

Curriculum Vitae

Prof. Dr. Nico Lachmann

Personal Information

Name: Nico Lachmann, Prof. Dr. rer. nat
Address: Hannover Medical School
Department of Pediatric Pneumology, Allergology and Neonatology
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Place of Birth: Grevesmühlen, Germany
Date of Birth: 01.08.1980

Education

06/2016 Habilitation	Hannover Medical School, Hannover (Germany) , Habilitation (Venia Legendi) in the subject of "Regenerative Medicine" <u>Cumulative Thesis:</u> "Pluripotent- and Multipotent-Stem Cell Derived Hematopoietic Cells and Their Use for Regenerative Therapies"
11/2008 – 01/2012 PhD student	Hannover Medical School, Hannover (Germany) , PhD Program "Regenerative Science", REBIRTH Cluster of Excellence <i>Overall Grade: summa cum laude, excellent</i> <u>Cumulative PhD Thesis:</u> "Strategies for Cell-Type Specific and Time Dependent Transgene Expression in Hematopoietic Gene Therapy"
10/2006 – 10/2008 M.Sc.	Hannover Medical School Hannover (Germany), Yale University, School of Medicine, New Haven (CT, USA) , "Biomedicine" <i>Overall Grade: 1.9</i> <u>Master Thesis:</u> "Elucidation of cellular and molecular role of SMAD7 in the development of hematopoietic stem cells" Yale University School of Medicine, New Haven, CT, USA (Supervisor 1: Prof. Dr. Christoph Klein (Childrens Hospital, Munich (Dr. von Haunerschen Kinderspital München) Supervisor 2: Prof. Richard Flavell (School of Medicine, Yale University, New Haven, CT, USA)
10/2003 – 09/2006 B.Sc.	Leibniz University Hannover, Hannover (Germany) , Bachelor-program "Life Science" <i>Overall Grade: 1.9</i> <u>Bachelor Thesis:</u> "Products of animal celllines cultured in an industrial scale format" (Supervisor: PD Dr. Cornelia Casper, Leibniz University Hannover)
08/2001 – 09/2003 A-Level	Berufsoberschule Lübeck, Lübeck (Germany) (Highschool equivalent) Certificate: A-Level (<i>Overall Grade: 1.5</i>)
09/1997 – 01/2001	Leibniz Research Center Borstel , Apprenticeship as Biologic Lab Assistant, Borstel Germany

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Academic Appointments

07/2022 – present	ATTRACT group leader, “Immune Cell Technologies” , Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM)
09/2020 – present	Associate (W2) Professor , RESIST Cluster of Excellence, Department of Pediatric Pneumology, Allergology and Neonatology, Hannover Medical School, Hannover, Germany
10/2018 – present	Faculty of Hannover Medical School
06/2015 – 08/2020	Group-Leader (Translational Hematology of Congenital Diseases) , REBIRTH Center for Translational and Regenerative Medicine, Institute of Experimental Hematology, Hannover Medical School, Hannover, Germany
10/2013 – 12/2019	Adjunct Instructor , Division of Pulmonary Biology, Prof. Bruce Trapnell Cincinnati Childrens Hospital Medical Center, Cincinnati, OH, USA
01/2012 – 05/2015	Postdoctoral Scientist , REBIRTH Cluster of Excellence, Institute of Experimental Hematology, RG Reprogramming and Gene Therapy Prof. Thomas Moritz, Hannover Medical School, Hannover, Germany
02/2012 – 07/2013	Postdoctoral Scientist , Max-Planck-Institute for Molecular Biomedicine, Prof. Tobias Cantz, (Zellux: Train the trainer), Münster, Germany

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Appointments & Offers

2025 -	Offer of a W2 in Pulmonary Infections (positive tenure track evaluation, permanent), Hannover Medical School
2025 -	Offer of a W3 Full Professorship in Immunology , TU Braunschweig, List rank 1

Industry & professional consultancy

2023 – present	Laverock Therapeutics (Consultant)
01/2021 – 12/2026	Novo Nordisk S/A Copenhagen (industrial collaboration on macrophage immune cell pharming)
2024 – 2025	Evotec International (Consultant)
02/2022 – 02/2023	Catalent (Consultant on iPSC-derived NK cells)

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Other Work Experience

03/2008 – 10/2008 Master Thesis, Department of Immunobiology (Prof. Richard Flavell), School of Medicine, Yale University, New Haven, CT, USA

