

# Prof. Dr. med. Jan Buer

## Curriculum Vitae

Semperstrasse 26, 45138 Essen

E-mail: buer.jan@uk-essen.de

Born on 26 December 1966 in Braunschweig · married, two children

---

## Education

1985	Abitur (secondary-school diploma), Gymnasium Vegesack (Bremen)
1985–86	Military service, German Air Force, Axtstedt (Lower Saxony)
1987–94	Studies in Human Medicine, Hannover Medical School (MHH)

## Clinical & Scientific Career

1990–95	Doctoral research (Dr. med.), Department of Haematology and Oncology, MHH (Prof. A. Ganser) and Memorial Sloan-Kettering Cancer Center (Prof. J. R. Bertino), New York – “summa cum laude”
1995–96	Resident physician (Arzt im Praktikum), Department of Haematology and Oncology, MHH (Prof. A. Ganser)
1996	Medical licence (Approbation)
1996–98	Postdoctoral fellow with Prof. H. von Boehmer, Hôpital Necker Enfants Malades (INSERM U373), Paris
1998–03	Head of the BMBF Junior Research Group “Mucosal Immunity”, GBF Braunschweig (today Helmholtz Centre for Infection Research, HZI)
1998–03	Specialist training in Medical Microbiology, Institute of Medical Microbiology and Hospital Hygiene, MHH (Prof. D. Bitter-Suermann)
07/2001	Habilitation in Immunology (MHH); appointment as Privatdozent
05/2003	Board certification (Facharzt) in Medical Microbiology, Virology and Infection Epidemiology
09/2003	Appointment as C3 Professor and Attending Physician, MHH (bridge professorship with the HZI)
02/2004	Extension of the venia legendi to the field of Medical Microbiology, MHH
06/2007	W3 Professor of Medical Microbiology and Institute Director, University Hospital Essen & Faculty of Medicine, University of Duisburg-Essen
10/2012	Dean of the Faculty of Medicine, University of Duisburg-Essen & Member of the Executive Board of University Hospital Essen (unanimously re-elected 2016, 2021 and 2024)

## Offices, Committees & Functions (Selection)

2008–12	Vice-Dean for Research and Early-Career Researchers, UDE
2009–12	Associate Editor, Journal of Investigative Dermatology
2009–12	Secretary of the German Society for Hygiene and Microbiology (DGHM)
2011	Congress President, 63rd Annual Meeting of the DGHM, Essen

2012–20	DFG Review Board member (FK 204-03: Medical Microbiology, Parasitology, Mycology & Hygiene, Molecular Infection Biology)
2012–20	Member of the Supervisory Board of the HZI, Braunschweig
2014–21	Member (Chair from 2017) of the Scientific Advisory Board of TWINCORE, Hannover
2018	Vice-President of the DGHM (re-elected 2020); Congress President, 70th Annual Meeting of the DGHM, Bochum
2020	Member of the University Council of Hannover Medical School (MHH)
2022	Member of the Senate and Grants Committee for Research Training Groups of the DFG (effective 1 January 2023)
2022	President of the German Society for Hygiene and Microbiology (DGHM)
2023	Member of the Board of MEDECON RUHR (healthcare-industry network of the Ruhr region)
2026	Reappointment to the Senate and Grants Committee for Research Training Groups of the DFG for a further three years
2026	Member of the International Expert Panel for the evaluation of the Department of Anaesthesiology and Perioperative Medicine, University of Zurich
2026	Invited Guest of Honour at the Annual Conference of the Sino-German Consortium on Medical Research and Education, Wuhan (China)

## Awards and Honours

1995	Doctoral Award of the “Society of Friends of the MHH”
1996	Two-year DFG research fellowship
2006	Roche Applied Science Innovation Award “Imagining the Future”
2017	Visiting Professorship, Huazhong University of Science & Technology, Wuhan
2021	Student Body Teaching Award (Medical Student Council)
2023–25	“Advisory Professorship”, Union Hospital, Wuhan

## Research and Clinical Focus

### Research Focus

- Immune regulation in transplantation and cancer
- Microbiome
- Neuroinfection and neuroimmunology
- Cardioimmunology

### Clinical Focus

- Molecular diagnostics and opportunistic fungal infections with multidrug-resistant pathogens
- Vaccination and travel medicine
- Sepsis and antibiotic stewardship
- AI, digitalisation and hospital hygiene (SMART Hospital)
- GREEN Hospital

