

Transregional Collaborative Research Centre TRR60

中德跨学科重大合作项目 TRR60

**Mutual interaction of chronic viruses with cells
of the immune system: from fundamental research to
immunotherapy and vaccination**

持续性病毒感染中病毒与免疫细胞的相互作用

从基础研究到免疫治疗与预防策略

Funding periods 1+2: July 2009 – June 2018



Publications / Joint Publications

(July 2009 – December 2018)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
publications in Germany and in China	5	18	18	14	17	30	26	36	21	7
joint publications	1	4	7	11	12	18	14	10	18	5
total	6	22	25	25	29	48	40	46	39	12

Total: 292

thereof joint publications: 98 = 33%

Publications from only German and only Chinese subprojects

(order within each year: first author alphabetical order)

PIs in Funding Period 1 (until 12/2013) and Funding Period 2 are underlined

For Joint Publications: please scroll down to page 22 !

2018

Anastasiou OE, Widera M, Korth J, Kefalakes H, Katsounas A, Hilgard G, Gerken G, Canbay A, Ciesek S, Verheyen J

Clinical patterns associated with the concurrent detection of anti-HBs and HBV DNA
J Med Virol. 2018 Feb;90(2):282-290

Hasenkrug K, Chougnat C, Dittmer U

Regulatory T cells in Retroviral Infections
PLoS Pathog. 2018 Feb 15;14(2):e1006776. *Review*

Knuschke T, Rotan O, Bayer W, Kollenda S, Dickow J, Sutter K, Hansen W, Dittmer U, Lang KS, Epple M, Buer J, Westendorf AM

Induction of type I interferons by therapeutic nanoparticle-based vaccination is indispensable to reinforce cytotoxic CD8⁺ T cell responses during chronic retroviral infection

Front Immunol. 2018 Apr 23;9:614.

Kolenbrander A, Grewe B, Nemazee D, Überla K, Temchura V.

Generation of T-follicular helper cells in vitro: requirement for BCR cross-linking and cognate B- and T-cell interaction.

Immunology. 2018 Feb;153(2):214-224.

Lavender KJ, Pace C, Sutter K, Messer RJ, Pouncey DL, Cummin NW, Natesampillai S, Zheng J, Goldsmith J, Widera M, Van Dis ES, Phillips K, Race B, Dittmer U, Kukoli G, Hasenkrug KJ.

An advanced BLT-humanized mouse model for extended HIV-1 cure studies
AIDS. 2018 Jan 2;32(1):1-10

Otto L, Zelinsky G, Schuster M, Dittmer U, Gunzer M

Imaging of cytotoxic antiviral immunity while considering the 3R principle of animal research.

J Mol Med (Berl). 2018 Apr;96(3-4):349-360.

Tucci FA, Kitanovski S, Johansson P, Klein-Hitpass L, Kahraman A, Düriq J, Hoffmann D, Küppers R.

Biased IgVH gene repertoire and clonal expansions in B cells of chronically hepatitis C virus-infected individuals

Blood. 2018 Feb 1;131(5):546-557.

2017

Anastasiou OE, Widera M, Verheyen J, Korth J, Gerken G, Helfritz FA, Canbay A, Wedemeyer H, Ciesek S

Clinical course and core variability in HBV infected patients without detectable anti-HBc antibodies

J Clinical Virology 93 (2017) 46-52

Bongard N, Lapiente D, Windmann S, Dittmer U, Tenbusch M, Bayer W.

Interference of retroviral envelope with vaccine-induced CD8+ T cell responses is relieved by co-administration of cytokine-encoding vectors.

Retrovirology 2017 Apr 27;14:28

Buranapraditkun S, Pissani F, Teigler JE, Schultz BT, Alter G, Marovich M, Robb ML, Eller MA, Martin J, Deeks S, Michael NL, Streeck H.

Preservation of peripheral T follicular helper cell function in HIV controllers.

J Virol. 2017 May 3. pii: JVI.00497-17.

Drabczyk-Pluta M, Werner T, Hoffmann D, Leng Q, Chen I, Dittmer U, Zelinskyy G.

Granulocytic myeloid-derived suppressor cells suppress virus-specific CD8+ T cell responses during acute Friend retrovirus infection

Retrovirology. 2017 Aug 23;14(1):42

Kalkavan H, Sharma P, Kasper S, Helfrich I, Pandya AA, Gassa A, Virchow I, Flatz L, Brandenburg T, Namineni S, Heikenwalder M, Höchst B, Knolle PA, Wollmann G, von Laer D, Drexler I, Rathbun J, Cannon PM, Scheu S, Bauer J, Chauhan J, Häussinger D, Willimsky G, Löhning M, Schadendorf D, Brandau S, Schuler M, Lang PA, Lang KS.

Spatiotemporally restricted arenavirus replication induces immune surveillance and type I interferon-dependent tumor regression.

Nat Commun 2017;8:14447.

Kaulfuß M, Wensing I, Windmann S, Hrycak CP, Bayer W

Induction of complex immune responses and strong protection against retrovirus challenge by adenovirus-based immunization depends on the order of vaccine delivery.

Retrovirology. 2017 Feb 6;14(1):8. doi: 10.1186/s12977-017-0336-7.

Klein JC, Katrin Moses K, Zelinskyy G, Sody S, Buer J, Lang KS, Helfrich I, Dittmer U, Kirschning CJ, Brandau S.

Combined toll-like receptor 3/7/9 deficiency on host cells results in T-cell-dependent control of tumor growth.

Nature Communications. 2017. Mar 16;8:14600.

Landsberg CD, Megger DA, Hotter D, Rückborn MU, Eilbrecht M, Howe S, Sauter D, Sitek B, Le-Trilling VTK, Trilling M.