02/2001 – 07/2001 Research Assistant, RG “Biophysic” (Prof. Thomas Gutschmann), Leibniz Research Center Borstel, Borstel, Germany

Internships

11/2008 – 12/2008 Department of Pediatric Hematology-Oncology (Prof. Dr. Christoph Klein), Hannover Medical School, Hannover, Germany

04/2008 – 06/2008 Institute of Cell and Molecular Pathology (Prof. Dr. Brigitte Schlegelberger), Hannover Medical School, Hannover, Germany

07/2005 – 09/2005 Bayer, Bayer Crop Science AG, Monheim, Germany

Additional work experience

09/2009 – 12/2012 Co-Founder and Associate of SciSerNet GbR

10/2006 – 02/2008 Office Assistant, Congress & Event Management, Hannover Medical School, Hannover, Germany

10/2003 – 02/2008 Student Sales Assistant, ATELCO Computer AG, Hannover, Germany

Awards and Honors

2024 **ERC Proof-of-Concept Grant “iMAClung”**, European Commission, Horizon Europe

2022/23 **ERC Proof-of-Concept Grant “iPYRO”**, European Commission, Horizon Europe

2019 **ERC Starting Grant, “iPSC2Therapy”**, European Commission, Horizon 2020

2019 **Young Investigator Award**, German Stem Cell Network (GSCN), Berlin

2015 **Abstract Achievement Award**, American Society of Hematology (ASH) (Orlando, FL, USA)

2015 **Fellowship for Interdisciplinary Sciences**, Joachim Herz Stiftung

2015 **Best-Poster-Award**, German Stem Cell Network (GSCN, Frankfurt am Main, Germany)

2015 **Best Clinical Research Award**, German Society for Pulmonology (DGP) together with Dr. med. Christine Happle, Berlin, Germany

2015 **Klaus Betke Fellowship**, 2nd Klaus Betke Symposium, Munich, Germany

2014 **Top Abstract Award & Best Translational Research** (*Large-scale hematopoietic differentiation of human induced pluripotent stem cells provides granulocytes or macrophages for cell replacement- and genetic-therapies*) German Society of Hematology and Oncology (DGHO), Hamburg, Germany

2014 **Selected as top abstract at “Presidential Symposium”** (*Therapeutic Efficacy of Intratracheally Transplanted Macrophage Progenitor Cells Introduces a Novel Gene-Therapy Approach To Hereditary Pulmonary Alveolar Proteinosis*) American Society for Gene and Cell Therapy (ASGCT); Washington D.C. (USA)

2014 **Young Academy Fellowship** (*Induced pluripotent stem cell (iPSC)-derived tissue-macrophages as an innovative therapy approach of hereditary Pulmonary Alveolar Proteinosis (herPAP)*) Hannover Medical School

2013 **Eva-Luise Köhler Forschungspreis für seltene Erkrankungen 2013** (Eva-Luise Köhler research award for rare diseases 2013) „*Innovative treatment options for hereditary pulmonary alveolar proteinosis*“; Eva Luise und Horst Köhler Stiftung, Allianz Chronischer Seltener Erkrankungen; Berlin (Germany)

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- 2012 **HiLF-Grant intramural program** Hannover Medical School *“Hematopoietic Gene Therapy of CSF2RA-Deficient Pulmonary Alveolar Proteinosis (PAP) Utilizing Patient-Specific Induced Pluripotent Stem Cells (iPSCs)”*
- 2012-2016 **Travel Awards:** American Society for Gene and Cell Therapy, **ASGCT**; European Society for Gene and Cell Therapy, **ESGCT**; International Society for Stem Cell Research, **ISSCR**, German Stem Cell Network **GSCN**

Patents

EP24176410.9 (PRODUCTION OF CRYONIDS AND BLOOD CELLS DERIVED THEREFROM.) Filing data 16.05.2024

PCT/US18/32933 (Cell Therapy with lentiviral transduced CSF2RA transgene in the treatment of hereditary pulmonary alveolar proteinosis), Filing date 17.05.2017, licensed

PCT/EP2018/061574 (Stem-cell derived myeloid cells, generation and use thereof), Filing date 04.05.2017 licensed

PCT/EP2021/083371 (Application of stem-cell derived monocytes in a monocyte activation test (MAT) for the assessment of pyrogenicity and inflammatory potential), Filing date 30.11.2020

