

Prof. Christoph Wilhelm, PhD

Institute of Clinical Chemistry and Clinical Pharmacology



new Member since 2015

Rheinische Friedrich-Wilhelms-University Bonn, Institute of Clinical Chemistry and Clinical Pharmacology

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Research Expertise

Prof. Wilhelm has longterm experience in the research of a unique group of immune cells termed innate lymphoid cells (ILC). His scientific focus is to understand how these cells protect the barrier sites of our body such as the lung, skin and gut and to understand the maintenance of ILC mediated barrier immunity in the context of malnutrition. The overall aim of this research is to understand the link between westernization and the growing health problem of chronic inflammatory conditions such as inflammatory bowel disease (IBD) and asthma.

Education / Training

National Institute for Medical Research, London, UK, Immunology, PhD, 2011

University of Munich, Germany, Biology MSc (Diploma), 2007

Appointments / Positions Held

2015 - present

Assistant Professor for Immunopathology, University of Bonn, Germany

2015 - present

Principal Investigator, Department of Medicine, University of Bonn, Germany

2011- 2015

Postdoctoral Fellow, National Institutes of Health, USA

Honors / Awards

2015

NRW-Return Programme, funding to establish an independent research programme

2014

NIH Fellow Award for Research Excellence (FARE award)

2014

The CIG best paper award, Best publication in cytokine research for postdoctoral fellow working at the NIH and FDA

2014

Keystone Symposia travel fellowship for oral presentation at the Keystone Symposia 2014

2013

Society of Mucosal Immunology travel fellowship

2012

NIH Fellow Award for Research Excellence (FARE award)

2012

Human Frontiers Science program postdoctoral fellowship

2010

British Society for Immunology travel fellowship for the International Congress of Immunology

2010

European Federation of Immunological Societies travel fellowship for the International Congress of Immunology

2009

European Federation of Immunological Societies travel fellowship for the European Congress of Immunology

2008

MUGEN travel fellowship for ENII-MUGEN Immunology Summer School

2007

Medical Research Council (MRC) Ph.D. studentship

10 Most Relevant Publications for Prof. Christoph Wilhelm

1. Zhong C, Cui K, Wilhelm C, Hu G, Mao K, Belkaid Y, Zhao K, Zhu J. GATA3 dictates NKp46+ T-bet/RORyt-co-expressing ILC3 development and regulates ILC3 homeostasis and function. *Nature Immunology* 2016.
2. Askenase MH, Han SJ, Byrd AL, Morais da Fonseca D, Bouladoux N, Wilhelm C, Konkel JE, Hand TW, Lacerda-Queiroz N, Su XZ, Trinchieri G, Grainger JR, Belkaid Y. Bone-Marrow-Resident NK Cells Prime Monocytes for Regulatory Function during Infection. *Immunity* 2015.
3. Naik, S., N. Bouladoux, J.L. Linehan, S.J. Han, O.J. Harrison, C. Wilhelm, S. Conlan, S. Himmelfarb, A.L. Byrd, C. Deming, M. Quinones, J.M. Brenchley, H.H. Kong, R. Tussiwand, K.M. Murphy, M. Merad, J.A. Segre, and Y. Belkaid. 2015. Commensal-dendritic-cell interaction specifies a unique protective skin immune signature. *Nature* 2015.
4. Wilhelm C*, Spencer SP*, Yang Q, Hall JA, Bouladoux N, Boyd A, Nutman TB, Urban JF Jr, Wang J, Ramalingam TR, Bhandoola A, Wynn TA, Belkaid Y. Adaptation of innate lymphoid cells to a micronutrient deficiency promotes type 2 barrier immunity. *Science* 2014 *Primary authors contributed equally to this work.
5. Turner JE*, Morrison PJ*, Wilhelm C, Wilson M, Ahlfors H, Renaud JC, Panzer U, Helmsby H and Stockinger B. (2013) IL-9-mediated survival of type 2 innate lymphoid cells promotes damage control in helminth-induced lung inflammation. *J Exp Med* *Primary authors contributed equally to this work.
6. Naik S, Bouladoux N, Wilhelm C, Molloy MJ, Salcedo R, Kast-enmuller W, Deming C, Quinones M, Koo L, Conlan S, Spencer S, Hall JA, Dzutsev A, Kong H, Campbell DJ, Trinchieri G, Segre JA, Belkaid Y. (2012) Compartmentalized control of skin immunity by resident commensals. *Science*
7. Wilhelm C, Turner JE, Van Snick J, and Stockinger B. The many lives of IL-9: a question of survival? *Nature Immunology* 2012.
8. Wilhelm C, Hirota K, Stieglitz B, Van Snick J, Tolaini M, Lahl K, Sparwasser T, Helmsby H and Stockinger B. (2011) An IL-9 fate reporter demonstrates the induction of an innate IL-9 response in lung inflammation. *Nature immunology*
9. Li Y, Innocentin S, Withers DR, Roberts NA, Gallagher AR, Grigorieva EF, Wilhelm C and Veldhoen M. (2011) Exogenous stimuli maintain intraepithelial lymphocytes via aryl hydrocarbon receptor activation. *Cell*
10. Veldhoen M, Uyttenhove C, van Snick J, Helmsby H, Westendorf A, Buer J, Martin B, Wilhelm C and Stockinger B. (2008) Transforming growth factor-beta 'reprograms' the differentiation of T helper 2 cells and promotes an interleukin 9-producing subset. *Nature immunology*