

Siegmund, Britta, Prof., MD (A05)

Personal Data

Title	Prof. Dr. med.
First name	Britta
Name	Siegmund
Current position	Director, Department Gastroenterology, Infectiology, Rheumatology (W3), Co-founding Director, The Berlin Centre for the Biology of Health; permanent position
Current institution(s)/site(s), country	Department of Gastroenterology, Infectious Diseases, Rheumatology (incl. Nutritional Therapy), Charité – Universitätsmedizin Berlin, Campus Benjamin Franklin (CBF) Hindenburgdamm 30, 12203 Berlin, Germany
Identifiers/ORCID	ORCID-ID: 0000-0002-0055-958X

Qualifications and Career

Stages	Periods and Details
Degree programme: Medicine	1992 – 1998, Ludwig-Maximilians-Universität, Munich, Germany & Harvard Medical School, Boston, USA
Doctorate	12.11.1998: Supervisor: Stefan Endres, “Regulation der Tumor-Nekrose-Faktor-α-Synthese durch Interleukin-10 und cAMP-erhörende Substanzen”, Ludwig-Maximilians-Universität, Munich, Germany
Stages of academic / professional career	
Since 2016	Medical Director, CharitéCentrum13 Internal Medicine with Gastroenterology and Nephrology, Berlin, Germany
Since 2013	Full Professor (tenured) and Director, Dept. of Gastroenterology, Infectious Diseases, Rheumatology (incl. Nutritional Medicine), Charité – Universitätsmedizin Berlin, Germany
2002 – 2013	Residency Internal Medicine (2002 – 2007), Consultant (2007 – 2012), Deputy Director (2012 – 2013), Dept. of Gastroenterology, Infectious Diseases, Rheumatology (incl. Nutritional Medicine), Charité – Universitätsmedizin Berlin, Germany
Since 2010	Certified principal investigator in clinical trials
2009	Board certification <i>Gastroenterology</i>
2007	Board certification <i>Internal Medicine</i>
2000 – 2002	Postdoctoral Fellow, University of Colorado, Denver, USA
1998 – 2000	Resident physician in Internal Medicine, Klinikum Innenstadt der Ludwig-Maximilians-Universität Munich, Germany

Engagement in the Research System

- Vice president, German Research Foundation (since 2019)

- Co-spokesperson, DGF CRC-TR241 “Immune-Epithelial Communication in Inflammatory Bowel Diseases” (since 2018)
- Member, Faculty Council, Charité (since 2018)
- Member of the Senate, German Research Foundation (2017 – 2019)
- Member, Steering Committee, Deutsche Gesellschaft für Gastroenterologie, Verdauungs- und Stoffwechselerkrankungen (DGVS) (2017 – 2022)
- Guideline coordinator, DGVS (2017 – 2022)
- Associate Editor *Journal of Crohn's & Colitis* (2015 – 2021)
- Editorial Board: *Journal of Crohn's & Colitis*, *Nat Rev Gastroenterol Hepatol*, *Mucosal Immunology*, *EBio* (since 2018)
- Spokesperson, DFG CRC633 “Induction and Modulation of T cell Mediated Immune Responses in the Gastrointestinal Tract” (2012 – 2015)
- Founding member, Deputy Director BIH Charité Clinician Scientist Program (since 2011)

Scientific Results

Category A, * contributed equally, # open access

1. Louis E, Resche-Rigon M, Laharie D, Satsangi J, Ding N, **Siegmund B**, D'Haens G, Picon L, Bossuyt P, Vuitton L, Irving P, Viennot S, Lamb C, Pollok R, Baert F, Nachury M, Fumery M, Gilletta C, Almer S, Benhorin S, Bouchnik Y, Colombel JF, Hertervig E. Withdrawal of infliximab or concomitant immunosuppressant therapy in Crohn's disease patients on combination therapy: a randomized controlled trial (SPARE). **Lancet Gastroenterol Hepatol** 2023; 8(3):215-227. doi: 10.1016/S2468-1253(22)00385-5. # **Investigator-initiated trial, funded by the EU Horizon 2020 Program, this a landmark paper for the field of deescalating therapy, I am the lead investigator for Germany.**
2. Hecker J, Letizia M, Loescher BS, **Siegmund B***, Weidinger C*. Early onset of TNF α -driven arthritis, auto-inflammation, and progressive loss of vision in a patient with ALPK1 mutation. **J Clin Immunol** 2022; 42(2):880-84. doi: 10.1007/s10875-022-01214-8. #
3. Atreya R, **Siegmund B**. Location is important: differentiation between ileal and colonic Crohn's disease. **Nat Rev Gastro Hepatol** 2021; 18(8):544-558. doi: 10.1038/s41575-021-00424-6. **This review outlines that the site of intestinal inflammation drives the molecular mechanism of disease and thus warrants for a new disease classification.**
4. Jessen B, Rodriguez-Sillke Y, Sonnenberg E, Schumann M, Kruglov A, Freise I, Schmidt F, Maul J, Kühl AA, Glauben R, Lissner D*, **Siegmund B***. Level of tumor necrosis factor production by stimulated blood mononuclear cells can be used to predict response of patients with inflammatory bowel diseases to infliximab. **Clin Gastroenterol Hepatol** 2021; 19(4):721-31. doi: 10.1016/j.cgh.2020.03.066.
5. Ziegler J, Boettcher C, Letizia M, Cansu Y, Wu H, Freise I, Rodriguez-Sillke Y, Stoyanova A, Kreis M, Asbach P, Kunkel D, Priller J, Anagostopoulos I, Kuehl A, Miehle K, Sturmfull M, Tran F, Friedrich B, Fordter M, Franke A, Bojarski C, Glauben R, Löscher BS, **Siegmund B***, Weidinger C*. Leptin induces TNF α -dependent inflammation in acquired generalized lipodystrophy and combined Crohn's disease. **Nat Commun** 2019; 10(1):5629. doi: 10-1038/s41467-019-13559-7. # **This is a rare disease patients that allows for studying the effect of lack of adipose tissue on the immune system and subsequent inflammation.**
6. Wu H, Han Y, Rodriguez Sillke Y, Deng H, Siddiqui S, Treese C, Schmidt F, Friedrich M, Keye J, Wan J, Qin Y, Kühl AA, Qin Z, **Siegmund B***, Glauben R*. Lipid droplet-dependent