Reviewer

- Grants applications: European Research Council (ERC), Deutsche Forschungsgemeinschaft (DFG), Agence Nationale de la Recherche (ANR), Swiss 3R Competence Centre, AFM-Telethon, Italian Cystic Fibrosis Research Foundation, Pancreatic Cancer UK, Academia Sinica (Taiwan), Deutsche Kinderkrebshilfe, Research Ireland Frontiers for the Future
- Scientific journals: Nature, Nature Immunology, Nature Reviews Immunology, Nature Immunology, Nature Reviews Disease Primer, Nature Communications, Nature Communications Medicine, Nature Biomedical Engineering, iScience, Cell Reports Medicine, Stem Cell Reports, eBioMedicine, AJRCCM, Bioactive Materials, CMLS, Differentiation, Scientific Reports, PLOS One, Human Gene Therapy, Immunotherapy, Theranostics, Experimental Hematology, Experimental Cell Research

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Academic Activities

- 2026 – present Member (Jury) of the ScheringPlus Fellowships, Schering Stiftung (Foundation), Berlin
- 2023 – present Board member, PhD program “Regenerative Sciences”, Hannover Medical School
- 2023 – present Member (Jury) of the Joachim-Herz-Fellowship Program, Joachim Herz Foundation, Hamburg
- 2023 – present Spokesperson, Medical Scientist Program “nextGENERATION” (Regenerate Organ Function)
- 2023 – present Organizer and moderator, International UniStemDay 2023 at Hannover Medical School
- 2023 – present Mentor via: mento international program University Kiel
- 2021 – present Elected member, Extended Board, German Stem Cell Network, GSCN
- 2019 – present Elected member of section II (Department of Internal Medicine, Pediatrics and Surgery), Hannover Medical School
- 2019 – present Elected member, steering committee REBIRTH Center for Translational and Regenerative Medicine, Hannover Medical School
- 2019 – present Initiator and founder of “StemCells – Goes Back to School”
Scientific talks for students (highschool level) on stem cell technologies and the use of gene therapy applications to treat primary immunodeficiencies. Scientific interactions with:

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	<i>Gymnasium Burgdorf, Robert Koch Gymnasium in Clausthal Zellerfeld, Gymnasium in Wolfsburg, IGS Sarstedt, St. Ursula-Schule Hannover, Sophienschule Hannover</i>
2021 – 2025	EU representative for Hannover Medical School, adviser for research grants within the framework of Horizon Europe
2014 – 2017	Lecture at Katholische Kirche Niedersachsen for Stem Cells in Regenerative Sciences <i>Invited talks on regenerative medicine and the use of stem cell technology for clinical use. Talks are given for the catholic church in lower Saxony.</i>
2012/2013	Faculty of “Ethikuniversität an der Medizinischen Hochschule Hannover” <i>Talks about the ethical use of stem cells for regenerative medicine</i>
2009-2017	Member in the REBIRTH organizing committee for the IdeenExpo, Hannover (Germany)

Additional Qualifications and Certificates

2014	Qualifikation zum Prüfarzt/Prüfärztin bzw. Assistenz in klinischen Studien (GCP-Grundkurs) <i>Extended Qualification and certificate on good clinical practice (GCP)</i>
2013	“Basisprogramm zur Qualifizierung von Lehrenden der MHH” <i>MHH intramural teaching qualification class for faculty</i>
2008	Category C certificate to guide and lead animal experiments (principal investigator level), of Federation of European Laboratory Animal Science Association (FELASA) Hannover Medical School, Hannover (Germany)

Professional Societies

Member “*International Society for Stem Cell Research (ISSCR)*”
Associate Member “*European Society of Gene and Cell Therapy (ESGCT)*”
Associate Member “*American Society of Gene and Cell Therapy (ASGCT)*”
Member of the “*German Stem Cell Network (GSCN)*”

