

Bufler, Philip, Prof., MD (B01)

Personal Data

Title	Prof. Dr. med.
First name	Philip
Name	Bufler
Current position	Professor of Pediatrics and Pediatric Gastroenterology (W3), Director Department of Pediatric Gastroenterology, Nephrology and Metabolic Diseases Charité – Universitätsmedizin Berlin, Campus Virchow-Klinikum (CVK); permanent position
Current institution(s)/site(s), country	Department of Pediatric Gastroenterology, Nephrology and Metabolic Diseases Charité – Universitätsmedizin Berlin, Campus Virchow-Klinikum (CVK) Augustenburger Platz 1, 13353 Berlin, Germany
Identifiers/ORCID	ORCID-ID: 0000-0002-5742-8273

Qualifications and Career

Stages	Periods and Details
Degree programme: Medicine	1988 – 1995, Ludwig-Maximilians-University (LMU) Munich, Germany (clinical electives: Guy's Hospital, London, UK; University of Chicago, Illinois, New York University, NY, USA)
Doctorate: MD thesis	20.02.1997: Supervisors: Hartmut Engelmann, Gerd Riethmüller, <i>"Soluble lipopolysaccharide receptor (CD14) is released via two different mechanisms from human monocytes and CD14 transfected cells"</i> (<i>summa cum laude</i>), Institute for Immunology, LMU Munich, Germany
Stages of academic / professional career	
Ongoing	Principal investigator: 8 clinical trials, one clinical study leading PI Germany
Since 2017	Professor of Pediatrics and Pediatric Gastroenterology (W3), Director Department of Pediatric Gastroenterology, Nephrology and Metabolic Diseases Charité – Universitätsmedizin Berlin, Campus Virchow-Klinikum (CVK), Berlin, Germany
2017	W2 Professor Pediatric Hepatology, LMU Munich, Germany
2014	Clinical observership <i>Pediatric Hepatology</i> Children's Hospital Cincinnati, Cincinnati, OH, USA, Medical School Hannover, Germany
2013	Head, Pediatric Hepatology, LMU Munich, Germany
2006	Habilitation and <i>venia legendi</i> Mentor: Dietrich Reinhardt, <i>"Mechanisms of innate immunity: pulmonary collectins and cytokines of the Interleukin-1 family as examples of local and systemic effector molecules"</i> , LMU Munich, Germany
2009	Board certification <i>Allergology</i>

2007	Attending Physician <i>Pediatric Gastroenterology</i> , Dr. von Hauner Children's Hospital, LMU Munich, Germany
2007	Board certification <i>Pediatric Gastroenterology</i>
2005 – 2007	Fellowship <i>Pediatric Gastroenterology</i> , Dr. von Hauner Children's Hospital, LMU Munich, Germany
2005	Board certification <i>Pediatrics</i>
2003 – 2005	Resident physician, Dr. von Hauner Children's Hospital, LMU Munich, Germany
2001 – 2003	Postdoctoral Research Fellowship (DFG), UCHSC Denver, Colorado, USA
1995 – 2001	Resident physician <i>Pediatrics</i> , Kinderpoliklinik, LMU Munich, Germany
1997 – 1998	Research Fellowship, MD Anderson Cancer Center, Houston, TX, USA

Engagement in the Research System

- National guideline coordinator “Genetic cholestatic syndromes” (living guideline, S3, DGVS) (2022 – 2024), supported by Innovationsfond/G-BA
- Working group leader Pediatrics guideline “Acute and chronic Pancreatitis” (S3, DGVS)
- Other guidelines: DGVS Autoimmune liver diseases (S3, living guideline) (2022 – 2024), DGVS Crohn's disease, DGVS H. pylori, DGVS Hepatitis C
- Governing Board member and treasurer, Society for Pediatric Gastroenterology and Nutrition [Gesellschaft für pädiatrische Gastroenterologie und Ernährung (GPGE) (2009 – 2017)]
- Editorial board: *Frontiers in Immunology* (Associate Editor), *Mediators of Inflammation*, *Immune Network*

Scientific Results

Category A, * contributed equally, # open access

1. Azabdaftari A, Sczakiel HL, Danyel M, Kohlmaier B, Mache CJ, Stalke A, Pfister ED, Thumfart J, Henning S, Knisely AS, **Bufler P**. Biallelic known and novel DCDC2 variants in cholestatic liver disease: Phenotype-genotype observations in four children. **Liver Int** 2023; 43(5):1089-1095. doi: 10.1111/liv.15563.
2. Griessmair L, Pirringer L, Mountford S, Sendlhofert A, Koletzko S, Mayr D, **Bufler P**. Expression of IL-37 Correlates with Immune Cell Infiltrate and Fibrosis in Pediatric Autoimmune Liver Diseases. **J Pediatr Gastroenterol Nutr** 2022; 74,6,742-749. doi: 10.1097/MPG.0000000000003443.
3. Mountford S, Effenberger M, Noll-Puchta H, Griessmair L, Ringleb A, Haas S, Denk G, Reiter FP, Mayr D, Dinarello CA, Tilg H, **Bufler P**. Modulation of Liver Inflammation and Fibrosis by Interleukin-37. **Front Immunol** 2021; 12:603649. doi: 10.3389/fimmu.2021.603649. #
4. Mountford S, Ringleb A, Schwaiger R, Mayr D, Kobold S, Dinarello CA, **Bufler P**. Interleukin-37 Inhibits Colon Carcinogenesis During Chronic Colitis. **Front Immunol** 2019; 10:2632. doi: 10.3389/fimmu.2019.02632. #

