

## Curriculum Vitae

**Geraldine Nouailles**

PD, Dr.-Ing.

d.o.b. August 01st, 1980, in Hannover, Germany

### University Education

- 2024 Habilitation, Experimental Medicine, Charité – Universitätsmedizin Berlin
- 2010 Doctorate in Engineering, TU Berlin / Max Planck Institute for Infection Biology
- 2000-2006 Studies of Biotechnology (Diploma), TU Berlin

### Scientific Career

- Since 2026 PI, German Center for Lung Research
- Since 2026 PI, DFG-funded graduate school RTG NeurInfect, member of the executive board
- Since 2025 PI, DFG-funded collaborative research center CRC 1449
- Since 2025 Organiser, Lunchy Science Club, connecting clinicians with basic scientist presenting their latest research in an in-house Journal Club format
- 2025-2026 PI, foundation-funded research project “Remodelling the Mucin-Glycocalyx”
- 2024-2027 PI, BMVg-funded research project, NoVAP - Organoids
- 2020-2023 PI, BMBF-funded German-French research network MAPVAP
- 2018-2027 PI, industry-funded research project “IgM and pneumonia”
- 2011-2025 Lecturer, Technische Universität Berlin, Master students lecture series: „Basics in Immunology”
- Since 2022 Lecturer, Charité – Universitätsmedizin Berlin, Module 13: “Respiration”, Class: “Defense Mechanisms of the Respiratory System”; Module 01-04, Classes in problem-oriented learning (POL)
- Since 2019 Group Leader of AG Nouailles “Immunobiology and Respiratory Infections”, Department of Infectious Diseases, Respiratory Medicine and Critical Care, Charité – Universitätsmedizin Berlin, Germany
- 2014-2018 Postdoctoral fellow (Senior Scientist), AG Witzernath, Division of Pulmonary Inflammation, Charité – Universitätsmedizin Berlin, Germany
- 2010-2013 Postdoctoral Fellow, Department of Immunology, Max Planck Institute for Infection Biology, Germany
- 2007-2010 Ph.D. student in Infection Immunology, Department of Immunology, Max Planck Institute for Infection Biology, Berlin, Germany and Technische Universität Berlin, Germany
- 2003 Visiting Scientist, Leukocyte Biology Laboratory, Child Health Research Institute, Adelaide, Australia

### Awards and Honors

- 2025 Shortlisted, Stiftung Tierärztliche Hochschule Hannover, W2/W3-Professorship (open rank) for "Immunology"
- 2001-2005 Careerbuilding-Program for female STEM students, Femtec GmbH, Technische Universität Berlin, Germany
- Reviewer Peer-review journals: *European Respiratory Journal (ERJ)*, *Nature Microbiology*, *Nature Communications*, *Mucosal Immunology*, *American Journal of Respiratory Cell and Molecular Biology (AJRCMB)*, *Cell Discovery*, *Scientific Reports*, *Cell Reports*, *American Journal of Physiology - Lung Cellular and Molecular Physiology (AJP lung)*, *Frontiers in Immunology*, *Respiratory research*, *Cytokine*, *Viruses*, *Medical Microbiology and Immunology*  
Funding agencies: *German Research Foundation (DFG)*, *Swiss National Science Foundation (SNSF)*, *UK Research and Innovation (UKRI)*, *French National Research Agency (ANR)*

- Memberships German Society of Immunology (DGfI), German Society of Pulmonology (DGP), European Respiratory Society (ERS), member of Infect-Net, a network of female scientists in infection biology, member of Charité 3R (Replace, Reduce, Refine)

## Citation Record

Total citations: 2,920; h-index: 24; h-index since 2021: 21 (Google Scholar June 5<sup>th</sup>, 2026)

