

Curriculum Vitae

Theresa Graalmann Dr. med., Dr. rer. nat
(né Frenz) d.o.b. March 15th, 1982, in Bad Soden-Salmünster, Germany

University Education

2019 Doctorate Medicine, TWINCORE & Hannover Medical School, Hannover, Germany
2012–2018 Studies of Medicine, Hannover Medical School (MHH), Hannover, Germany
2010 Doctorate Biology, Paul-Ehrlich-Institut, Langen & MHH, Hannover, Germany
2001-2007 Studies of Biology, Goethe-University, Frankfurt, Germany

Scientific Career

Since 2021 Clinician scientist, Head of junior research group “Translational Immunology” at TWINCORE
Since 2018 Assistant physician, Department for Rheumatology and Immunology at MHH
2010-2020 Postdoctoral researcher in the Institute for Experimental Infection Research at TWINCORE
2008 1month research stay - Institute for Experimental Neuroimmunology, University Hospital Zurich, Switzerland
2006-2007 Diploma thesis - Department of Immunology, Paul-Ehrlich-Institut, Langen and Johann Wolfgang Goethe University, Frankfurt, Germany, under supervision of Prof. Dr. Ulrich Kalinke, Thesis: “Impact of type I interferon on activation and function of antigenspecific cytotoxic T cells”
2003 3-months research stay - University of Western Australia, Perth, Australia / Peron national park, Shark Bay, Australia

Awards and Honors

2025 “Paper of the month” at BREATH for the article “T cells of patients with systemic sclerosis or Sjögren’s disease display an aberrant metabolic state and memory phenotype in blood and lungs”, Rheumatology
2022 AAI Bright Sparks Award, Joint Meeting DGfI & ÖGAI, 2022 Hannover, Germany
2022 Best Poster Award at the 1st Young Inflammation Meeting of the DGRh Rheumazentrum Erlangen Nürnberg, Germany
2017 “Paper of the month” at HZI for the article “Systemic virus infections differentially modulate cell cycle state and functionality of long-term hematopoietic stem cells in vivo”, Cell Rep
2017 Milstein Travel Award to participate in the Cytokines Meeting 2017 in Kanazawa, Japan
2016 “Paper of the month” at HZI for the article “CD4(+) T cells in patients with chronic inflammatory rheumatic disorders show distinct levels of exhaustion”, J Allergy Clin Immunol
2010 EFIS Junior Delegate Travel Award to participate in the 14th International Congress of Immunology 2010 in Kobe, Japan

Citation Record

Total citations: 921; h-index:19; (Research gate January 28th, 2026)

Top-10 selected Publications

Christian L, Yilmaz H, Ruwisch J, Giercke L, Seeliger B, Kamp JC, Bayraktar S, Ewen R, **Graalmann T**, Fuge J, Greer M, Ius F, Welte T, Liao SY, Yang IV, Hohlfeld JM, Hoepfer, Gottlieb J, Kaminski N, Prasse A, Jonigk D, Li Y, Falk C, Neubert L, Schupp JC. Spatial Transcriptomics Uncovers Hybrid, Pro-Inflammatory and Pro-Fibrotic Cellular Niches in Pulmonary Granuloma of Patients with Chronic Sarcoidosis, **AJRCCM**, published January 23rd 2026; <https://doi.org/10.1093/ajrccm/aamaf089>

Ehlers C, Biermann H, Thiele T, Schupp JC, Villa M, Jänke C, Risser LM, Witte T, Kalinke U, Seeliger B & **Graalmann T**. T cells of patients with systemic sclerosis or Sjögren's disease display an aberrant metabolic state and memory phenotype in blood and lungs. **Rheumatology (Oxford)**. 2025 Aug 1;64(8):4806-4815. doi: 10.1093/rheumatology/keaf198.

