

Nicole Joller - Publications

Borsa M, Barandun N, Gräbnitz F, Barnstorf I, Baumann NS, Pallmer K, Baumann S, Stark D, Balaz M, Oetiker N, Wagen F, Wolfrum C, Simon AK, **Joller N**, Barral Y, Spörri R, Oxenius A
Asymmetric cell division shapes naive and virtual memory T-cell immunity during ageing.
Nat Commun. 2021 May 11;12(1):2715.. IF: 12.121

Panetti C, Kao KC, Joller N[‡]
Dampening antiviral immunity can protect the host.
FEBS J. 2021 Feb 11. IF: 4.392

Estrada Brull A, Rost F, Oderbolz J, Kirchner F, Leibundgut-Landmann S, Oxenius A, Joller N[‡]
CD85k Contributes to Regulatory T Cell Function in Chronic Viral Infections.
Int J Mol Sci. 2020 Dec 22;22(1):31.. IF: 4.556

Xiao S, Bod L, Pochet N, Kota SB, Hu D, Madi A, Kilpatrick J, Shi J, Ho A, Zhang H, Sobel R, Weiner HL, Strom TB, Quintana FJ, **Joller N**, Kuchroo VK
Checkpoint Receptor TIGIT Expressed on Tim-1⁺ B Cells Regulates Tissue Inflammation
Cell Reports, 2020 Jul 14;32(2):107892, IF: 8.109

Joller N[‡]
Type 1 Treg cells act as unexpected helpers. [News and Views]
Nature Immunology, 2020 Jul;21(7):720-721, IF: 21.809

Rost F, Lambert K, Rakebrandt N, Joller N[‡]
Memory of Viral Infection in Regulatory T cells.
Scientific Reports, 2020 May 20;10(1):8350, IF: 4.011

Barnstorf I, Welten SPM, Borsa M, Baumann NS, Pallmer K, **Joller N**, Spörri R, Oxenius A
Chronic viral infections impinge on naive bystander CD8 T cells.
Immun Inflamm Dis. 2020 Mar 26, IF: 1.24

Schorer M, Lambert K, Rakebrandt N, Rost F, Kao KC, Yermanos A, Spörri A, Oderbolz J, Raeber ME, Keller CW, Lünemann JD, Rogler G, Boyman O, Oxenius A, Joller N
Rapid expansion of Treg cells protects from collateral colitis following a viral trigger.
Nat Commun. 2020 Mar 24; 11, IF: 11.880

Schorer M, Rakebrandt N, Lambert K, Hunziker A, Pallmer K, Oxenius A, Kipar A, Stertz S, Joller N
TIGIT limits immune pathology during viral infections.
Nat Commun. 2020 Mar 9;11(1):1288. IF: 11.880

Schorer M, Kuchroo VK, Joller N
Role of Co-stimulatory Molecules in T Helper Cell Differentiation
Adv Exp Med Biol. 2019;1189:153-177. doi: 10.1007/978-981-32-9717-3_6. IF: 1.760

Rakebrandt N, Joller N
Infection History Determines Susceptibility to Unrelated Diseases.
Bioessays. 2019 Jun;41(6):e1800191, IF: 4.419

Sparber F, De Gregorio C, Steckholzer S, Kirchner F, **Dolowschiak T**, Mertens S, Prinz I, **Joller N**, Glatz M, Sallusto F, LeibundGut-Landmann S
The IL-23/IL-17 axis exerts a dual role in the host response to the skin commensal yeast Malassezia by providing immunosurveillance and exacerbating skin inflammation.
Cell Host & Microbe, 2019 Mar 13; 25:389–403, IF: 17.872

Barnstorf I, Borsa M, Baumann N, Pallmer K, Yermanos A, **Joller N**, Welten SPM, Krautler NJ, Oxenius A
Innocent Bystanders: Chronic Virus Infection Compromises Memory Bystander T cell Function in a IL-6/STAT1 dependent manner.
Journal of Experimental Immunology, 2019 Mar 4;216(3):571-586.. IF: 10.790

Kirchner F, **Littringer L**, Altmeier S, Tran VDT, Schönherr F, Lemberg C, Pagni M, Sanglard D, **Joller N**, LeibundGut-Landmann S
Persistence of Candida albicans in oral mucosa induces a curbed inflammatory host response that is independent of immunosuppression
Frontiers in Immunology, 2019 Feb 27; 10:330, IF: 6.429

