneemilch M, Doumandji Z, Pušnik M, Umek P, Pajk S, Joubert O, Schmid O, Urbančič I, Irmler M, Beckers J, Lobaskin V, Halappanavar S, Quirke N, Lyubartsev AP, Vogel U, Koklič T*, **Stoeger T***, Štrancar J*. Prediction of Chronic Inflammation for Inhaled Particles: the Impact of Material Cycling and Quarantining in the Lung Epithelium. *Adv Mater.* 2020 Oct 19:e2003913. doi: [10.1002/adma.202003913](https://doi.org/10.1002/adma.202003913)

Conlon TM, John-Schuster G, Heide D, Pfister D, Lehmann M, Hu Y, Ertüz Z, Lopez MA, Ansari M, Strunz M, Mayr C, Ciminieri C, Costa R, Kohlhepp MS, Guillot A, Günes G, Jeridi A, Funk MC, Beroshvili G, Prokosch S, Hetzer J, Verleden SE, Alsafadi H, Lindner M, Burgstaller G, Becker L, Irmler M, Dudek M, Janzen J, Goffin E, Gosens R, Knolle P, Pirotte B, **Stoeger T**, Beckers J, Wagner D, Singh I, Theis FJ, de Angelis MH, O'Connor T, Tacke F, Boutros M, Dejardin E, Eickelberg O, Schiller HB, Königshoff M, Heikenwalder M, Yildirim AÖ. Inhibition of LTβR signalling activates WNT-induced regeneration in lung. *Nature* 2020 Dec;588(7836):151-156. doi: [10.1038/s41586-020-2882-8](https://doi.org/10.1038/s41586-020-2882-8)

Sattler C, Moritz F, Chen S, Steer B, Kutschke D, Irmeler M, Beckers J, Eickelberg O, Schmitt-Kopplin P, Adler H, **Stoeger T**. Nanoparticle exposure reactivates latent herpesvirus and restores a signature of acute infection. *Part Fibre Toxicol*. 2017 Jan 10;14(1):2. doi: [10.1186/s12989-016-0181-1](https://doi.org/10.1186/s12989-016-0181-1)