



Veröffentlichungen

des Helmholtz-Zentrums für Umweltforschung – UFZ

Forschungsbereich Gesundheit

Vorbemerkung

Das vorliegende Veröffentlichungsverzeichnis umfasst die im Jahre 2020 erschienenen Publikationen des Forschungsbereichs Gesundheit, die von MitarbeiterInnen der Helmholtz-Zentrum für Umweltforschung GmbH - UFZ verfasst, mitverfasst oder herausgegeben wurden.

Redaktionsschluss für diese Publikationsliste war der 25.02.2021.

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

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

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Veröffentlichungen in ISI/Scopus-gelisteten Zeitschriften/Schriftenreihen

1. Albergamo, V., **Escher, B.I.**, Schymanski, E.L., Helmus, R., Dingemans, M.M.L., Cornelissen, E.R., Kraak, M.H.S., Hollender, J., de Voogt, P. (2020):
Evaluation of reverse osmosis drinking water treatment of riverbank filtrate using bioanalytical tools and non-target screening
Environ. Sci.-Wat. Res. Technol. **6** (1), 103 - 116
2. Balogh, G., Bernhart, S.H., Stadler, P.F., **Schor, J.** (2020):
A probabilistic version of Sankoff's maximum parsimony algorithm
J. Bioinform. Comput. Biol. **18** (1), art. 2050004
3. **Canzler, S., Schor, J., Busch, W., Schubert, K., Rolle-Kampczyk, U.E.,** Seitz, H., Kamp, H., **von Bergen, M.**, Buesen, R., **Hackermüller, J.** (2020):
Prospects and challenges of multi-omics data integration in toxicology
Arch. Toxicol. **94** (2), 371 - 388
4. Dijkstra, D.J., Verkaik-Schakel, R.N., Eskandar, S., Limonciel, A., **Stojanovska, V.,** Scherjon, S.A., Plösch, T. (2020):
Mid-gestation low-dose LPS administration results in female-specific excessive weight gain upon a western style diet in mouse offspring
Sci. Rep. **10** , art. 19618
5. **Elter, E., Wagner, M., Buchenauer, L., Bauer, M., Polte, T.** (2020):
Phthalate exposure during the prenatal and lactational period increases the susceptibility to rheumatoid arthritis in mice
Front. Immunol. **11** , art. 550
6. Ernst, J., Gert, K., Kraus, F.B., **Rolle-Kampczyk, U.E.,** Wabitsch, M., Dehghani, F., Schaedlich, K. (2020):
Androstenedione changes steroidogenic activity of SGBS cells
Endocr. Connect. **9** (7), 587 - 598
7. **Escher, B.I.,** Stapleton, H.M., Schymanski, E.L. (2020):
Tracking complex mixtures of chemicals in our changing environment
Science **367** (6476), 388 - 392
8. Farag, M.A., Abdelwareth, A., Sallam, I.E., el Shorbagi, M., **Jehlich, N., Fritz, K., Schaepe, S., Rolle-Kampczyk, U.,** Ehrlich, A., Wessjohann, L.A., **von Bergen, M.** (2020):
Metabolomics reveals impact of seven functional foods on metabolic pathways in a gut microbiota model
J. Adv. Res. **23** , 47 - 59

9. Feng, X., Flexeder, C., Markevych, I., Standl, M., Heinrich, J., Schikowski, T., Koletzko, S., **Herberth, G.**, Bauer, C.-P., von Berg, A., Berdel, D., Astell-Burt, T. (2020):
Impact of residential green space on sleep quality and sufficiency in children and adolescents residing in Australia and Germany
Int. J. Environ. Res. Public Health **17** (13), art. 4894
10. **Fritz-Wallace, K., Engelmann, B., Krause, J.L., Schäpe, S.S., Pöppe, J., Herberth, G., Rösler, U., Jehmlich, N., von Bergen, M., Rolle-Kampczyk, U.** (2020):
Quantification of glyphosate and AMPA from microbiome reactor fluids
Rapid Commun. Mass Spectrom. **34** (7), e8668
11. **Haange, S.-B., Groeger, N., Froment, J., Rausch, T., Burkhardt, W., Gonnermann, S., Braune, A., Blaut, M., von Bergen, M., Rolle-Kampczyk, U.** (2020):
Multiplexed quantitative assessment of the fate of taurine and sulfoquinovose in the intestinal microbiome
Metabolites **10** (11), art. 430
12. **Haange, S.-B., Jehmlich, N., Krügel, U., Hintschich, C., Wehrmann, D., Hankir, M., Seyfried, F., Froment, J., Hübschmann, T., Müller, S., Wissenbach, D.K., Kang, K.H., Buettner, C., Panagiotou, G., Noll, M., Rolle-Kampczyk, U., Fenske, W., von Bergen, M.** (2020):
Gastric bypass surgery in a rat model alters the community structure and functional composition of the intestinal microbiota independently of weight loss
Microbiome **8**, art. 13
13. Hartmann, H., Pauli, L.K., Janssen, L.K., **Huhn, S.**, Ceglarek, U., Horstmann, A. (2020):
Preliminary evidence for an association between intake of high-fat high-sugar diet, variations in peripheral dopamine precursor availability and dopamine-dependent cognition in humans
J. Neuroendocrinol. **32** (12), e12917
14. Hsu, M.-J., **Karkossa, I., Schäfer, I., Christ, M., Kühne, H., Schubert, K., Rolle-Kampczyk, U.E., Kalkhof, S., Nickel, S., Seibel, P., von Bergen, M., Christ, B.** (2020):
Mitochondrial transfer by human mesenchymal stromal cells ameliorates hepatocyte lipid load in a mouse model of NASH
Biomedicine **8** (9), art. 350
15. Jacoby, C., Krull, J., Andexer, J., **Jehmlich, N., von Bergen, M., Brüls, T., Boll, M.** (2020):
Channeling C1 metabolism toward S-adenosylmethionine-dependent conversion of estrogens to androgens in estrogen-degrading bacteria
mBio **11** (4), e01259-20