Littringer K, Moresi C, Rakebrandt N, Zhou X, Schorer M, Dolowschiak T, Kirchner F, Rost F, LeibundGut-Landmann S, Robinson MD, Joller N
Common features of regulatory T cell specialization during Th1 responses.
Frontiers in Immunology, 2018 Jun 13;9:1344.. IF: 6.429

Sparber F, **Dolowschiak T**, Mertens S, Lauener L, Clausen B, Stoitzner P, **Joller N**, Tussiwand R, LeibundGut-Landmann S

Langerin⁺ DCs regulate innate IL-17 production in the oral mucosa during Candida albicans-mediated infection.
PLoS Pathogens, 2018 May 21;14(5):e1007069. IF: 6.608

Dixon K*, **Schorer M***, Nevin J, Etminan Y, Amoozgar Z, Kondo T, Kurtulus S, Kassam N, Fukumura D, Jain RK, Anderson AC, Kuchroo VK*, **Joller N***

Functional anti-TIGIT antibodies regulate development of autoimmunity and anti-tumor immunity.
Journal of Immunology, 2018 Apr 15;200(8):3000-3007. IF: 4.856

†This publication was among the top 5 downloaded papers in JI in 2018

Cobos EJ, Nickerson CA, Gao F, Chandran V, Bravo-Caparrós I, González-Cano R, Riva P, Andrews NA, Latremoliere A, Seehus CR, Perazzoli G, Nieto FR, **Joller N**, Painter MW, Ma CHE, Omura T, Chesler EJ, Geschwind DH, Coppola G, Rangachari M, Woolf CJ, Costigan M

Mechanistic Differences in Neuropathic Pain Modalities Revealed by Correlating Behavior with Global Expression Profiling.

Cell Reports, 2018 Jan 30;22(5):1301-12. IF: 8.282

Joller N, Kuchroo VK

Tim-3, Lag-3, and TIGIT.

Current Topics in Microbiology and Immunology, 2017;410:127-156. IF: 3.799

Kishi Y, Kondo T, Wang C, Wu C, Yosef N, Regev A, **Joller N***, Kuchroo VK*
Protein C receptor (PROCR) regulates the pathogenic phenotype of Th17 cells.
Journal of Experimental Medicine, 2016 Oct 17;213(11):2489-2501. IF: 11.240

Rakebrandt N, Littringer K, **Joller N**

Regulatory T cells: balancing protection vs. pathology.

Swiss Medical Weekly, 2016;146:w14343. IF: 2.086

Anderson AC, **Joller N**, Kuchroo VK

Lag-3, Tim-3, and TIGIT co-inhibitory receptors with specialized functions in immune regulation.

Immunity, 2016 May 17;44(5):989-1004. IF: 24.082

Wang C, Yosef N, Gaublotme J, Wu C, Lee Y, Clish CB, Kaminski J, Xiao S, Meyer Zu Horste G, Pawlak M, Kishi Y, **Joller N**, Karwacz K, Zhu C, Ordovas-Montanes M, Madi A, Wortman I, Miyazaki T, Sobel RA, Park H, Regev A, Kuchroo VK

CD5L/AIM Regulates Lipid Biosynthesis and Restrains Th17 Cell Pathogenicity.

Cell, 2015 Dec 3;163(6):1413-27. IF: 28.710

Kurtulus S, Sakuishi K, Ngiow SF, **Joller N**, Tan DJ, Teng MWL, Smyth MJ, Kuchroo VK, Anderson AC

TIGIT predominantly regulates the immune response via regulatory T cells.

Journal of Clinical Investigation, 2015 Nov 2;125(11):4053-62. IF: 12.575

Murugaiyan G, PiresdaCunha A, Ajay AK, **Joller N**, Garo LP, Kumaradevan S, Yosef N, Vaidya VS, Weiner HL
MicroRNA-21 promotes Th17 differentiation and mediates experimental autoimmune encephalomyelitis.

Journal of Clinical Investigation, 2015 Mar 2;125(3):1069-80. IF: 12.575

Joller N, Lozano E, Burkett PR, Patel B, Xiao S, Zhu C, Xia J, Tan TG, Sefik E, Yajnik V, Sharpe AH, Quintana FJ, Mathis D, Benoist C, Hafler DA, Kuchroo VK

Treg cells expressing the coinhibitory molecule TIGIT selectively inhibit proinflammatory Th1 and Th17 cell responses.

Immunity, 2014 Apr 17;40(4):569-81. IF: 21.561

Joller N, Kuchroo VK

Good guys gone bad: exTreg cells promote autoimmune arthritis.

