

Diefenbach, Andreas, Prof., MD (B07)

Personal Data

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| Title | Univ.-Prof. Dr. |
| First name | Andreas |
| Name | Diefenbach |
| Current position | Director, Microbiology, The Berlin Centre for the Biology of Health; permanent position |
| Current institution(s)/site(s), country | Department of Microbiology, Infectious Diseases and Immunology, Charité - Universitätsmedizin Berlin (CBF-CVK-CCM), Hindenburgdamm 30, 12203 Berlin, Germany |
| Identifiers/ORCID | ORCID-ID: 0000-0002-9176-9530 |

Qualifications and Career

| Stages | Periods and Details |
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| Degree programme: Medicine | 1989 – 1996, University Erlangen, Germany |
| Doctorate: MD thesis | 30.06.1997: Supervisor: Werner Solbach, “ <i>Regulation der Parasitenausbreitung bei der murinen Leishmania major Infektion</i> ”, Microbiology and Immunology, University Erlangen, Germany |
| Stages of academic/professional career | |
| Since 2016 | Full Professor (tenured, W3) and Director Institute of Microbiology, Infectious Diseases and Immunology, Charité – Universitätsmedizin Berlin, Berlin, Germany |
| 2003 – 2016 | Full Professor (tenured, W3) and Director Institute of Medical Microbiology and Hygiene, Johannes-Gutenberg University of Mainz, Medical Centre, Mainz, Germany |
| 2006 – 2013 | Full Professor (tenured, W3) Institute of Medical Microbiology and Hygiene, University of Freiburg Medical Centre, Freiburg, Germany |
| 2012 | Board certification <i>Microbiology, Virology and Epidemiology of Infections</i> |
| 2003 – 2006 | Assistant Professor (tenure-track), Skirball Institute of Biomolecular Medicine at New York University Medical Center, New York, USA |
| 1999 – 2003 | Postdoctoral Fellow, Department of Molecular & Cell Biology, University of California, Berkeley, USA |
| 1996 – 1998 | Resident in Microbiology, Institut für Klinische Mikrobiologie, Immunologie & Hygiene, University of Erlangen, Germany |

Engagement in the Research System

- Founding Director, *The Berlin Centre for the Biology of Health* (since 2023)
- Scientific Director, Labor Berlin (since 2021)

- Professor, Freie Universität (FU) Berlin, Dept. Biology, Chemistry and Pharmacy (since 2018)
- Editorial Advisory Board, Immunity (Cell Press) (since 2019)
- Member, Faculty Council, Charité – Universitätsmedizin Berlin (since 2018), Germany
- Scientific Advisory Board, Centre for Innovation Competence (ZIK) Septomics, Jena, Germany (since 2017)
- Liaison Professor (Vertrauensdozent), Studienstiftung des Deutschen Volkes (since 2017)
- Laboratory Head, Developmental and Mucosal Immunology, German Rheumatism Research Centre, A Leibniz Institute, Berlin (since 2016)
- Spokesperson, DFG Priority Program 1937 “*Innate Lymphoid Cells*” (2016 – 2023)
- Speaker, Research Centre Immunology, Universitätsmedizin Mainz (2015 – 2016)
- Steering Committee, International PhD Program of Institute of Molecular Biology (IMB) and University of Mainz (2014 – 2016)
- Associate Editor, *Eur J Immunol* (since 2013)
- Scientific Advisory Board, IfADo - Leibniz Research Centre for Working Environment and Human Factors, a Leibniz Institute, Dortmund, Germany (2012 – 2018)
- Director, Integrated Research and Training Group (IRTG-IMM) of SFB 620 (2009 – 2013)
- Executive Board, Sonderforschungsbereich (Collaborative Research Center) 620: “*Immunodeficiency*” (2009 – 2013)
- Executive Committee, Max-Planck-Research School of Molecular & Cellular Biology (IMPRS-MCB), Max-Planck-Institute of Immunobiology and Epigenetics (2009 – 2013)

