

Arbeitsbericht 2012-2014

Publikationen (Publikationen können mit bis zu 1.000 € vom ZBAF unterstützt werden)

Jenke AC, Postberg J, Mariel B, **Hensel K**, Foell D, Dabritz J, Wirth S. (2013) S100a12 and hbd2 correlate with the composition of the fecal microflora in elbw infants and expansion of e. Coli is associated with nec. *BioMed research international* 150372.

Kallenborn-Gerhardt W, **Lu R**, Syhr KM, Heidler J, von Melchner H, Geisslinger G, Bangsow T, Schmidtko A (2013) Antioxidant activity of sestrin 2 controls neuropathic pain after peripheral nerve injury. *Antioxid Redox Signal*. Dec 10;19(17):2013-23. doi: 10.1089/ars.2012.4958. Epub 2013 Apr 19.

Lu R, Schmidtko A. (2013) Direct intrathecal drug delivery in mice for detecting in vivo effects of cGMP on pain processing. *Methods Mol Biol*. 1020:215-21. doi: 10.1007/978-1-62703-459-3_14.

Lu R, Lukowski R, Sausbier M, Zhang DD, Sisignano M, Schuh CD, Kuner R, Ruth P, Geisslinger G, Schmidtko A (2013) BKCa channels expressed in sensory neurons modulate inflammatory pain in mice. *Pain*. 2014 Mar;155(3):556-65. doi: 10.1016/j.pain.2013.12.005. Epub 2013 Dec 11.

Voigtlander R, Haase R, Muck-Hausl M, Zhang W, **Boehme P**, Lipps HJ, et al. (2013) A Novel Adenoviral Hybrid-vector System Carrying a Plasmid Replicon for Safe and Efficient Cell and Gene Therapeutic Applications. *Molecular therapy Nucleic acids*. 2013;2:e83.

Wirth S, Bortolotti F, Brunert C, Postberg J, **Hensel K**, Jenke A (2013) Hepatitis b virus genotype change in children is closely related to hbeag/anti-hbe seroconversion. *Journal of pediatric gastroenterology and nutrition* 57, 363-366.

Hensel KO, Wirth S (2014) Undescended testis guideline — is it being implemented in practice? *Deutsches Ärzteblatt International* 111, 647–8.

Hensel KO, Jenke A, Leischik R (2014) Speckle-tracking and tissue-doppler stress echocardiography in arterial hypertension - a sensitive tool for detection of subclinical LV impairment. *BioMed research international* 2014:9

Hensel KO, Jenke A, Klein A, Willuhn L, Prax S, Winkler T, Deba T, Orth V, **Weil PP**, Baiker A, Wirth S, Postberg J (2014) Restitution of hepatitis b virus-manipulated gene expression and plastic chromatin deformation in non-transformed murine hepatocytes. *Clinical Epigenetics* 6, 26.

Hensel KO, Boland V, Postberg J, Zilbauer M, Heuschkel R, Wirth, Jenke AC (2014) Differential expression of mucosal trefoil factors und mucins in paediatric inflammatory bowel diseases. *Scientific reports* 4, 7343.

Jenke, ACW, **Hensel, KO**, Klein, A, Willuhn, L, Prax, L, **Weil, PP**, Winkler,T, Deba,T, Orth,V, Baiker, A, Wirth, S, Postberg J (2014) Restitution of gene expression and histone acetylation signatures altered by hepatitis B virus through antiviral microRNA-like molecules in nontransformed murine hepatocytes. *Clinical Epigenetics* 6:26, doi:10.1186/1868-7083-6-26

Leischik R, Dworrak B, **Hensel KO** (2014) Intraobserver and interobserver reproducibility for radial, circumferential and longitudinal strain echocardiography. *Open cardiovascular medicine journal* 8, 102-109.

Lorenz JE, Kallenborn-Gerhardt W, **Lu R**, Syhr KM, Eaton P, Geisslinger G, Schmidtko A (2014) Oxidant-induced activation of cGMP-dependent protein kinase I α mediates neuropathic pain after peripheral nerve injury. *Antioxid Redox Signal*. 2014 Oct 1;21(10):1504-15. doi: 10.1089/ars.2013.5585.