## Organisation & Management as Dean and Board Member (Selection)

- Successful evaluation of University Medicine Essen by the German Council of Science and Humanities (Wissenschaftsrat, 2018).
- More than 100 successfully completed faculty appointment procedures since October 2012.
- Positioning as a research-intensive faculty with five dynamic focus areas.
- Co-responsibility for the Medical Modernisation Programme (MedMoP) of the State of North Rhine-Westphalia: around EUR 300 million for six construction and renovation projects (incl. ENT/Ophthalmology, Children's Hospital, Nuclear Medicine).
- Founding of the IKIM – Institute for Artificial Intelligence in Medicine (2019) with eight W3 professorships and five junior research groups.
- Leadership of the “Smart Hospital” approach of University Medicine Essen, including the SmartHospital.NRW collaborative project.
- Establishment of the Cancer Research Center Cologne Essen (2019) and successful launch of the NCT West (2023).
- Development of numerous DFG collaborative projects (incl. CRC/Transregio 289, 296, 332; Research Training Groups 1739, 1949, 2098, 2535, 2989; Clinical Research Unit KFO 337; Research Unit FOR 2879); extension of CRC/TRR 332 (May 2026) and new funding of CRC 1752 “DYNAMO” for the treatment of malignant melanoma (May 2026).
- Opening of the West German Proton Therapy Centre (2013) and the West German Heart and Vascular Centre (2015); establishment of the West German Biobank Essen (2013).
- Development of a strong General Practice division (>200 teaching practices) and the first W3 Chair of General Practice.
- First DFG-funded German-Chinese Transregio (TRR60) with Wuhan (2009–2018); international networking with China, the USA, Japan, Mexico and Mongolia, among others.
- Early-career development with a dedicated vice-deanship (UMEA/UMEA<sup>2</sup> Clinician Scientist programmes, BIOME Graduate School).
- Coordination of the interdisciplinary BMFTR project VaSequls (since 2026): an AI-based early-warning system integrating data from patient, drinking-water and wastewater samples.
- Establishment of the “West German Infection Prevention Network for AI-based Antibiotic Resistance Detection” (WIN-KID) with the University of Münster, funded through the ERDF Innovation Agency NRW (2021–2027).

### Third-Party Funding & Research Support

More than EUR 10 million in third-party funding acquired; regular funding from the DFG, BMBF/BMFTR and German Cancer Aid (Deutsche Krebshilfe). Founding member of the DKTK (Essen site) and the Comprehensive Cancer Center Essen.

## Publications (Selection)

*More than 330 publications with over 27,000 citations, D-index 82 (Research.com 2026). ORCID: 0000-0002-7602-1698.*

- Phan J., Cansiz F., Westendorf A., Buer J. & Tasdogan A. (2026). The role of retrotransposons in hematopoiesis and cancer. *Trends Cell Biol*, 36, 429–439.
- Steinbach P. et al. (2024). Influenza virus infection enhances tumour-specific CD8+ T-cell immunity, facilitating tumour control. *PLoS Pathog*, 20, e1011982.
- Huang K. D. et al. (2024). Establishment of a non-Westernized gut microbiota in men who have sex with men is associated with sexual practices. *Cell Rep Med*, 5, 101426.
- Abberger H. et al. (2023). Neuropilin-1 identifies a subset of highly activated CD8+ T cells during parasitic and viral infections. *PLoS Pathog*, 19, e1011837.
- Pylaeva E. et al. (2022). During early stages of cancer, neutrophils initiate anti-tumor immune responses in tumor-draining lymph nodes. *Cell Rep*, 40, 111171.
- Palmieri V. et al. (2021). Interleukin-33 signaling exacerbates experimental infectious colitis. *Mucosal Immunol*, 14, 923–936.
- Adamczyk A. et al. (2021). GPR15 facilitates recruitment of regulatory T cells to promote colorectal cancer. *Cancer Res*, 81, 2970–2982.
- Robak O. H. et al. (2018). Antibiotic treatment-induced secondary IgA deficiency enhances susceptibility to *Pseudomonas aeruginosa* pneumonia. *J Clin Invest*, 128, 3535–3545.
- Klein J. C. et al. (2017). Combined toll-like receptor 3/7/9 deficiency on host cells results in T-cell-dependent control of tumour growth. *Nat Commun*, 8, 14600.
- Oldenburg M. et al. (2012). TLR13 recognizes bacterial 23S rRNA devoid of erythromycin resistance-forming modification. *Science*, 337, 1111–1115.
- Hansen W. et al. (2012). Neuropilin-1 deficiency on CD4+Foxp3+ regulatory T cells impairs mouse melanoma growth. *J Exp Med*, 209, 2001–2016.
- Veldhoen M. et al. (2008). The aryl hydrocarbon receptor links TH17-cell-mediated autoimmunity to environmental toxins. *Nature*, 453, 106–109.
- Choudhury A. R. et al. (2007). Cdkn1a deletion improves stem cell function and lifespan of mice with dysfunctional telomeres without accelerating cancer formation. *Nat Genet*, 39, 99–105.
- Bohn G. et al. (2007). A novel human primary immunodeficiency syndrome caused by deficiency of the endosomal adaptor protein p14. *Nat Med*, 13, 38–45.

Essen, 15 June 2026

**Prof. Dr. med. Jan Buer**