Reviewer

*European Research Council; Deutsche Forschungsgemeinschaft; Deutsche Krebshilfe; FWF Der Wissenschaftsfonds, Austria; Swiss National Science Foundation, Switzerland; Medical Research Council, UK; Cancer Research, UK; The Wellcome Trust, UK; Agence Nationale de la Recherche, France; Center for Scientific Review, National Institutes of Health, USA; Nature Publishing Group (*Nature, Nat Immunol, Nat Med, Nat Rev Immunol, Nat Commun, Mucosal Immunol, Leukemia*); Science Journals (*Science, Sci Immunol, Sci Transl Med*); Cell Press Journals (*Cell, Immunity, Cell Metab, Cell Rep, Trends Immunol*); *J Exp Med, J Clin Invest, PNAS, EMBO J, EMBO Rep, Blood, J Immunol, Eur J Immunol**

Scientific Results

Category A, * contributed equally, # open access

1. Witkowski M, Tizian C, Ferreira-Gomes M, Niemeyer D, Jones TC, Heinrich F, Frischbutter S, Angermair S, Hohnstein T, Mattiola I, Nawrath P, McEwen S, Zocche S, Viviano E, Heinz GA, Maurer M, Kölsch U, Chua RL, Aschman T, Meisel C, Radke J, Sawitzki B, Roehmel J, Allers K, Moos V, Schneider T, Hanitsch L, Mall MA, Conrad C, Radbruch H, Duerr CU, Trapani JA, Marcenaro E, Kallinich T, Corman VM, Kurth F, Sander LE, Drosten C, Treskatsch S, Durek P, Kruglov A, Radbruch A, Mashreghi MF, **Diefenbach A**. Untimely TGF β responses in COVID-19 limit antiviral functions of NK cells. **Nature** 2021; 600(7888):295-301. doi: 10.1038/s41586-021-04142-6.
2. Guendel F, Kofoed-Branzk M, Gronke K, Tizian C, Witkowski M, Cheng HW, Heinz GA, Heinrich F, Durek P, Norris PS, Ware CF, Ruedl C, Herold S, Pfeffer K, Hehlhans T, Waisman A, Becher B, Giannou AD, Brachs S, Ebert K, Tanriver Y, Ludewig B, Mashreghi