Nature Medicine (News and Views), 2014 Jan 7;20(1):15-7. IF: 28.223

Lozano E, **Joller N**, Coa Y, Kuchroo VK, Hafler DA

The CD226/CD155 Interaction Regulates the Proinflammatory (Th1/Th17)/Anti-Inflammatory (Th2) Balance in Humans.

Journal of Immunology, 2013 Oct 1;191(7):3673-80. IF: 5.362

Sutherland APR, **Joller N**, Michaud M, Liu SM, Kuchroo VK, Grusby MJ

IL-21 promotes CD8⁺ CTL activity via the transcription factor T-bet.

Journal of Immunology, 2013 Apr 15;190(8):3977-84. IF: 5.362

Weber SS, **Joller N**, Oxenius A

Assessment of Legionella-specific immunity in mice.

Methods in Molecular Biology, 2013;954:505-20

Murugaiyan G, Beynon V, Pires da Cunha A, **Joller N**, Weiner HL

IFN- γ limits Th9 mediated autoimmune inflammation through dendritic cell modulation of IL-27.

Journal of Immunology, 2012 Dec 1;189(11):5277-83. IF: 5.362

Joller N, Peters A, Anderson AC, Kuchroo VK
Immune checkpoints in central nervous system autoimmunity.
Immunological Reviews, 2012 Jul;248(1):122-39. IF: 12.155

Weber SS*, **Joller N***, Küntzel AB, Spörri R, Tchang VS, Scandella E, Rösli C, Ludewig B, Hilbi H, Oxenius A
Identification of protective B cell antigens of Legionella pneumophila.
Journal of Immunology, 2012 Jul 15;189(2):841-9. IF: 5.520

Wiesel M, Crouse J, Bedenikovic G, Sutherland APR, **Joller N**, Oxenius A
Type-I IFN drives the differentiation of short-lived effector CD8⁺ T cells.
European Journal of Immunology, 2012 Feb;42(2):320-9. IF: 4.970

Murugaiyan G, Beynon V, Mittal A, **Joller N**, Weiner HL
Silencing MicroRNA-155 Ameliorates Experimental Autoimmune Encephalomyelitis.
Journal of Immunology, 2011 Sep 1;187(5):2213-21. IF: 5.788

Joller N, Weber SS, Oxenius A
Antibody - Fc receptor interactions in protection against intracellular pathogens.
European Journal of Immunology, 2011 Apr;41(4):889-97. IF: 5.103

Joller N, Hafler JP, Brynedal B, Kassam N, Spoerl S, Levin SD, Sharpe AH, Kuchroo VK
Cutting edge: TIGIT has T cell-intrinsic inhibitory functions.
Journal of Immunology (Cutting Edge), 2011 Feb 1;186(3):1338-42. IF: 5.788

Joller N*, Weber SS*, Müller AJ, Spörri R, Selchow P, Sander P, Hilbi H, Oxenius A
Antibodies protect against intracellular bacteria by Fc receptor-mediated lysosomal targeting[‡].
Proceedings of the National Academy of Sciences USA (PNAS), 2010 Nov 23;107(47):20441-6. IF: 9.771

[‡]This publication was awarded with the Pfizer Forschungspreis 2012

Wiesel M, **Joller N**, Ehler AK, Crouse J, Spörri R, Bachmann MF, Oxenius A
T helper cells act via two synergistic pathways to promote antiviral CD8⁺ T cell responses.
Journal of Immunology, 2010 Nov 1;185(9):5188-97. IF: 5.745

Apetoh L*, Quintana FJ*, Pot C*, **Joller N**, Xiao S, Kumar D, Burns EJ, Sherr DH, Weiner HL, Kuchroo VK
The aryl hydrocarbon receptor interacts with c-Maf to promote the differentiation of type 1 regulatory T cells induced by IL-27.
Nature Immunology, 2010 Sep; 11(9):854-61. IF: 25.668

Spörri R, **Joller N**, Hilbi H, Oxenius A
A novel role for neutrophils as critical cytokine producers in microbial infection.
Journal of Immunology, 2008 Nov 15;181(10):7121-30. IF: 6.000

Joller N, Spörri R, Hilbi H and Oxenius A
Induction and protective role of antibodies in Legionella pneumophila infection.
European Journal of Immunology, 2007. 37: 3414-3423. IF: 4.662

Spörri R, **Joller N**, Albers U, Hilbi H, Oxenius A
MyD88-dependent IFN-gamma production by NK cells is key for control of Legionella pneumophila infection.
Journal of Immunology, 2006 May 15;176(10):6162-71. IF: 6.293

* These authors contributed equally