Ehlers C, Thiele T, Biermann H, Traidl S, Bruns L, Ziegler A, Schefzyk M, Bartsch LM, Kalinke U, Witte T, **Graalmann T**. Toll-Like Receptor 8 is Expressed in Monocytes in Contrast to Plasmacytoid Dendritic Cells and Mediates Aberrant Interleukin-10 Responses in Patients With Systemic Sclerosis. **Arthritis Rheumatol**. 2025 Jan;77(1):59-66. doi: 10.1002/art.42964.

Elsayed A, von Hardenberg S, Atschekzei F, **Graalmann T**, Jänke C, Witte T, Ringshausen FC, Sogkas G. Phenotypic and pathomechanistic overlap between tapasin and TAP deficiencies. **J Allergy Clin Immunol**. 2024 Oct;154(4):1069-1075. doi: 10.1016/j.jaci.2024.06.003.

Stankov MV, Hoffmann M, Gutierrez Jauregui R, Cossmann A, Morillas Ramos G, **Graalmann T**, Winter EJ, Friedrichsen M, Ravens I, Ilievska T, Ristenpart J, Schimrock A, Willenzon S, Ahrenstorf G, Witte T, Förster R, Kempf A, Pöhlmann S, Hammerschmidt SI, Dopfer-Jablonka A, Behrens GMN. Humoral and cellular immune responses following BNT162b2 XBB.1.5 vaccination. **Lancet Infect Dis**. 2024 Jan;24(1):e1-e3. doi: 10.1016/S1473-3099(23)00690-4.

Graalmann T, Borst K, Manchanda H, Vaas L, Bruhn M, Graalmann L, Koster M, Verboom M, Hallensleben M, Guzmán CA, Sutter G, Schmidt RE, Witte T, Kalinke U. B cell depletion impairs vaccination-induced CD8+ T cell responses in a type I interferon-dependent manner. **Ann Rheum Dis**. 2021 Dec;80(12):1537-1544. doi: 10.1136/annrheumdis-2021-220435.

Durán V, Grabski E, Hozsa C, Becker J, Yasar H, Monteiro JT, Costa B, Koller N, Lueder Y, Wiegmann B, Brandes G, Kaefer V, Lehr CM, Lepenies B, Tampé R, Förster R, Bošnjak B, Furch M, **Graalmann T & Kalinke U**. Fucosylated lipid nanocarriers loaded with antibiotics efficiently inhibit mycobacterial propagation in human myeloid cells. **J Control Release**. 2021 Jun 10;334:201-212. doi: 10.1016/j.jconrel.2021.04.012.

Borst K, Flindt S, Blank P, Tegtmeyer P-K, Chhatbar C, Skerra J, Hirche C, König M, Alanentalo T, Hafner M, Waibler Z, Pfeffer K, Sexl V, Sutter G, Müller W, **Graalmann T & Kalinke U**. NK cell-derived IFN- γ is necessary and sufficient to control systemic vaccinia virus infection. **PLoS Pathog**. 2020 Feb 5;16(2):e1008279. doi: 10.1371/journal.ppat.1008279.

Hirche C & **Frenz T & Haas SF**, Döring M, Borst K, Tegtmeyer PK, Brizic I, Jordan S, Keyser K, Chhatbar C, Pronk E, Lin S, Messerle M, Jonjic S, Falk CS, Trumpp A, Essers MAG, Kalinke U.: Systemic virus infections differentially modulate cell cycle state and functionality of long-term hematopoietic stem cells in vivo. **Cell Rep**. 2017 Jun 13;19(11):2345-2356. doi: 10.1016/j.celrep.2017.05.063.

Frenz T & Grabski E & Buschjäger D, Vaas LA, Burgdorf N, Schmidt RE, Witte T, Kalinke U.: CD4(+) T cells in patients with chronic inflammatory rheumatic disorders show distinct levels of exhaustion. **J Allergy Clin Immunol**. 2016 Aug;138(2):586-589.e10. doi: 10.1016/j.jaci.2016.04.013.