A comparative analysis of the interactomes of viral accessory proteins exploiting DDB1 and Cullin Ubiquitin ligases

PloS Pathogens, (submitted 11 September 2017)

Le-Trilling VTK* & Trilling M* (* corresponding authors)

Mouse newborn cells allow highly productive mouse cytomegalovirus replication, constituting a novel convenient primary cell culture system.

PLoS One. 2017 Mar 24;12(3)

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Natural killer T cells contribute to the control of acute retroviral infection.

Retrovirology. 2017 Jan 26;14(1):5.

Liu C, Huang X, Werner M, Broering R, Ge J, Li Y, Liao B, Sun J, Peng J, Lu M, Hou J, Zhang X.

Elevated Expression of Chemokine CXCL13 in Chronic Hepatitis B Patients Links to Immune Control during Antiviral Therapy.

Front Immunol. 2017 Mar 23;8:323.

Malyshkina A, Littwitz-Salomon E, Sutter K, Zelinskyy G, Windmann S, Schimmer S, Paschen A, Streeck H, Hasenkrug KJ, Dittmer U.

Fas Ligand-mediated cytotoxicity of CD4+ T cells during chronic retrovirus infection.

Sci Rep. 2017 Aug 10;7(1):7785.

Megger DA, Philipp J, Le-Trilling VTK, Sitek B, Trilling M.

Deciphering of the Human Interferon-regulated Proteome by Mass Spectrometry-based Quantitative Analysis Reveals Extent and Dynamics of Protein Induction and Repression

Frontiers in Immunology, section Molecular Innate Immunity. September 2017, Vol. 8, Article 1139

Megger DA, Pott LL, Rosowski K, Korte B, Tautges S, Bracht T, Sitek B

NHS-based tandem mass tagging of proteins at the level of whole cells: A critical evaluation in comparison to conventional TMT-labeling approaches for quantitative proteome analysis

Anal Sci. 2017;33(12):1387-1394

Meng Z, Lu M.

RNA Interference-Induced Innate Immunity, Off-Target Effect, or Immune Adjuvant?

Front Immunol. 2017 Mar 23;8:331. (*Review*)

Nemec M, Hoffmann D.

Quantitative Assessment of Molecular Dynamics Sampling for Flexible Systems.

J Chem Theory Comput. 2017 Feb 14;13(2):400-414.

Otto L, Schuster M, Zelinskyy G, Dittmer U, Gunzer M

Repetitive transfer of naïve fluorescent Friend Retrovirus-specific CD8+ T Cells from a single donor to visualize antiviral immunity in infected living mice

J Immunology (submitted 18 September 2017)

Saeedghalati M, Farahpour F, Budeus B, Lange A, Westendorf AM, Seifert M, Küppers R, Hoffmann D.

Quantitative Comparison of Abundance Structures of Generalized Communities: From B-Cell Receptor Repertoires to Microbiomes.

PLoS computational biology. 2017 Jan;13:e1005362.

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Differential Inhibitory Receptor Expression on T Cells Delineates Functional Capacities in Chronic Viral Infection

J Virol. 2017 Nov 14;91(23)

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Avidin-conjugated calcium phosphate nanoparticles as a modular targeting system for
the attachment of biotinylated molecules in vitro and in vivo.
Acta Biomaterialia 2017; 57:414-425.

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Hepatic expression of oncogenes Bmi1 and Dkk1 is up-regulated in hepatitis B virus
surface antigen-transgenic mice and can be induced by treatment with HBV particles
or lipopolysaccharides in vitro.
Int J Cancer. 2017 Jul 15;141(2):354-363.

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Akhmetzyanova I, Zelinskyy G, Littwitz-Salomon E, Malyshkina A, Dietze KK, Streeck H, Brandau S, Dittmer U.

CD137 Agonist Therapy Can Reprogram Regulatory T Cells into Cytotoxic CD4+ T Cells with Antitumor Activity.

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Viruses. 2016 May 10;8(5). E125. (*invited Review*)

Broering R, Trippler M, Werner M, Real CI, Megger DA, Bracht T, Schweinsberg V, Sitek B, Eisenacher M, Meyer HE, Baba HA, Weber F, Hoffmann AC, Gerken G, Schlaak JF.

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Sci Rep. 2016 Jan 25;6:19191.

Ehltling C, Trilling M, Tiedje C, Le-Trilling VT, Albrecht U, Kluge S, Zimmermann A, Graf D, Gaestel M, Hengel H, Häussinger D, Bode JG.

MAPKAP kinase 2 regulates IL-10 expression and prevents formation of intrahepatic myeloid cell aggregates during cytomegalovirus infections.

J Hepatol. 2016 Feb;64(2):380-9.

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Eur J Immunol. 2016 Feb;46(2):372-80.

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Reduced Frequencies and Activation of Regulatory T Cells After the Treatment of HIV-1-Infected Individuals with the CCR5 Antagonist Maraviroc Are Associated with a Reduction in Viral Loads Rather Than a Direct Effect of the Drug on Regulatory T Cells.

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Combination of nanoparticle-based therapeutic vaccination and transient ablation of regulatory T cells enhances anti-viral immunity during chronic retroviral infection

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Broad and potent antiviral activity of the NAE inhibitor MLN4924.

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Insufficient natural killer cell responses against retroviruses: how to improve NK cell killing of retrovirus-infected cells.

Retrovirology. 2016 Nov 8;13(1):77. (Review)

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Genes encoding members of the JAK-STAT pathway or epigenetic regulators are recurrently mutated in T-cell prolymphocytic leukaemia.

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Antiviral CD8(+) T Cells Restricted by Human Leukocyte Antigen Class II Exist during Natural HIV Infection and Exhibit Clonal Expansion.

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