- MF, Kruglov AA, **Diefenbach A**. Group 3 Innate Lymphoid Cells Program a Distinct Subset of IL-22BP-Producing Dendritic Cells Demarcating Solitary Intestinal Lymphoid Tissues. **Immunity** 2020; 53(5):1015-1032.e8. doi: 10.1016/j.immuni.2020.10.012. #
3. Schaupp L, Muth S, Rogell L, Kofoed-Branzk M, Melchior F, Lienenklaus S, Ganal-Vonarburg SC, Klein M, Guendel F, Hain T, Schütze K, Grundmann U, Schmitt V, Dorsch M, Spanier J, Larsen PK, Schwanz T, Jäckel S, Reinhardt C, Bopp T, Danckwardt S, Mahnke K, Heinz GA, Mashreghi MF, Durek P, Kalinke U, Kretz O, Huber TB, Weiss S, Wilhelm C, Macpherson AJ, Schild H, **Diefenbach A***, Probst* HC. Microbiota-Induced Type I Interferons Instruct a Poised Basal State of Dendritic Cells. **Cell** 2020; 181(5):1080-1096.e19. doi: 10.1016/j.cell.2020.04.022. #
 4. Gronke K, Hernández PP, Zimmermann J, Klose CSN, Kofoed-Branzk M, Guendel F, Witkowski M, Tizian C, Amann L, Schumacher F, Glatt H, Triantafyllopoulou A, **Diefenbach A**. Interleukin-22 protects intestinal stem cells against genotoxic stress. **Nature** 2019; 566(7743):249-253. doi: 10.1038/s41586-019-0899-7. #
 5. Hernández PP, Mahlakoiv T, Yang I, Schwierzeck V, Nguyen N, Guendel F, Gronke K, Ryffel B, Hoelscher C, Dumoutier L, Renauld JC, Suerbaum S, Staeheli P, **Diefenbach A**. Interferon- λ and interleukin 22 act synergistically for the induction of interferon-stimulated genes and control of rotavirus infection. **Nat Immunol** 2015; 16(7):698-707. doi: 10.1038/ni.3180. #
 6. Klose CSN, Flach M, Möhle L, Rogell L, Hoyler T, Ebert K, Fabiunke C, Pfeifer D, Sexl V, Fonseca-Pereira D, Domingues RG, Veiga-Fernandes H, Arnold SJ, Busslinger M, Dunay IR, Tanriver Y, **Diefenbach A**. Differentiation of type 1 ILCs from a common progenitor to all helper-like innate lymphoid cell lineages. **Cell** 2014; 157(2):340-356. doi: 10.1016/j.cell.2014.03.030. #
 7. Klose CS, Kiss EA, Schwierzeck V, Ebert K, Hoyler T, d'Hargues Y, Göppert N, Croxford AL, Waisman A, Tanriver Y, **Diefenbach A**. A T-bet gradient controls the fate and function of CCR6-ROR γ t⁺ innate lymphoid cells. **Nature** 2013; 494(7436):261-5. doi: 10.1038/nature11813
 8. Hoyler T, Klose CS, Souabni A, Turqueti-Neves A, Pfeifer D, Rawlins EL, Voehringer D, Busslinger M, **Diefenbach A**. The transcription factor GATA-3 controls cell fate and maintenance of type 2 innate lymphoid cells. **Immunity** 2012; 37(4):634-48. doi: 10.1016/j.immuni.2012.06.020. #
 9. Ganal SC, Sanos SL, Kallfass C, Oberle K, Johner C, Kirschning C, Lienenklaus S, Weiss S, Staeheli P, Aichele P, **Diefenbach A**. Priming of natural killer cells by nonmucosal mononuclear phagocytes requires instructive signals from commensal microbiota. **Immunity** 2012; 37(1):171-86. doi: 10.1016/j.immuni.2012.05.020. #
 10. Kiss EA, Vonarbourg C, Kopfmann S, Hobeika E, Finke D, Esser C, **Diefenbach A**. Natural aryl hydrocarbon receptor ligands control organogenesis of intestinal lymphoid follicles. **Science** 2011; 334(6062):1561-5. doi: 10.1126/science.1214914.

Academic Distinctions

- ERC Advanced Grant (2022)
- Visiting Professor, Chiba University, Chiba, Japan (2019 – 2022)

- Elected Member, Berlin-Brandenburg Academy of Sciences (since 2018)
- Highly Cited Researcher (Web of Science, Clarivate Analytics) (since 2017)
- EINSTEIN Professor for Microbiology (*Einstein Foundation Berlin*) (since 2016)
- ERC Starting/Consolidator Grant (2013 – 2019)
- Main Scientific Prize, *Deutsche Gesellschaft für Mikrobiologie und Hygiene* (2010)
- Kavli Fellow, *National Academy of Sciences USA & Alexander-von-Humboldt-Stiftung* (2009)
- Whitehead Fellowship for Junior Faculty in Biomedical Sciences (2004 – 2005)
- Irene Diamond Professorship for Immunology (2003 – 2006)
- Postdoctoral Fellowship for Physicians, *Howard Hughes Medical Institute* (2000 – 2003)
- Postdoctoral Fellowship, *Deutsche Forschungsgemeinschaft* (1999 – 2000)
- Dissertation Award (*summa cum laude*), University of Erlangen (1998)
- Stipend, *Dr. Carl Duisberg Stiftung* (1993 / 1994)