- fatty acid metabolism controls the immune suppressive phenotype of tumor-associated macrophages. **EMBO Mol Med** 2019; 11(11):e10698. doi: 10.15252/emmm.201910698. # This study exemplifies how the local milieu shapes the phenotype and function of macrophages.
7. Kredel LI, Jödicke LJ, Scheffold A, Gröne J, Glauben R, Erben U, Kühl AA, **Siegmund B**. T-cell composition in ileal and colonic creeping fat - separating ileal from colonic Crohn's disease. **J Crohns Colitis** 2019; 13(1):79-91. doi: 10.1093/ecco-jcc/jjy146.
 8. Kredel LI, Batra A, Stroh T, Kühl AA, Zeitz M, Erben U, **Siegmund B**. Adipokines from local fat cells shape the macrophage compartment of the creeping fat in Crohn's disease. **Gut** 2013; 62:852-62. doi: 10.1136/gutjnl-2011-301424. Disease specific characteristics of the mesenteric fat tissue in Crohn's disease were identified which can be considered as co-opted *Hallmark of Health*.
 9. **Siegmund B**, Sennello JA, Jones-Carson J, Gamboni-Robertson F, Lehr HA, Batra A, Fedke I, Zeitz M, Fantuzzi G. Leptin receptor on T lymphocytes modulates chronic intestinal inflammation in mice. **Gut** 2004; 53:965-72. doi: 10.1136/gut.2003.027136. # This work identified a link between the metabolic factor leptin and T cell function in intestinal inflammation.
 10. **Siegmund B**, Lehr HA, Fantuzzi G. Leptin: a pivotal role in intestinal inflammation. **Gastroenterology** 2002; 122:2011-2025. doi: 10.1053/gast.2002.33631. First work identifying leptin as a key factor in intestinal inflammation and as such a key link for immune-metabolism.

Category B, # open access

1. Voskens CJ, Stoica D, Roessner S, Vitali F, Zundler S, Rosenberg M, Wiesinger M, Wunder J, **Siegmund B**, Schuler-Thurner B, Schuler G, Berling C, Atreya R, Neurath MF. Safety and tolerability of a single infusion of autologous ex vivo expanded regulatory T cells in adults with ulcerative colitis (ER-TREG01): protocol of a phase 1, open-label, fast-track dose-escalation clinical trial. **BMJ Open** 2021; 11(12):e049208. doi: 10.1136/bmjopen-2021-049208. # This is a trial protocol from a study within the CRC-TR241 that aims at reconstituting the Hallmarks of Health by autologous transfer of regulatory T cells in patients with ulcerative colitis.
2. **Siegmund B**, Feakins RM, Bamias G, Coelho LJ, Teixeira FV, Rogler G, Scharl M. Results of the 5th scientific workshop of the ECCO (II): Pathophysiology of perianal fistulising disease. **J Crohns Colitis** 2016; 10:377-86. doi: 10.1093/ecco-jcc/jv228. Epub 2015 Dec 17. Erratum in: J Crohns Colitis. 2016 Jul;10(7):870. PMID: 26681764; PMCID: PMC4946764. #
3. Magro F, Rahier J-F, Abeu C, MacMahon E, Hart A, van der Woude CJ, Gordon H, Adamina M, Viget N, Vavricka S, Kucharzik T, Leone S, **Siegmund B**, Danese S, Peyrin-Biroulet L. Inflammatory bowel disease management during the COVID-19 outbreak: The 10 do's and don'ts from the ECCO-COVID taskforce. **J Crohn's & Colitis** 2020; 14(Suppl_3):S798-S806. doi: 10.1093/ecco-jcc/jjaa160. #
4. Mascagni P, Leoni F, Porro G, Pagani P, Dona G, Pozzi P, Dinarello C, Fantuzzi G, **Siegmund B**, Reznikov L, Bufler P, Kim S-h, Pomerantz B. DE60232797D1, histone deazetylase enzyme-inhibiting hydroxamic acid derivatives as new inflammatory inhibitors for inhibiting cytokine synthesis.

Academic Distinctions

- President European Crohn's & Colitis Organization (2023 – 2025)
- Member, Walther-Siegenthaler-Society (2020)
- Member, Berlin Brandenburgische Akademie der Wissenschaften (2019)
- Member, National Academy of Sciences – Leopoldina (2017)
- Heisenberg professor, German Research Foundation (2012 – 2013)
- Rising Star Award (United European Gastroenterology Federation) (2006)
- Emmy Noether Research Group Leader, German Research Foundation (2003 – 2007)
- Young Investigator Award, International Cytokine Society (2001)
- LMU-Harvard educational exchange program (1997)