

Veröffentlichungen

des Helmholtz-Zentrums für Umweltforschung GmbH – UFZ

Forschungsbereich Gesundheit

Forschen für die Umwelt

Vorbemerkung

Das vorliegende Veröffentlichungsverzeichnis umfasst die im Jahre 2016 erschienenen Publikationen des Forschungsbereichs Gesundheit, die von Mitarbeitern der Helmholtz-Zentrum für Umweltforschung GmbH - UFZ verfasst, mitverfasst oder herausgegeben wurden.

Redaktionsschluss für diese Publikationsliste war der 15. Februar 2017.

Im Unterschied zu externen Autoren sind UFZ Angehörige bei allen Publikationen durch **fette Schrift** hervorgehoben.

Das anschließende alphabetische Register verzeichnet alle UFZ Autoren mit den jeweiligen laufenden Nummern ihrer Publikationen.

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Artikel in ISI und SCOPUS gelisteten Zeitschriften

1. Bastida, F., **Jehlich, N.** (2016):
It's all about functionality: How can metaproteomics help us to discuss the attributes of ecological relevance in soil?
J. Proteomics **144**, 159 - 161
2. **Bauer, M., Fink, B., Thürmann, L.**, Eszlinger, M., **Herberth, G., Lehmann, I.** (2016):
Tobacco smoking differently influences cell types of the innate and adaptive immune system—indications from CpG site methylation
Clin. Epigenetics **8**, art. 83
3. Bauer, T., **Trump, S.**, Ishaque, N., **Thürmann, L.**, Gu, L., **Bauer, M.**, Bieg, M., Gu, Z., Weichenhan, D., Mallm, J.-P., **Röder, S., Herberth, G.**, Takada, E., Mücke, O., **Winter, M., Junge, K.M., Grützmann, K., Rolle-Kampczyk, U.**, Wang, Q., Lawerenz, C., Borte, M., **Polte, T.**, Schlesner, M., Schanne, M., Wiemann, S., Geörg, C., Stunnenberg, H.G., Plass, C., Rippe, K., Mizuguchi, J., Herrmann, C., Eils, R., **Lehmann, I.** (2016):
Environment-induced epigenetic reprogramming in genomic regulatory elements in smoking mothers and their children
Mol. Syst. Biol. **12** (3), art. 861
4. Bousquet, J., Anto, J.M., Akdis, M., Auffray, C., Keil, T., Momas, I., Postma, D., Valenta, R., Wickman, M., Cambon-Thomsen, A., Haahtela, T., Lambrecht, B.N., Lodrup-Carlsen, K., Koppelman, G.H., Sunyer, J., Zuberbier, T., Annesi-Maesano, I., Arno, A., Bindslev-Jensen, C., De Carlo, G., Forastiere, F., Heinrich, J., Kowalski, M.L., Maier, D., Melén, E., Palkonen, S., Smit, H.A., Standl, M., Wright, J., Arsanoj, A., Benet, M., Balardini, N., Garcia-Aymerich, J., Gehring, U., Guerra, S., Hohmann, C., Kull, I., Lupinek, C., Pinart, M., Skrandio, I., Westman, M., Smagge, D., Akdis, C., Albang, R., Anastasova, V., Anderson, N., Bachert, C., Ballereau, S., Ballester, F., Basagana, X., Bedbrook, A., Bergstrom, A., von Berg, A., Brunekreef, B., Burte, E., Carlsen, K.H., Chatzi, L., Coquet, J.M., Curin, M., Demoly, P., Eller, E., Fantini, M.P., Gerhard, B., Hammad, H., von Hertzen, L., Hovland, V., Jacquemin, B., Just, J., Keller, T., Kerkhof, M., Kiss, R., Kogevinas, M., Koletzko, S., Lau, S., **Lehmann, I.**, Lemonnier, N., McEachan, R., Mäkelä, M., Mestres, J., Minina, E., Mowinckel, P., Nadif, R., Nawijn, M., Oddie, S., Pellet, J., Pin, I., Porta, D., Rancière, F., Rial-Sebbag, A., Saes, Y., Schuijs, M.J., Siroux, V., Tischer, C.G., Torrent, M., Varraso, R., De Vocht, J., Wenger, K., Wieser, S., Xu, C. (2016):
Paving the way of systems biology and precision medicine in allergic diseases: the MeDALL success story. (Mechanisms of the Development of ALLergy; EU FP7-CP-IP; Project No: 261357; 2010-2015)
Allergy **71** (11), 1513 - 1525