Invited Talks and Social Media Content

2026	March IGLD meeting
2026	17 th March Advanced Therapies London “TBD”
2026	10 th April Zürich, Regenerative Science Center “TBD”
2025	17 th Annual PEGS Europe meeting, Protein “Antibody Engineering Summit, Lisbon, Portugal “TBD”
2025	SLAS (Advances in Laboratory Automation), Next-Generation Immune Solutions: Scalable Human iPSC-Derived Platforms for Therapeutic and Research Applications, Hamburg
2025	From regenerative medicine to anti-cancer therapies: iPSC-derived CAR-Macrophages, Comprehensive Cancer Center Zürich, Annual meeting at Universitätsspital Zürich
2025	Advanced Generation of Human Immune Cells from iPSC: In Process Cryopreservation meet Continuous Production of Immune Cells, GSCN on Tour
2025	Harnessing induced pluripotent stem cell-derived macrophages for modern therapies, University clinic Magdeburg, Germany
2025	Genetic Engineering for Improved Macrophage-Cell Therapies, ATMP Symposium, German Pharm-Tox Summit, Hannover
2024	From regenerative medicine to anti-cancer therapies: iPSC-derived immune cells, Zürich University, iPSC online seminar

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- 2024 Cell and Gene Therapies Innovation Day, German Healthcare Centers, Deutsche Zentren der Gesundheit (DZG) Potsdam, „Cell & Gene Therapies using Macrophages: From Tissue Regeneration to Anti-Cancer Therapies”
- 2024 Drexel University, Philadelphia, USA “Immune-Cell-”Farming” Technologies as a Driver for (Non)Therapeutic Innovations”
- 2024 Fraunhofer Workshop “Alternatives to Animal Testing 2024”, Title: The plasticity of macrophages as a target for novel therapeutics
- 2024 International Society for Stem Cell Research (ISSCR), Annual Meeting 2024, “Harnessing the therapeutic potential of iPSC-derived immune cells to treat diseases of the lung and beyond”, invited by EVOTEC
- 2024 Würzburg, SFB/CRC “Decisions in Infectious Diseases” Prof. Dr. Thomas Rudel, title of the talk “iPSC meet infection models”
- 2024 Institute for Regenerative Medicine (IREM), Sils Maria Retreat, Switzerland “iPSC-derived macrophages: Regenerative Therapies and Infection Medicine”
- 2024 Interview on macrophages in anti-cancer therapies, Comprehensive Cancer Center Göttingen
- 2024 Central Animal Facility, Hannover Medical School, “Standardized iPSC-derived immune cells and its use to avoid animal research”
- 2023 Gesellschaft für Biochemie und Molekularbiologie e.V. (GBM) Young Investigators, Presentation „Macrophages in Modern Infection Research“
- 2023 Brodehl Symposium, Keynote lecture, “Application of human induced pluripotent stem cells in pediatric research and congenital diseases”
- 2023 Fraunhofer Academy, Tissue Engineering Digital Workshop “Scalable generation of immune cells from human iPSC for (non)therapeutic applications”
- 2023 Fraunhofer ITEM, Tag der offenen Tür, Designer Immune Cells for Modern Healthcare
- 2023 DGK annual meeting, Medical Scientist Retreat, Support for Medical Scientist; nextGENERATION
- 2022 German Stem Cell Network (GSCN) Annual Meeting, “Hematopoietic progenitors drive human macrophage ontogeny from pluripotent stem cells”
- 2022 Podcast, Bringing Science to life, “Prof. Dr. Nico Lachmann, vom Makrophagen-Spezialisten zum Start-up Gründer” (<https://www.youtube.com/watch?v=Qcij71rqmjM>)
- 2022 Keynote lecture, DECHEMA Advanced Therapies – Challenges for Routine Applications, “Scalable generation of custom-made immune cells for innovative cell-based immunotherapies and industrial applications” in Frankfurt am Main
- 2021 PharmaLab 2021 “Scalable Generation of Fully Defined Monocyte/Macrophages from Human iPSC to Assess Pyrogens in Parenteral drugs and Medical Products”
- 2021 Innovative Therapy Days 2021, INTERNATIONAL SYMPOSIUM:LEADING RESEARCH TO INDUSTRY “IPSC-DERIVED HEMATOPOIETIC CELLS AND CELL-BASED THERAPIES”
- 2021 German Stem Cell Network (GSCN) Annual Meeting, “Stem cells meet cell-based immunotherapies, the hope behind regenerative medicine”
- 2021 Deutsche Zentren der Gesundheitsforschung, „Working as a Medical Scientist“
- 2020 Macrophage-directed-Therapies Summit, “Designer Macrophage Manufacturing & Exploring the Role of Macrophages in Lung Disease”