Kallenborn-Gerhardt W, **Lu R**, Bothe A, Thomas D, Schlaudraff J, Lorenz JE, Lippold N, Real CI, Ferreirós N, Geisslinger G, Del Turco D, Schmidtko A. (2014) Phosphodiesterase 2A localized in the spinal cord contributes to inflammatory pain processing. *Anesthesiology*. Aug;121(2):372-82. doi: 10.1097/ALN.0000000000000270.

Lüsebrink, J, Li, X, Söderlund-Venermo, M, Hedman, K, Brockmann, M, **Khalfaoui, S**, Schildgen, V, Schildgen, O, Windisch, W (2014) HBoV-1 in pleura of an adult patient in Cologne, Germany. *JMM Case Reports*.

Schildgen V, Mai, S, **Khalfaoui, S**, Lüsebrink, J, Pieper M, Tillmann RL, Brockmann M, Schildgen, O (2014) Pneumocystis jirovecii can be productively cultured in differentiated CuFi-8 airway cells. *MBio* 5(3):e01186-14.

Schildgen, V, **Khalfaoui S**, Schildgen, O (2014) Human bocavirus: from common cold to cancer? Speculations on the importance of an episomal genomic form of human bocavirus. *Reviews in Medical Microbiology* 25(4):113-118.

Syhr KM, Kallenborn-Gerhardt W, **Lu R**, Olbrich K, Schmitz K, Männich J, Ferreiros-Bouzas N, Geisslinger G, Niederberger E, Schmidtko A. (2014) Lack of effect of a P2Y6 receptor antagonist on neuropathic pain behavior in mice. *Pharmacol Biochem Behav*. 95 ,389-95. doi: 10.1016/j.pbb.2014.07.009.

Kallenborn-Gerhardt W, Hohmann SW, Syhr KM, Schröder K, Sisignano M, Weigert A, Lorenz JE, **Lu R**, Brüne B, Brandes RP, Geisslinger G, Schmidtko A (2014) Nox2-dependent signaling between macrophages and sensory neurons contributes to neuropathic pain hypersensitivity. *Pain* Oct;155(10):2161-70. doi: 10.1016/j.pain.2014.08.013.

Wirth S, Klodt C, Wintermeyer P, Berrang J, **Hensel K**, Langer T, Heusch (2014) Positive or Negative Fructose Breath Test Results do not Predict Response to Fructose Restricted Diet in Children with Recurrent Abdominal Pain: Results from a Prospective Randomized Trial. *Klinische Pädiatrie* 226(5), 268-273

Boehme P, Doerner J, Solanki M, Zhang W, Ehrhardt A. (2015) The Sleeping Beauty Transposon Vector System for Treatment of Rare Genetic Diseases: an Unrealized Hope? *Current gene therapy*, Januar 26.

Abstracts

Mohr et al. (2012) Investigation of the *in vitro* differentiation ability of hybrid cell clones derived from spontaneous cell fusion events between murine breast cancer cells and murine mesenchymal stem cells. *UWH Forschungstag, Wuppertal*

Boehme et.al. (2013). Towards a direct comparison of HC-AdV vectors utilizing different genetic elements for stable transgene expression; Kongress der Gesellschaft für Gen- und Zelltherapie, Madrid, für Präsentation ausgewähltes Poster

Mohr et al. (2013) Quantification of cell fusion processes between breast cancer cells and breast epithelial cells. AACR Annual Meeting 2013, Washington, DC, USA

Mohr et al. (2013) Investigation of the *in vitro* differentiation ability of hybrid cell clones derived from spontaneous cell fusion events between murine breast cancer cells and murine mesenchymal stem cells. Stem Cell Network NRW 7th Annual Meeting, Cologne

Mohr et al. (2013) Investigation of the *in vitro* differentiation ability of hybrid cell clones derived from spontaneous cell fusion events between murine breast cancer cells and murine bone marrow-derived cells. GSCN Annual Meeting 2013, Berlin

Mohr et al. (2013) Investigation of the *in vitro* differentiation ability of hybrid cell clones derived from spontaneous cell fusion events between murine breast cancer cells and murine bone marrow-derived cells. UWH Forschungstag, Witten