## Top-10 selected Publications

1. Hoffmann K, Behrendt U, Pennitz P, Kirsten H, Pohl J, Lopez-Rodriguez E, Weissfuss C, Kollmeier J, Tönnies M, Brill S, Steinestel K, Witzentrath M, Wenzel W, Zobel C\*, **Nouailles G\***. Mechanical strain exacerbates *Pseudomonas* infection in an organoid-based pneumonia-on-a-chip model. *J Clin Invest*. 2025 Nov 18:e192454.
2. Berger S, Goekeri C, Pennitz P, Gutbier B, Michalick L, Hoffmann K, Lopez-Rodriguez E, Gluhovic V, Wienhold SM, Behrendt U, Taylor A, Dietert K, Kirsten H, Kunder S, Mueller K, Hain T, Volkers SM, Weis S, Gruber AD, Sander LE, Kuebler WM, CAPSyS study group, Witzentrath M, **Nouailles G**. Neutrophil-chemoattractant CXCL5 induces lung barrier permeability in acute lung injury. *Mucosal Immunol* 2025 Oct 10:S1933-0219(25)00105-9.
3. **Nouailles G**, Bischoff R, Linke K, Taylor A, Gutbier B, Pennitz P, Goekeri C, Kunder S, Voß A, Brömel TC, Kershaw O, Milek M, Farztdinov V, Mülleder M, Weissmüller S, Heinz CC, Visser M, Bohlaender F, Ahrens K, Beule D, Gruber AD, Koenig M, Witzentrath M. Trimodulin Supports Antibacterial Defence and Restricts Inflammation in Preclinical Pneumonia Models. *Eur Respir J*. 2025 Sep 11:2500392.
4. Weissfuss C, Li J, Behrendt U, Hoffmann K, Bürkle M, Tan C, Krishnamoorthy G, Korf IHE, Rohde C, Gaborieau B, Debarbieux L, Ricard JD, Witzentrath M, Felten M\*, **Nouailles G\***. Adjunctive phage therapy improves antibiotic treatment of ventilator-associated-pneumonia with *Pseudomonas aeruginosa*. *Nat Commun*. 2025 May 15;16(1):4500.
5. Friedrich VD, Pennitz P, Wyler E, Adler JM, Postmus D, Müller K, Teixeira Alves LG, Prigann J, Pott F, Vladimirova D, Hoefler T, Goekeri C, Landthaler M, Goffinet C, Saliba AE, Scholz M, Witzentrath M, Trimpert J, Kirsten H\*, **Nouailles G\***. Neural network-assisted humanisation of COVID-19 hamster transcriptomic data reveals matching severity states in human disease. *EBioMedicine*. 2024 Oct;108:105312.
6. Goekeri C, Linke KAK, Hoffmann K, Lopez-Rodriguez E, Gluhovic V, Voß A, Kunder S, Zappe A, Timm S, Nettesheim A, Schickinger SMK, Zobel CM, Pagel K, Gruber AD, Ochs M, Witzentrath M, **Nouailles G**. Enzymatic Modulation of the Pulmonary Glycocalyx Enhances Susceptibility to *Streptococcus pneumoniae*. *Am J Respir Cell Mol Biol*. 2024 Dec;71(6):646-658.
7. Peidli S\*, **Nouailles G\***, Wyler E, Adler JM, Kunder S, Voß A, Kazmierski J, Pott F, Pennitz P, Postmus D, Teixeira Alves LG, Goffinet C, Gruber AD, Blüthgen N, Witzentrath M, Trimpert J, Landthaler M, Praktijnjo SD. Single-cell-resolved interspecies comparison shows a shared inflammatory axis and a dominant neutrophil-endothelial program in severe COVID-19. *Cell Rep*. 2024 Jun 25;43(6):114328.
8. **Nouailles G\***, Adler JM\*, Pennitz P, Peidli S, Teixeira Alves LG, Baumgardt M, Bushe J, Voss A, Langenhagen A, Langner C, Martin Vidal R, Pott F, Kazmierski J, Ebenig A, Lange MV, Mühlebach MD, Goekeri C, Simmons S, Xing N, Abdelgawad A, Herwig S, Cichon G, Niemeyer D, Drosten C, Goffinet C, Landthaler M, Blüthgen N, Wu H, Witzentrath M, Gruber AD, Praktijnjo SD, Osterrieder N, Wyler E, Kunec D, Trimpert J. Live-attenuated vaccine sCPD9 elicits superior mucosal and systemic immunity to SARS-CoV-2 variants in hamsters. *Nat Microbiol*. 2023 May;8(5):860-874.
9. Wyler E, Adler JM, Eschke K, Teixeira Alves G, Peidli S, Pott F, Kazmierski J, Michalick L, Kershaw O, Bushe J, Andreotti S, Pennitz P, Abdelgawad A, Postmus D, Goffinet C, Kreye J, Reincke SM, Prüss H, Blüthgen N, Gruber AD, Kuebler WM, Witzentrath M, Landthaler M, **Nouailles G\***, Trimpert J\*. Key benefits of dexamethasone and antibody treatment in COVID-19 hamster models revealed by single-cell transcriptomics. *Mol Ther*. 2022 May 4;30(5):1952-1965.
10. **Nouailles G\***, Wyler E\*, Pennitz P, Postmus D, Vladimirova D, Kazmierski J, Pott F, Dietert K, Muelleder M, Farztdinov V, Obermayer B, Wienhold SM, Andreotti S, Hoefler T, Sawitzki B, Drosten C, Sander LE, Suttorp N, Ralser M, Beule D, Gruber AD, Goffinet C, Landthaler M, Trimpert J, Witzentrath M. Temporal omics analysis in Syrian hamsters unravel cellular effector responses to moderate COVID-19. *Nat Commun*. 2021 Aug 11;12(1):4869.

\*, indicates shared authorships