5. **Dey, P.,** Gola, D., Mishra, A., Malik, A., Kumar, P., Singh, D.K., Patel, N., **von Bergen, M., Jehmlich, N.** (2016):
Comparative performance evaluation of multi-metal resistant fungal strains for simultaneous removal of multiple hazardous metals
J. Hazard. Mater. **318** , 679 - 685
6. Dietrich, S., Floegel, A., Troll, M., Kühn, T., Rathmann, W., Peters, A., Sookthai, D., **von Bergen, M.,** Kaaks, R., Adamski, J., Prehn, C., Boeing, H., Schulze, M.B., Illig, T., Pischon, T., Knüppel, S., Wang-Sattler, R., Drogan, D. (2016):
Random Survival Forest in practice: a method for modelling complex metabolomics data in time to event analysis
Int. J. Epidemiol. **45** (5), 1406 - 1420
7. Els-Heindl, S., Kostelnik, K.B., Klötting, N., **Baumann, S., von Bergen, M.,** Beck-Sickinger, A.G. (2016):
A palmitoylated ghrelin receptor ligand shows high metabolic *in vivo* stability and bioavailability
Neuropeptides **55** , 1 - 12
8. Förster, Y., **Schmidt, J.R., Wissenbach, D.K., Pfeiffer, S.E.M., Baumann, S.,** Hofbauer, L.C., **von Bergen, M., Kalkhof, S.,** Rammelt, S. (2016):
Microdialysis sampling from wound fluids enables quantitative assessment of cytokines, proteins, and metabolites reveals bone defect-specific molecular profiles
PLOS One **11** (7), e0159580
9. Gjesing Welinder, K., Hansen, R., Toft Overgaard, M., Brohus, M., Sønderkær, M., **von Bergen, M., Rolle-Kampczyk, U., Otto, W.,** Lindahl, T.L., Arinell, K., Evans, A.L., Swenson, J.E., Revsbech, I.G., Frøbert, O. (2016):
Biochemical foundations of health and energy conservation in hibernating free-ranging subadult brown bear *Ursus arctos*
J. Biol. Chem. **291** , 22509 - 22523
10. **Haange, S.-B., Jehmlich, N.** (2016):
Proteomic interrogation of the gut microbiota: potential clinical impact
Expert Rev. Proteomics **13** (6), 535 - 537
11. Harris, C., Buyken, A., von Berg, A., Berdel, D., **Lehmann, I.,** Hoffmann, B., Koletzko, S., Koletzko, B., Heinrich, J., Standl, M. (2016):
Prospective associations of meat consumption during childhood with measures of body composition during adolescence: results from the GINIplus and LISAplus birth cohorts
Nutr. J. **15** , art. 101

12. Hoeke, H., **Roeder, S.**, Bertsche, T., Borte, M., **von Bergen, M.**, **Wissenbach, D.K.** (2016):
Assessment of maternal drug intake by urinary bio monitoring during pregnancy and postpartally until the third perinatal year
Pharmacoepidemiol. Drug Saf. **25** (4), 431 - 437
13. Hoeke, H., **Roeder, S.**, **Mueller, A.**, Bertsche, T., Borte, M., **Rolle-Kampczyk, U.**, **von Bergen, M.**, **Wissenbach, D.K.** (2016):
Biomonitoring of prenatal analgesic intake and correlation with infantile anti-aeroallergens IgE
Allergy **71** (6), 901 - 906
14. **Hörnig, F.**, **Kohajda, T.**, **Röder, S.**, **Herberth, G.**, **von Bergen, M.**, Borte, M., Diez, U., **Rolle-Kampczyk, U.**, Simon, J.-C., Denburg, J.A., **Lehmann, I.**, **Junge, K.M.** (2016):
The LINA study: higher sensitivity of infant compared to maternal eosinophil/basophil progenitors to indoor chemical exposures
J. Environ. Public Health **2016**, art. 5293932
15. Huber, K., Dänicke, S., Rehage, J., Sauerwein, H., **Otto, W.**, **Rolle-Kampczyk, U.**, **von Bergen, M.** (2016):
Metatypes with properly functioning mitochondria and antiinflammation predict extended productive life span in dairy cows
Sci. Rep. **6**, art. 24642
16. Italia, S., Brüske, I., Heinrich, J., Berdel, D., von Berg, A., **Lehmann, I.**, Standl, M., Wolfenstetter, S.B. (2016):
A longitudinal comparison of drug use among 10-year-old children and 15-year-old adolescents from the German GINIplus and LISAprime birth cohorts
Eur. J. Clin. Pharmacol. **72** (3), 301 - 310
17. Italia, S., Brüske, I., Heinrich, J., Berdel, D., von Berg, A., **Lehmann, I.**, Standl, M., Wolfenstetter, S.B. (2016):
Complementary and alternative medicine use among chronically ill adolescents from 2 German birth cohorts
Forsch. Komplementmed. **23** (4), 246 - 252
18. **Jehmlich, N.**, **Vogt, C.**, **Lünsmann, V.**, **Richnow, H.H.**, **von Bergen, M.** (2016):
Protein-SIP in environmental studies
Curr. Opin. Biotechnol. **41**, 26 - 33