Söngül et al. (2013) Inhibition of MDA-MB-231 and -435 breast cancer cell migration. UWH Forschungstag, Witten

Boehme et. al. (2014) Development of an integrating HC-AdV-SB100x hybrid-vector for stable expression in mitotically active tissue.; Kongress der Gesellschaft für Gentherapie, Ulm

Boehme et al. (2014) Feasible and sufficient small-scale amplification of high-capacity adenovirus; Kongress der amerikanischen Gesellschaft für Gentherapie ASGCT, Washington DC

Doerner et al, (2014) Biologically relevant and time efficient titration of adenoviral vectors using duplex quantitative real-time PCR" Witten/Herdecke university research day

Mohr et al. (2014) Quantification of cell fusion events between breast cancer cells and breast epithelial cells. Stem Cell Network NRW Internal Meeting, Herne

Mohr et al. (2014) Quantification of cell fusion events between breast cancer cells and breast epithelial cells. AACR Annual Meeting 2014, San Diego, CA, USA

Mohr et al. (2014) Quantification of cell fusion events between breast cancer cells and breast epithelial cells exhibiting stem cell characteristics. GSCN Annual Meeting, Heidelberg

Mohr et al. (2014) Quantification of cell-cell fusion events in cancer context. UWH Forschungstag, Cologne

Doerner et al, (2015) A novel oncolytic adenovirus based on human adenovirus serotype 17" ASGCT Meeting, New Orleans

Grimmer F, Roskopf M, Heusch A, Jenke A, Wirth S, **Hensel K** (2014) Quantitative Stress-Echokardiographie bei pädiatrischen Typ-1 Diabetes Mellitus Patienten. UWH Forschungstag

Hagedorn, **Boehme** et.al.. (2012) pEPI coming of age—Improvement of a non-viral episomal vector"; Kongress der Gesellschaft für Gentherapie, Frankfurt/Main

Hensel et al. (2013) Transcriptome dysregulation and epigenome signature responses in hepatocytes upon hepatitis B virus infection and therapy. Arbeitstagung pädiatrische Forschung, Düsseldorf (Vortrag)

Hensel et al. (2013) Petechien, Eosinophilie, transiente Hemiplegie und vermindertes IgM - eine atypische Präsentation eines Hyper-IgM-Syndroms aufgrund von CD-40-Liganden-Defizienz. Jahrestagung der Deutschen Gesellschaft für Kinder- und Jugendheilkunde, Hamburg

Hensel et al. (2013) Transcriptome dysregulation and epigenome signature responses in hepatocytes upon hepatitis B virus infection and therapy. Epigenesys Annual Meeting, Amsterdam

Lu et al. (2013) K channels expressed in nociceptors modulate persistent pain in mice. DGPT (Deutsche Gesellschaft für Experimentelle und Klinische Pharmakologie und Toxikologie) Jahrestagung 2B013, Halle

Voigtlaender, **Boehme** et. al.. (2013) Designing efficient and safe long term expressing high-capacity adenoviral vectors for gene therapy“; Kongress der Gesellschaft für Gentherapie, Hamburg, Boehme presenting author

Hensel et al. (2014) Transcriptome dysregulation and epigenome signature responses in hepatocytes upon hepatitis B virus infection and therapy. Jahrestagung der European Society for Pediatric Gastroenterology, Hepatology and Nutrition, Jerusalem, Israel (Vortrag)

Hensel et al. (2014) Hepatitis B virus-induced histone hypoacetylation in non-transformed murine hepatocytes is associated with upregulated sirtuin activity and decreased chromatin accessibility. Arbeitstagung pädiatrische Forschung, Göttingen (Vortrag)

Hensel et al. (2014) Differenzielle Expression von mukosalen Trefoil Factors und Mucinen bei pädiatrischen chronisch-entzündlichen Darmerkrankungen. Jahrestagung der Deutschen Gesellschaft für Kinder- und Jugendheilkunde, Leipzig

Hensel et al. Hepatitis B virus-induced histone hypoacetylation in non-transformed murine hepatocytes is associated with upregulated sirtuin activity and decreased chromatin accessibility. UWH Forschungstag, Köln