5. Hudert CA, Tzschatzsch H, Rudolph B, Blaker H, Loddenkemper C, Muller HP, Henning S, **Bufler P**, Hamm B, Braun J, Holzhutter HG, Wiegand S, Sack I, Guo J. Tomoelastography for the Evaluation of Pediatric Nonalcoholic Fatty Liver Disease. **Invest Radiol** 2019; 54:198-203. doi: 10.1097/RLI.0000000000000529.
6. Hudert CA, Selinski S, Rudolph B, Blaker H, Loddenkemper C, Thielhorn R, Berndt N, Golka K, Cadenas C, Reinders J, Henning S, **Bufler P**, Jansen PLM, Holzhutter HG, Meierhofer D, Hengstler JG, Wiegand S. Genetic determinants of steatosis and fibrosis progression in paediatric non-alcoholic fatty liver disease. **Liver Int** 2019; 39:540-556. doi: 10.1111/liv.14006.
7. Nold-Petry CA, Lo CY, Rudloff I, Elgass KD, Li S, Gantier MP, Lotz-Havla AS, Gersting SW, Cho SX, Lao JC, Ellisdon AM, Rotter B, Azam T, Mangan NE, Rossello FJ, Whisstock JC, **Bufler P**, Garlanda C, Mantovani A, Dinarello CA, Nold MF. IL-37 requires the receptors IL-18Ralpha and IL-1R8 (SIGIRR) to carry out its multifaceted anti-inflammatory program upon innate signal transduction. **Nat Immunol** 2015; 16:354-365. doi: 10.1038/ni.3103.
8. Bulau AM, Nold MF, Li S, Nold-Petry CA, Fink M, Mansell A, Schwerd T, Hong J, Rubartelli A, Dinarello CA, **Bufler P**. Role of caspase-1 in nuclear translocation of IL-37, release of the cytokine, and IL-37 inhibition of innate immune responses. **Proc Natl Acad Sci U S A** 2014; 111:2650-2655. doi: 10.1073/pnas.1324140111. #
9. Ballak DB, van Diepen JA, Moschen AR, Jansen HJ, Hijmans A, Groenhof GJ, Leenders F, **Bufler P**, Boekschoten MV, Muller M, Kersten S, Li S, Kim S, Eini H, Lewis EC, Joosten LA, Tilg H, Netea MG, Tack CJ, Dinarello CA, Stienstra R. IL-37 protects against obesity-induced inflammation and insulin resistance. **Nat Commun** 2014; 5:4711. doi: 10.1038/ncomms5711. Erratum in: *Nat Commun* 2015;6:6039. #
10. Nold MF, Nold-Petry CA, Zepp JA, Palmer BE, **Bufler P**, Dinarello CA. IL-37 is a fundamental inhibitor of innate immunity. **Nat Immunol** 2010; 11:1014-1022. doi: 10.1038/ni.1944. #

Academic Distinctions

- Call W3 Professor Pediatric Gastroenterology University of Münster, Children's Hospital, Germany (2013)
- Call W2 Professor Pediatric Gastroenterology Goethe-University Frankfurt, Frankfurt, Germany (2011)
- Postdoctoral Investigator Award, International Cytokine Society (2003)

Collaborators

No.	Collaboration partners	Location/Institution
1	Charles A. Dinarello	Denver, Colorado, University of Colorado
2	Tobias Schwerd	Munich, Germany, LMU
3	Matthias Zilbauer	Cambridge, UK, University of Cambridge
4	Soo Hyun Kim	Seoul, Korea, Konkuk University
5	Alex Miethke	Cincinnati, OH, USA, Children's Hospital

6	Adrien Guillot	Berlin, Germany, Charité – Universitätsmedizin Berlin
7	Daniel Kotlarz	Munich, Germany, LMU
8	Marcel Nold	Melbourne, Australia, Monash University
9	Sibylle Koletzko	Munich, Germany, LMU
10	Katja Kotsch	Berlin, Germany, Charité – Universitätsmedizin Berlin

Fields of Research

No.	Fields of research
1	205-15 Medicine/ Gastroenterology
2	201-03 Basic Research in Biology and Medicine/ Cell Biology
3	204-05 Immunology