19. **Junge, K.M.**, Bauer, T., Geissler, S., Hirche, F., **Thürmann, L.**, **Bauer, M.**, **Trump, S.**, Bieg, M., Weichenhan, D., Gu, L., Mallm, J.-P., Ishaque, N., Mücke, O., **Röder, S.**, **Herberth, G.**, Diez, U., Borte, M., Rippe, K., Plass, C., Hermann, C., Stangl, G.I., Eils, R., **Lehmann, I.** (2016):
Increased vitamin D levels at birth and in early infancy increase offspring allergy risk—evidence for involvement of epigenetic mechanisms. Letter to the editor
J. Allergy Clin. Immunol. **137** (2), 610 - 613
20. **Kalkhof, S.**, Schildbach, S., Blumert, C., Horn, F., **von Bergen, M.**, Labudde, D. (2016):
PIPINO: a software package to facilitate the identification of protein-protein interactions from affinity purification mass spectrometry data
Biomed Res. Int. **2016**, art. 2891918
21. Kenéz, Á., Dänicke, S., **Rolle-Kampczyk, U.**, **von Bergen, M.**, Huber, K. (2016):
A metabolomics approach to characterize phenotypes of metabolic transition from late pregnancy to early lactation in dairy cows
Metabolomics **12** (11), art. 165
22. Kjeldal, H., Zhou, N.A., **Wissenbach, D.K.**, **von Bergen, M.**, Gough, H.L., Nielsen, J.L. (2016):
Genomic, proteomic, and metabolite characterization of gemfibrozil-degrading organism *Bacillus* sp. GeD10
Environ. Sci. Technol. **50** (2), 744 - 755
23. Kühn, T., Floegel, A., Sookthai, D., Johnson, T., **Rolle-Kampczyk, U.**, **Otto, W.**, **von Bergen, M.**, Boeing, H., Kaaks, R. (2016):
Higher plasma levels of lysophosphatidylcholine 18:0 are related to a lower risk of common cancers in a prospective metabolomics study
BMC Med. **14**, art. 13
24. Kühn, T., Sookthai, D., **Rolle-Kampczyk, U.**, **Otto, W.**, **Otto, W.**, **von Bergen, M.**, Kaaks, R., Johnson, T. (2016):
Mid- and long-term correlations of plasma metabolite concentrations measured by a targeted metabolomics approach
Metabolomics **12** (12), art. 184
25. Mahnke, H., Ballent, M., **Baumann, S.**, Imperiale, F., **von Bergen, M.**, Lanusse, C., Lifschitz, A.L., Honscha, W., Halwachs, S. (2016):
The ABCG2 efflux transporter in the mammary gland mediates veterinary drug secretion across the blood-milk barrier into milk of dairy cows
Drug Metab. Dispos. **44** (5), 700 - 708