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2020	ROTARY Club Hannover, "Blut auf Bestellung"
2019	European Society for Gene and Cell Therapy (ESGCT), Barcelona, "The „New Stem Cell“: macrophages for disease modeling and cell based therapies"
2019	Paul Ehrlich and Ludwig Darmstädter Research Award Symposium (short listed)
2018	Workshop Pluripotent Stem Cells in Translational Cardiovascular Research, German Society for Cardiology, Charité, Berlin
2018	Society for Laboratory Automation and Screening Europe (SLAS) Transforming Research Conference in Brussel "iPSC-Technology: New Avenues for Cell-Based Therapies"
2018	Graduation speech, PhD program "Infection Biology", Hannover Medical School
2018	KeyNote lecture MD/PHD program "Molecular Medicine", Hannover Medical School
2018	17th Fraunhofer seminar „Translational Lung Research Models of Lung Disease"
2017	Future Medicine 2017, Berlin "Next Generation of „Antibiotics“: Bioreactor Derived Immune Cells to Fight Infectious Diseases"
2017	12min.me, "Kann man aus Stammzellen Blut herstellen? Neue Wege in der regenerative Medizin"
2016	Volkswagen Stiftung, Herrenhausen Late "Stammzellen = Alleskönner. Was kann die Regenerative Medizin?"

Publications

Publications since 2012:

- 99x Publications, Reviews, Comments etc. **in total**
- Out of 99x publications in total: 49x as first and last-author: 49x
- Nature, Cell, Science Immunology, Science Translational Medicine, Nature Protocols, Nature Communications, Blood, JCI, ...

Books and Chapters

Tissue-Resident Macrophages, 2023, ISBN: 978-1-0716-3436-3, Springer Protocols, Chapter: "Adaptation of Human iOSC-Derived Macrophages Toward an Alveolar Macrophage-Like Phenotype Post Intra-Pulmonary Transfer into Murine Models"

Seltene Lungenerkrankungen, 2022, ISBN: 978-3-662-63650-3, 2. Auflage, Springer, Chapter: „Pulmonale Alveolarproteinose“

Stem Cell Assays Methods and Protocols, 2022, ISBN: 978-1-0716-1978-0, Springer Protocols, Chapter: „Generation of Human iPSC from Small Volume Peripheral Blood Samples““

Publications and Articles (chronological order 2012-present)

2025

1. Chen S, Rahim MI, Mikolai C, Paasch D, Winkel A, Doll-Nikutta K, Lachmann N, Menzel H, Wirth D, Hauser H, Stiesch M. Macrophage-Mediated Control of Implant-Associated Biofilms in a Three-Dimensional

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Human Oral Mucosa Model. **Materialia**. 2025 Volume 41,102452, ISSN 2589-1529, doi: 10.1016/j.mtla.2025.10245

2. Rahim MI, Baseer S, Paasch D, Steglich M, Waqas SFK, **Lachmann N**, Falk CS, Stiesch M. Commensal microflora coating endows implants with biofilm-repellent, immunomodulatory and osteogenic properties. **Acta Biomaterialia**. 2025 under revision
3. Basílio-Queirós D, Riviere I, van der Stegen S, **Lachmann N**, **Advanced Drug Delivery Reviews.**, 2025 accepted.
4. Saleh F, Valdivia Malqui EE, Gensch I, Schinke M, Kappelhøj M, Nikolouli E, Nguyen AHH, Jang MS, Basílio-Queirós D, **Lachmann N**, "Harnessing Intermediate-Scale Bioreactors for Next-Generation Macrophage Production and Application" **Nature Protocols**, 2025, accepted
5. Durán V*, Nikolouli E*, Chatterjee S*, Costa B, Pavlou A, Ziegler A, Becker J, Baumann K, Bruhn M, Haake K, Hashtchin AR, Gensch I, Korte A, Behrens YL, Zhang SY, Casanova JL, Bär C, **Lachmann N***, Thum T*, Kalinke U*. "Type I IFNs decrease SARS-CoV-2 replication in human cardiomyocytes and increase cytokine production in macrophages" **Journal of Clinical Immunology**, 2025, accepted
6. Basílio-Queirós D, **Lachmann N**. "In vivo macrophage engineering for renal cancer therapy." **Nat Cancer**. 2025 Apr 29. doi: 10.1038/s43018-025-00912-7.
7. Kolter J, Döring CL, Sarout S, Baasch S, Steele L, Alsumati R, Lucena Silva GV, Aníbal Silva CE, Paiva IM, Mansoori Moghadam Z, Gres V, Lohrmann F, Aktories P, Buchegger T, Bijnen M, Doumard L, Voisin B, Le Foll C, **Lachmann N**, Greter M, Kierdorf K, Haniffa M, Cunha TM, Flacher V, Henneke P. "Sensory neurons shape local macrophage identity via TGF- β signaling." **Immunity**. 2025 Sep 5:S1074-7613(25)00367-X. doi: 10.1016/j.immuni.2025.08.004.

