

Prof. Dr. rer. nat. Daniel Robert Engel

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W2-Professor, Head of Department
<http://www.immunodynamics.de/>

University education

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| 1998 – 2003 | Studies in Biology, Rheinische Friedrich-Wilhelms-University Bonn, Universidade Estadual de Londrina, Londrina, Brazil |
| 2003 – 2007 | PhD thesis, Institute of Molecular Medicine and Experimental Immunology, University Hospital Bonn |
| 2007 – 2010 | Postdoc, Centre for Inflammatory Diseases, Monash University, Department of Medicine, Melbourne, Australia and Institute of Experimental Immunology, Bonn |

Scientific degrees

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| 2003 | Diploma in Biology, Rheinische Friedrich-Wilhelms-University Bonn |
| 2007 | PhD thesis, University Hospital Bonn |

Professional career

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| 2001 – 2003 | Research Fellow, Department Anti-Infectiva, Bayer AG, Wuppertal |
| 2003 – 2007 | Research scientist, DFG-funded Clinical Research Group |
| 2010 – 2014 | Principal Investigator and Head of the Junior Research Group “Cellular and molecular mechanisms of the innate immune response in urinary tract infection”, Institute of Experimental Medicine, University Hospital Bonn |
| 2014 – present | Professor of Immunodynamics, University Duisburg-Essen |

Selected professional service duties

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| 2010 – present | Ad hoc reviewer: Am J Physiol, Am Soc Nephrol, Biomark Insights, Cellular Immunol, Eur J Immunol, Front Immunol, Histochem Cell Biol, J Clin Invest, J Leukoc Biol, Kidney Int, Mediators Inflamm, Nat Commun, Mucosal Immunol, Nephrol Dial Transplant, Pathogens |
| 2011 – present | Editorial board member, Frontiers in Immunology, Antigen Presenting Cell Biology |
| 2014 – present | External Reviewer for grant applications: German Research Foundation; Agence Nationale de la Recherche, France; Wellcome Trust, UK |
| 2015 – present | Spokesman of the Medical Research Center at the University Hospital Essen |
| 2016 – present | Leader of the BIOME Core “Infectious Diseases” – DFG-funded Graduate School - at the University Duisburg-Essen |

Awards and scholarships

2001 – 2003	Bayer Research Fellowship
2010	Research fellow at the Centre for Inflammatory Diseases, Monash University, Department of Medicine, Melbourne, Australia
2011	Fritz and Ursula Melchers Award of the German Society of Immunology (DGFI)
2013	Best Young Research Group Award; University Hospital Bonn

Selected publications

- Pohl JM, Volke JK, Thiebes S, Brenzel A, Fuchs K, Beziere N, Ehrlichmann W, Pichler BJ, Squire A, Gueler F, **Engel DR**. CCR2-dependent Gr1^{high} monocytes promote kidney injury in shiga toxin-induced hemolytic uremic syndrome in mice. Eur J Immunol. 2018, 48:990-1000.
- Dixit A, Bottek J, Beerlage AL, Schuettpelz J, Thiebes S, Brenzel A, Garbers C, Rose-John S, Mittrücker HW, Squire A, **Engel DR**. Proliferation of Ly6C⁺ monocytes during urinary tract infections is regulated by IL-6 trans-signaling. J Leukoc Biol. 2018, 1:13-22.
- Pohl JM, Gutweiler S, Thiebes S, Volke J, Klein-Hitpass L, Zwanziger D, Gunzer M, Jung S, Agace W, Kurts C, **Engel DR**. Irf4-dependent CD103⁺CD11b⁺ dendritic cells and the intestinal microbiome regulate monocyte and macrophage activation and intestinal peristalsis in postoperative ileus. Gut 2017, 12:2110-2120.
- Zec, K., Volke, J., Vijitha, N., Thiebes, S., Gunzer, M., Kurts, C., and **Engel, DR**. Neutrophil Migration into the Infected Uroepithelium Is Regulated by the Crosstalk between Resident and Helper Macrophages. Pathogens 2016, 5.
- Engel DR**, Krause TA, Snelgrove SL, Thiebes S, Hickey MJ, Boor P, Kitching AR, Kurts C. CX3CR1 Reduces Kidney Fibrosis by Inhibiting Local Proliferation of Profibrotic Macrophages. J Immunol. 2015, 194:1628-38.
- Schiwon M, Weisheit C, Franken L, Gutweiler S, Dixit A, Meyer-Schwesinger C, Pohl JM, Maurice NJ, Thiebes S, Lorenz K, Quast T, Fuhrmann M, Baumgarten G, Lohse MJ, Opdenakker G, Bernhagen J, Bucala R, Panzer U, Kolanus W, Grone HJ, Garbi N, Kastenmuller W, Knolle PA, Kurts C, **Engel DR**. Crosstalk between Sentinel and Helper Macrophages Permits Neutrophil Migration into Infected Uroepithelium. Cell 2014, 156:456-68.
- Snelgrove SL, Kausman JY, Lo C, Lo C, Ooi JD, Coates PT, Hickey MJ, Holdsworth SR, Kurts C, **Engel DR***, Kitching AR*. Renal dendritic cells adopt a pro-inflammatory phenotype in obstructive uropathy to activate T cells but do not directly contribute to fibrosis. Am J Pathol 2012, 180:91-103 *contributed equally.
- Engel DR**, Koscielny A, Wehner S, Maurer J, Schiwon M, Franken L, Schumak B, Limmer A, Sparwasser T, Hirner A, Knolle PA, Kalff JC, Kurts C. T helper type 1 memory cells disseminate postoperative ileus over the entire intestinal tract. Nat Med. 2010, 16:1407-13.
- Engel DR**, Maurer J, Tittel AP, Weisheit C, Cavlar T, Schumak B, Limmer A, van Rooijen N, Trautwein C, Tacke F, Kurts C. CCR2 mediates homeostatic and inflammatory release of Gr1^(high) monocytes from the bone marrow, but is dispensable for bladder infiltration in bacterial urinary tract infection. J Immunol. 2008, 181:5579-86.
- Engel DR**, Dobrindt U, Tittel A, Peters P, Maurer J, Gütgemann I, Kaissling B, Kuziel W, Jung S, Kurts C. Tumor necrosis factor alpha- and inducible nitric oxide synthase-producing dendritic cells are rapidly recruited to the bladder in urinary tract infection but are dispensable for bacterial clearance. Infect Immun. 2006, 74:6100-7.