26. Malik, A.A., Chowdhury, S., Schlager, V., Oliver, A., Puissant, J., Vazquez, P.G.M., **Jehlich, N., von Bergen, M.**, Griffiths, R.I., Gleixner, G. (2016): Soil fungal:bacterial ratios are linked to altered carbon cycling
Frontiers in Microbiology **7** , art. 1247
27. Markevych, I., Standl, M., Koletzko, S., **Lehmann, I.**, Bauer, C.-P., Hoffmann, B., von Berg, A., Berdel, D., Heinrich, J. (2016): Early life travelling does not increase risk of asthma, allergies and atopy until 15 years: results from GINIplus and LISAplus
Allergy **71** (S102), 273 - 273
28. Men, Y., Han, P., Helbling, D.E., **Jehlich, N.**, Herbold, C., Gulde, R., Onnis-Hayden, A., Gu, A.Z., Johnson, D.R., Wagner, M., Fenner, K. (2016): Biotransformation of two pharmaceuticals by the ammonia-oxidizing archaeon *Nitrososphaera gargensis*
Environ. Sci. Technol. **50** (9), 4682 - 4692
29. Mussotter, F., **Tomm, J.M.**, El Ali, Z., Pallardy, M., Kerdine-Römer, S., Götz, M., **von Bergen, M.**, Haase, A., Luch, A. (2016): Proteomics analysis of dendritic cell activation by contact allergens reveals possible biomarkers regulated by Nrf2
Toxicol. Appl. Pharmacol. **313** , 170 - 179
30. **Rolle-Kampczyk, U.E.**, Krumsiek, J., **Otto, W., Röder, S.W., Kohajda, T.**, Borte, M., Theis, F., **Lehmann, I., von Bergen, M.** (2016): Metabolomics reveals effects of maternal smoking on endogenous metabolites from lipid metabolism in cord blood of newborns
Metabolomics **12** (4), art. 76
31. Rother, S., Samsonov, S.A., **Hofmann, T.**, Blaszkiewicz, J., Köhling, S., Moeller, S., Schnabelrauch, M., Rademann, J., **Kalkhof, S., von Bergen, M.**, Pisabarro, M.T., Scharnweber, D., Hintze, V. (2016): Structural and functional insights into the interaction of sulfated glycosaminoglycans with tissue inhibitor of metalloproteinase-3 – A possible regulatory role on extracellular matrix homeostasis
Acta Biomater. **45** , 143 - 154
32. Schaarschmidt, J., **Nagel, M.B.M.**, Huth, S., Jaeschke, H., Moretti, R., Hintze, V., **von Bergen, M., Kalkhof, S.**, Meiler, J., Paschke, R. (2016): Rearrangement of the extracellular domain/extracellular loop 1 interface is critical for thyrotropin receptor activation
J. Biol. Chem. **291** , 14095 - 14108

33. **Schlink, U., Röder, S., Kohajda, T., Wissenbach, D.K., Franck, U., Lehmann, I.** (2016):
A framework to interpret passively sampled indoor-air VOC concentrations in health studies
Build. Environ. **105** , 198 - 209
34. Schreier, M., Schwartz, J.T., Landgraf, K., Scheuermann, K., Erbs, S., **Herberth, G.,** Pospisilik, J.A., Kratzsch, J., Kiess, W., Körner, A. (2016):
Osteopontin is BMI-independently related to early endothelial dysfunction in children
J. Clin. Endocrinol. Metab. **101** (11), 4164 - 4169
35. Schütze, N., Trojandt, S., **Kuhn, S., Tomm, J.M., von Bergen, M.,** Simon, J.C., **Polte, T.** (2016):
Allergen-induced IL-6 regulates IL-9/IL-17A balance in CD4⁺ T cells in allergic airway inflammation
J. Immunol. **197** (7), 2653 - 2664
36. Su, C., Breitner, S., Schneider, A., Liu, L., **Franck, U.,** Peters, A., Pan, X. (2016):
Short-term effects of fine particulate air pollution on cardiovascular hospital emergency room visits: a time-series study in Beijing, China
Int. Arch. Occup. Environ. Health **89** (4), 641 - 657
37. Tautenhahn, H.-M., Brückner, S., **Baumann, S.,** Winkler, S., **Otto, W., von Bergen, M.,** Bartels, M., Christ, B. (2016):
Attenuation of postoperative acute liver failure by mesenchymal stem cell treatment due to metabolic implications
Ann. Surg. **263** (3), 546 - 556