2024

8. Rodriguez Gonzalez C, Basílio-Queirós D, Neehus AL, Merkert S, Tschritter D, Ünal S, Hegermann J, Mörgelin M, Bustamante J, Nietert MM, Martin U, Tümmler B, Munder A, **Lachmann N**. "Human CFTR deficient iPSC-macrophages reveal impaired functional and transcriptomic response upon Pseudomonas aeruginosa infection" **Front Immunol**. 2024 Nov 13:15:1397886. doi: 10.3389/fimmu.2024.1397886.
9. Desai O, Köster M, Kloos D, **Lachmann N**, Hauser H, Poortinga A, Wirth D. „Ultrasound-triggered drug release in vivo from antibubble-loaded macrophages. **J Control Release**. 2024 Dec 19:378:365-376. doi: 10.1016/j.jconrel.2024.12.007.
10. Streckfuss-Bömeke K, Kränkel N, Maack C, Schnabel RB, Zelarayán LC, Frey N, Jezzard P, Krüger M, **Lachmann N**, Lutz S, Noack C, Schoger E, Schröder K, Sommerfeld LC, Steffens S, Winkels H, Würtz C, Zeller T, Rog-Zielinska EA, Kohl P. "Physiologists as medical scientists: An early warning from the German academic system" **Physiol Rep**. 2024 Nov;12(21):e70055. doi: 10.14814/phy2.70055.
11. Guillet S, Lazarov T, Jordan N, Boisson B, Tello M, Craddock B, Zhou T, Nishi C, Bareja R, Yang H, Rieux-Laucat F, Fregel Lorenzo RI, Dyal SD, Isenberg D, D'Cruz D, **Lachmann N**, Elemento O, Viale A, Socci ND, Abel L, Nagata S, Huse M, Miller WT, Casanova JL, Geissmann F. "ACK1 and BRK non-receptor tyrosine kinase deficiencies are associated with familial systemic lupus and involved in efferocytosis" **Elife**. 2024 Nov 21:13:RP96085. doi: 10.7554/eLife.96085.

