

Name: Prof. Dr. med. Wolfgang Kastenmüller



Date of birth: 02th February 1975

Nationality: German

Children: 2; age 9, 7

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Experimental Immunology
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Current position: Independent Group Leader, Institute of Experimental Immunology (IEI)

Education and academic positions

07/2003 MD thesis, Dept. of Internal Medicine University of Munich, Prof. H. Bernhard
"Induktion Her-2/neu spezifischer T-Zellen durch infizierte autologe dendritische Zellen mittels rekombinantem viralen Vektor MVA und Charakterisierung MVA infizierter DC's; graded "summa cum laude"

1995-2002 Studies in medicine, Universities of Regensburg and Munich

Academic positions

2013 – to date Professor (W2), Institute of Experimental Immunology, University of Bonn, Germany

2008-2012 Research Fellow, Laboratory of Systems Biology, NIAID, National Institutes of Health, USA

2003-2008 Postdoctoral Research and Clinical Fellow for Infectious disease, Institute of Virology and Microbiology Technical University of Munich, Germany

Honors and awards

2003: Dietmar-Zumpf-Promotions Preis

2012: NIH Cytokine Interest Group: Best Paper award

Ten selected publications (1-10):

1. Eickhoff S, Brewitz A, Gerner MY, Klauschen F, Komander K, Hemmi H, Garbi N, Kaisho T, Germain RN, **Kastenmuller W**. 2015. Robust Anti-viral Immunity Requires Multiple Distinct T Cell-Dendritic Cell Interactions. *Cell* 2015 Sep 10;162(6):1322-37.
2. Franklin BS, Bossaller L, De Nardo D, Ratter JM, Stutz A, Engels G, Brenker C, Nordhoff M, Mirandola SR, Al-Amoudi A, Mangan MS, Zimmer S, Monks BG, Fricke M, Schmidt RE, Espevik T, Jones B, Jarnicki AG, Hansbro PM, Busto P, Marshak-Rothstein A, Hornemann S, Aguzzi A, **Kastenmuller W**, Latz E. 2014. The adaptor ASC has extracellular and 'prionoid' activities that propagate inflammation. *Nat Immunol* 15: 727-37
3. Honda T, Egen JG, Lammermann T, **Kastenmuller W**, Torabi-Parizi P, Germain RN. 2014. Tuning of antigen sensitivity by T cell receptor-dependent negative feedback controls T cell effector function in inflamed tissues. *Immunity* 40: 235-47
4. Bald T, Quast T, Landsberg J, Rogava M, Glodde N, Lopez-Ramos D, Kohlmeyer J, Riesenberger S, van den Boorn-Konijnenberg D, Homig-Holzel C, Reuten R, Schadow B, Weighardt H, Wenzel D, Helfrich I, Schadendorf D, Bloch W, Bianchi ME, Lugassy C, Barnhill RL, Koch M, Fleischmann BK, Forster I, **Kastenmuller W**, Kolanus W, Holzel M, Gaffal E, Tuting T. 2014. Ultraviolet-radiation-induced inflammation promotes angiotropism and metastasis in melanoma. *Nature* 507: 109-13
5. Lammermann T, Afonso PV, Angermann BR, Wang JM, **Kastenmuller W**, Parent CA, Germain RN. 2013. Neutrophil swarms require LTB4 and integrins at sites of cell death in vivo. *Nature* 498: 371-5
6. **Kastenmuller W**, Brandes M, Wang Z, Herz J, Egen JG, Germain RN. 2013. Peripheral prepositioning and local CXCL9 chemokine-mediated guidance orchestrate rapid memory CD8+ T cell responses in the lymph node. *Immunity* 38: 502-13
7. Naik S, Bouladoux N, Wilhelm C, Molloy MJ, Salcedo R, **Kastenmuller 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* 337: 1115-9
8. **Kastenmuller W**, Torabi-Parizi P, Subramanian N, Lammermann T, Germain RN. 2012. A spatially-organized multicellular innate immune response in lymph nodes limits systemic pathogen spread. *Cell* 150: 1235-48
9. Gerner MY, **Kastenmuller W**, Ifrim I, Kabat J, Germain RN. 2012. Histo-cytometry: a method for highly multiplex quantitative tissue imaging analysis applied to dendritic cell subset microanatomy in lymph nodes. *Immunity* 37: 364-76
10. **Kastenmuller W**, Gasteiger G, Gronau JH, Baier R, Ljapoci R, Busch DH, Drexler I. 2007. Cross-competition of CD8+ T cells shapes the immunodominance hierarchy during boost vaccination. *J Exp Med* 204: 2187-98

Übersichtsarbeiten (1-4):

1. Qi H, **Kastenmuller W**, Germain RN. 2014. Spatiotemporal basis of innate and adaptive immunity in secondary lymphoid tissue. *Annu Rev Cell Dev Biol* 30: 141-67
2. **Kastenmuller W**, Kastenmuller K, Kurts C, Seder RA. 2014. Dendritic cell-targeted vaccines--hope or hype? *Nat Rev Immunol* 14: 705-11

3. Tang J, van Panhuys N, **Kastenmuller W**, Germain RN. 2013. The future of immunoimaging--deeper, bigger, more precise, and definitively more colorful. *Eur J Immunol* 43: 1407-12
4. **Kastenmuller W**, Gerner MY, Germain RN. 2010. The in situ dynamics of dendritic cell interactions. *Eur J Immunol* 40: 2103-6

Recent Meetings:

Keystone 2015 in Salt Lake City:

T Cells: Regulation and Effector Function

Short Talk and Poster: Multiple Spatially and Temporally Distinct T Cell-Dendritic Cell Interactions Support Effective Anti-Viral Immunity

Invited Speaker DGfl 2014 in Bonn:

Immune cell dynamics during infection

Keystone 2012 in Beaver Run:

Chemokines and Leukocyte Trafficking in Homeostasis and Inflammation.

Short Talk and Poster: Non-Random Layered Organization of Effector Cells in the Lymph Node Allows for Optimal Pathogen Defense

Keystone 2011 in Banff:

Immunologic Memory, Persisting Microbes and Chronic Disease.

Short Talk and Poster: By limiting the availability of IL-2, T_{reg} regulate the CD8 effector pool size *in vivo* while preserving the central memory response after acute viral infection.