38. Teumer, A., Qi, Q., Nethander, M., Aschard, H., Bandinelli, S., Beekman, M., Berndt, S.I., Bidlingmaier, M., Broer, L., Cappola, A., Ceda, G.P., Chanock, S., Chen, M.-H., Chen, T.C., Chen, Y.-D.I., Chung, J., Del Greco Miglianico, F., Eriksson, J., Ferrucci, L., Friedrich, N., Gnewuch, C., Goodarzi, M.O., Grarup, N., Guo, T., Hammer, E., Hayes, R.B., Hicks, A.A., Hofman, A., Houwing-Duistermaat, J.J., Hu, F., Hunter, D.J., Husemoen, L.L., Isaacs, A., Jacobs, K.B., Janssen, J.A.M.J.L., Jansson, J.-O., **Jehlich, N.**, Johnson, S., Juul, A., Karlsson, M., Kilpelainen, T.O., Kovacs, P., Kraft, P., Li, C., Linneberg, A., Liu, Y., Loos, R.J.F., Lorentzon, M., Lu, Y., Maggio, M., Magi, R., Meigs, J., Mellström, D., Nauck, M., Newman, A.B., Pollak, M.N., Pramstaller, P.P., Prokopenko, I., Psaty, B.M., Reincke, M., Rimm, R.B., Rotter, J.I., Saint Pierre, A., Schurmann, C., Seshadri, S., Sjögren, K., Slagboom, P.E., Strickler, H.D., Stumvoll, M., Suh, Y., Sun, Q., Zhang, C., Svensson, J., Tanaka, T., Tare, A., Tönjes, A., Uh, H.-W., van Duijn, C., van Heemst, D., Vandenput, L., Vasan, R.S., Völker, U., Willems, S.M., Ohlsson, C., Wallaschofski, H., Kaplan, R.C. (2016):
Genomewide meta-analysis identifies loci associated with IGF-I and IGFBP-3 levels with impact on age-related traits
Aging Cell **15** (5), 811 - 824
39. **Trump, S.**, Bieg, M., Gu, Z., **Thürmann, L.**, Bauer, T., **Bauer, M.**, Ishaque, N., **Röder, S.**, Gu, L., **Herberth, G.**, Lawrenz, C., Borte, M., Schlesner, M., Plass, C., Diessl, N., Eszlinger, M., Mücke, O., Elvers, H.-D., **Wissenbach, D.K.**, **von Bergen, M.**, Herrmann, C., Weichenhan, D., Wright, R.J., **Lehmann, I.**, Eils, R. (2016):
Prenatal maternal stress and wheeze in children: novel insights into epigenetic regulation
Sci. Rep. **6**, art. 28616
40. **Vorreiter, F.**, **Richter, S.**, **Peter, M.**, **Baumann, S.**, **von Bergen, M.**, **Tomm, J.M.** (2016):
Comparison and optimization of methods for the simultaneous extraction of DNA, RNA, proteins, and metabolites
Anal. Biochem. **508**, 25 - 33
41. Warnke, M., Jung, T., Dermer, J., Hipp, K., **Jehlich, N.**, **von Bergen, M.**, Ferlaino, S., Fries, A., Müller, M., Boll, M. (2016):
25-hydroxyvitamin D₃ synthesis by enzymatic steroid side-chain hydroxylation with water
Angew. Chem.-Int. Edit. **55** (5), 1881 - 1884
42. **Wissenbach, D.K.**, Oliphant, K., **Rolle-Kampczyk, U.**, Yen, S., **Höke, H.**, **Baumann, S.**, **Haange, S.B.**, Verdu, E.F., Allen-Vercoe, E., **von Bergen, M.** (2016):
Optimization of metabolomics of defined *in vitro* gut microbial ecosystems
Int. J. Med. Microbiol. **306** (5), 280 - 289

43. **Wissenbach, D.K., Winkler, B., Otto, W., Kohajda, T., Roeder, S., Müller, A., Hoeke, H.,** Matysik, S., **Schlink, U.,** Borte, M., Herbarth, O., **Lehmann, I., von Bergen, M.** (2016):
Long-term indoor VOC concentrations assessment a trend analysis of distribution, disposition, and personal exposure in cohort study samples
Air Qual. Atmos. Health **9** (8), 941 - 950
44. Wohlleben, W., Driessen, M.D., Raesch, S., Schaefer, U.F., Schulze, C., von Vacano, B., Vennemann, A., Wiemann, M., Ruge, C.A., Platsch, H., Mues, S., Ossig, R., **Tomm, J.M.,** Schnekenburger, J., Kuhlbusch, T.A.J., Luch, A., Lehr, C.-M., Haase, A. (2016):
Influence of agglomeration and specific lung lining lipid/protein interaction on short-term inhalation toxicity
Nanotoxicology **10** (7), 970 - 980

Artikel in anderen Zeitschriften

45. Pham, H.T., Arnhard, K., Asad, Y.J., Deng, L., Felder, T.K., St. John-Williams, L., Kaefer, V., Leadley, M., Mitro, N., Muccio, S., Prehn, C., Rauh, M., **Rolle-Kampczyk, U.**, Thompson, J.W., Uhl, O., Ulaszewska, M., Vogeser, M., Wishart, D.S., Koal, T. (2016):
Inter-laboratory robustness of next-generation bile acid study in mice and humans: international ring trial involving 12 laboratories
J. Appl. Lab. Med. **1** (2), 129 - 142

Berichtartikel

46. Barthod, C., Flörke, M., **Franck, U.**, Häuser, C.L., Hills, C., Kirilenko, A., Kock, R., Kusch, S., Matschullat, J., Persson, L., Plesnik, J., Tronczyński, J., Urge-Vorsatz, D., Zdruli, P. (2016):
Air quality
UNEP/UNECE 2016. GEO-6 Assessment for the pan-European region
United Nations Environment Programme (UNEP), Nairobi, p. 61 - 77

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