Hensel et al (2014) Wie leitliniengerecht ist der Operationszeitpunkt bei Maldescensus testis in Deutschland. UWH Forschungstag, Köln

Hensel et al. (2014) Differential Expression of Mucosal Trefoil Factors and Mucins in Pediatric Inflammatory Bowel Diseases. UWH Forschungstag, Köln

Lu et al. (2013) BKca channels expressed in nociceptors modulate inflammatory pain in mice“. Tag der Forschung (UW/H Gesundheitsforschung 2013), Witten

Lu et al. (2014) Phosphodiesterase 2A localized in the spinal cord regulates pain processing. DGPT (Deutsche Gesellschaft für Experimentelle und Klinische Pharmakologie und Toxikologie), Hannover

Lu et al. (2014) Slack channels expressed in sensory neurons control neuropathic pain and P2X3 signaling in mice“. Tag der Forschung (UW/H Gesundheitsforschung 2014), Köln

Söngül et al. (2014) Investigation of TLR-4 as well as -9 pathways in breast cancer cells, breast epithelial cells and their hybrids. UWH Forschungstag, Köln

Kongressbesuche (Kongressbesuche von PhD Studenten werden mit bis zu 300 € vom ZBAF unterstützt)

2012

Deutsche Gesellschaft für Gentherapie, Hamburg

2013

AACR Annual Meeting, Washington, DC, USA 2013

Arbeitstagung der Deutschen Gesellschaft für Kinder- und Jugendheilkunde, Hamburg

DGPT (Deutsche Gesellschaft für Experimentelle und Klinische Pharmakologie und Toxikologie) Jahrestagung, Halle

Epigenesys Annual Meetin, Amsterdam

European Society for Gene Therapy, Mailand

GSCN Annual Meeting, Berlin

130. Kongress der Deutschen Gesellschaft für Chirurgie

Neural Circuits underlying Nociception and Pain and their Plasticity, Heidelberg

Royal Society of Medicine Conference "Progress towards individualized cancer treatments", London, UK

Stem Cell Network NRW 7th Annual Meeting, Cologne

2014

AACR Annual Meeting, San Diego, CA, USA

American Society for Gene Therapy, Washington

Arbeitstagung pädiatrische Forschung, Göttingen

DGPT (Deutsche Gesellschaft für Experimentelle und Klinische Pharmakologie und Toxikologie) Jahrestagung, Hannover

GSCN Annual Meeting, Heidelberg

4th EpiGeneSys Annual Meeting, Barcelona

International Symposium on Recent Advances in Cancer Therapeutics, Bangkok, Thailand

Jahrestagung der European Society for Pediatric Gastroenterology, Hepatology and Nutrition, Jerusalem, Israel

Deutsche Gesellschaft für Gentherapie, Ulm

Jahrestagung der European Society for Pediatric Gastroenterology, Hepatology and Nutrition, Jerusalem, Israel

Jahrestagung der Deutschen Gesellschaft für Kinder- und Jugendheilkunde, Leipzig 2014

Tag der Forschung, UWH, Köln

Stem Cell Network NRW Internal Meeting, Herne

Drittmittel

Lu, R: 2014 Interne Forschungsförderung UW/H (Kleinprojekts 5000 €) Function of Slo2.1 potassium channels in neuropathic pain processing

Stipendien

Stipendium der Wittener Studierendengesellschaft (**Boehme**)

Stipendium Westermann-Wersterop Stiftung (**Boehme**)

Preise

Philip Boehme: Förderungspreis des Rotary Clubs Witten

Dr. Kai Hensel: **“Young Investigator Award”** - verliehen durch die European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESGHAN) 2014

Forschungspreis für innovative exzellente pädiatrisch-infektiologische Forschungsvorhaben”- 1. Preis, geehrt mit 20.000 € durch die Deutsche Gesellschaft für Pädiatrische Infektiologie (DGPI) 2014

“Young Investigator Award” - verliehen durch die European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESGHAN) 2015

Dr. Ruirui Lu: **“Bestes wissenschaftliches Poster”** – 2. Preis am Tag der Forschung der Universität Witten/Herdecke 2014

Marieke Mohr: **Immunotools Special Award 2014**