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12. Arias AA, Neehus AL, Ogishi M, Meynier V, Krebs A, Lazarov T, Lee AM, Arango-Franco CA, Yang R, Orrego J, Corcini Berndt M, Rojas J, Li H, Rinchai D, Erazo-Borrás L, Han JE, Pillay B, Ponsin K, Chaldebas M, Philippot Q, Bohlen J, Rosain J, Le Voyer T, Janotte T, Amarajeeva K, Soudée C, Brollo M, Wiegmann K, Marquant Q, Seeleuthner Y, Lee D, Lainé C, Kloos D, Bailey R, Bastard P, Keating N, Rapaport F, Khan T, Moncada-Vélez M, Carmona MC, Obando C, Alvarez J, Cataño JC, Martínez-Rosado LL, Sanchez JP, Tejada-Giraldo M, L'Honneur AS, Agudelo ML, Perez-Zapata LJ, Arboleda DM, Alzate JF, Cabarcas F, Zuluaga A, Pelham SJ, Ensser A, Schmidt M, Velásquez-Lopera MM, Jouanguy E, Puel A, Krönke M, Ghirardello S, Borghesi A, Pahari S, Boisson B, Pittaluga S, Ma CS, Emile JF, Notarangelo LD, Tangye SG, Marr N, **Lachmann N**, Salvator H, Schlesinger LS, Zhang P, Glickman MS, Nathan CF, Geissmann F, Abel L, Franco JL, Bustamante J, Casanova JL, Boisson-Dupuis S. "Tuberculosis in otherwise healthy adults with inherited TNF deficiency." **Nature**. 2024 Sep;633(8029):417-425. doi: 10.1038/s41586-024-07866-3. Epub 2024 Aug 28.
13. Hurley K, Ozaki M, Philippot Q, Galvin L, Crosby D, Kirwan M, Gill DR, Alysandratos KD, Jenkins G, Griese M, Nathan N, Borie R; COST Open-ILD Group Management Committee. (incl. **Lachmann N**) "A roadmap to precision treatments for familial pulmonary fibrosis." **EBioMedicine**. 2024 Jun;104:105135. doi: 10.1016/j.ebiom.2024.105135. Epub 2024 May 7.
14. Jacobsen C, Plückebaum N, Ssebyatika G, Beyer S, Mendes-Monteiro L, Wang J, Kropp KA, González-Motos V, Steinbrück L, Ritter B, Rodríguez-González C, Böning H, Nikolouli E, Kinchington PR, **Lachmann N**, Depledge DP, Krey T, Viejo-Borbolla A. "Viral modulation of type II interferon increases T cell adhesion and virus spread." **Nat Commun**. 2024 Jun 22;15(1):5318. doi: 10.1038/s41467-024-49657-4.
15. Schnell A, Tamm S, Hedtfeld S, Rodriguez Gonzalez C, Hoerning A, **Lachmann N**, Stanke F, Dittrich AM, Munder A. "Analysis of CFTR mRNA and Protein in Peripheral Blood Mononuclear Cells via Quantitative Real-Time PCR and Western Blot." **Int J Mol Sci**. 2024 Jun 8;25(12):6367. doi: 10.3390/ijms25126367.
16. Ackermann M, Saleh F, Abdin SM, Rafiei Hashtchin A, Gensch I, Golgath J, Carvalho Oliveira M, Nguyen AHH, Gaedcke S, Fenske A, Jang MS, Jirmo AC, Abeln M, Hansen G, **Lachmann N**. "Standardized generation of human iPSC-derived hematopoietic organoids and macrophages utilizing a benchtop bioreactor platform under fully defined conditions" **Stem Cell Res Ther**. 2024 Jun 18;15(1):171. doi: 10.1186/s13287-024-03785-2.
17. Paasch D, **Lachmann N**, "CAR macrophages tuning the immune symphony of anti-cancer therapies" **Cell Stem Cell**. 2024 Jun 6;31(6):791-793. doi: 10.1016/j.stem.2024.05.006.
18. Momenilandi M, Lévy R, Sobrino S, Li J, Lagresle-Peyrou C, Esmaeilzadeh H, Fayand A, Le Floc'h C, Guérin A, Mina ED, Shearer D, Delmonte OM, Yatim A, Mulder K, Mancini M, Rinchai D, Denis A, Neehus AL, Balogh K, Brendle S, Rokni-Zadeh H, Changi-Ashtiani M, Seeleuthner Y, Deswarte C, Bessot B, Cremades C, Materna M, Cederholm A, Ogishi M, Philippot Q, Beganovic O, Ackermann M, Wuyts M, Khan T, Fouéré S, Herms F, Chanal J, Palterer B, Bruneau J, Molina TJ, Leclerc-Mercier S, Prétet JL, Youssefian L, Vahidnezhad H, Parvaneh N, Claeys KG, Schrijvers R, Luka M, Pérot P, Fourgeaud J, Nourrisson C, Poirier P, Jouanguy E, Boisson-Dupuis S, Bustamante J, Notarangelo LD, Christensen N, Landegren N, Abel L, Marr N, Six E, Langlais D, Waterboer T, Ginhoux F, Ma CS, Tangye SG, Meyts I, **Lachmann N**, Hu J, Shahrooei M, Bossuyt X, Casanova JL, Béziat V. "FLT3L governs the development of partially overlapping hematopoietic lineages in humans and mice" **Cell**. 2024 May 23;187(11):2817-2837.e31. doi: 10.1016/j.cell.2024.04.009. Epub 2024 May 3.
19. Pecksen E, Tkachuk S, Schröder C, Vives Enrich M, Neog A, Johnson CP, **Lachmann N**, Haller H, Kiyan Y. "Monocytes prevent apoptosis of iPSCs and promote differentiation of kidney organoids" **Stem Cell Res Ther**. 2024 May 3;15(1):132. doi: 10.1186/s13287-024-03739-8.

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20. Abdin SM, Mansel F, Hashtchin AR, Ackermann M, Hansen G, Becker B, Kick B, Pham N, Dietz H, Schaniel C, Martin U, Spreitzer I, **Lachmann N.** „Sensor macrophages derived from human induced pluripotent stem cells to assess pyrogenic contaminations in parenteral drugs.“ **Biofabrication**. 2024 May 17;16(3). doi: 10.1088/1758-5090/ad4744.
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