16. Juskiene, I., Prokopciuk, N., **Franck, U.**, Tarasiuk, N., Dudoitis, V., Valiulis, A., Staras, K., Valiulis, A. (2020):
Occasional sources and level of indoor pollution in primary schools of relative low polluted region of Eastern Europe
Allergy **75** (S109), 80 - 81
17. **Karkossa, I., Raps, S., von Bergen, M., Schubert, K.** (2020):
Systematic review of multi-omics approaches to investigate toxicological effects in macrophages
Int. J. Mol. Sci. **21** (24), art. 9371
18. **Kipping, L., Holzsheck, N.**, Maurer, F., Muszynski, S., Noll, M., **Jehmlich, N.** (2020):
Microbial metaproteome data from decayed beech dead wood
Data in Brief **29** , art. 105285
19. **Krämer, S., Busch, W., Schüttler, A.** (2020):
A self-organizing map of the fathead minnow liver transcriptome to identify consistent toxicogenomic patterns across chemical fingerprints
Environ. Toxicol. Chem. **39** (3), 526 - 537
20. **Krause, J.L., Haange, S.-B., Schäpe, S.S., Engelmann, B., Rolle-Kampczyk, U., Fritz-Wallace, K., Wang, Z., Jehmlich, N., Türkowsky, D., Schubert, K., Pöppe, J., Bote, K., Rösler, U., Herberth, G., von Bergen, M.** (2020):
The glyphosate formulation Roundup® LB plus influences the global metabolome of pig gut microbiota *in vitro*
Sci. Total Environ. **745** , art. 140932
21. **Krause, J.L., Schaepe, S.S., Fritz-Wallace, K., Engelmann, B., Rolle-Kampczyk, U., Kleinsteuber, S., Schattenberg, F., Liu, Z., Müller, S., Jehmlich, N., von Bergen, M., Herberth, G.** (2020):
Following the community development of SIHUMIx – a new intestinal *in vitro* model for bioreactor use
Gut Microbes **11** (4), 1116 - 1129
22. **Krause, J.L., Schäpe, S.S., Schattenberg, F., Müller, S., Ackermann, G., Rolle-Kampczyk, U.E., Jehmlich, N., Pierzchalski, A., von Bergen, M., Herberth, G.** (2020):
The activation of mucosal-associated invariant T (MAIT) cells is affected by microbial diversity and riboflavin utilization *in vitro*
Front. Microbiol. **11** , art. 755

23. Kreuz, M., Otto, D.J., Fuessel, S., Blumert, C., Bertram, C., Bartsch, S., Loeffler, D., Puppel, S.-H., Rade, M., Buschmann, T., Christ, S., Erdmann, K., Friedrich, M., Froehner, M., Muders, M.H., **Schreiber, S.**, Specht, M., Toma, M.I., Benigni, F., Freschi, M., Gandaglia, G., Briganti, A., Baretton, G.B., Loeffler, M., **Hackermüller, J.**, Reiche, K., Wirth, M., Horn, F. (2020): ProstaTrend—A multivariable prognostic RNA expression score for aggressive prostate cancer
Eur. Urol. **78** (3), 452 - 459
24. **Krieg, L., Schaffert, A.**, Kern, M., Landgraf, K., Wabitsch, M., Beck-Sickinger, A.G., Koerner, A., Blüher, M., **von Bergen, M., Schubert, K.** (2020): An MRM-based multiplexed quantification assay for human adipokines and apolipoproteins
Molecules **25** (4), art. 775
25. **Leppert, B., Strunz, S., Seiwert, B., Schlittenbauer, L., Schlichting, R., Pfeifer, C., Röder, S., Bauer, M.**, Borte, M., Stangl, G.I., Schöneberg, T., Schulz, A., **Karkossa, I., Rolle-Kampczyk, U.E., Thürmann, L., von Bergen, M., Escher, B.I., Junge, K.M., Reemtsma, T., Lehmann, I., Polte, T.** (2020): Maternal paraben exposure triggers childhood overweight development
Nat. Commun. **11** , art. 561
26. **Lohmann, P.**, Benk, S., Gleixner, G., Potthast, K., Michalzik, B., **Jehlich, N., von Bergen, M.** (2020): Seasonal patterns of dominant microbes involved in central nutrient cycles in the subsurface
Microorganisms **8** (11), art. 1694
27. Mahdi, D.H., **Wissenbach, D.K., von Bergen, M.**, Vissiennon, Z., Chougourou, D., Nieber, K., Ahyi, V., Vissiennon, C. (2020): Ethnomedicinal survey and in vitro confirmation of anti-inflammatory and antispasmodic properties of the termite strain *Macrotermes bellicosus* used in traditional medicine in the Republic of Benin
J. Ethnopharmacol. **254** , art. 112705
28. Markevych, I., Ludwig, R., Baumbach, C., Standl, M., Heinrich, J., **Herberth, G.**, de Hoogh, K., Pritsch, K., Weikl, F. (2020): Residing near allergenic trees can increase risk of allergies later in life: LISA Leipzig study
Environ. Res. **191** , art. 110132

29. **Mendler, A., Geier, F., Haange, S.-B., Pierzchalski, A., Krause, J.L., Nijenhuis, I., Froment, J., Jehmlich, N., Berger, U., Ackermann, G., Rolle-Kampczyk, U., von Bergen, M., Herberth, G.** (2020):
Mucosal-associated invariant T-Cell (MAIT) activation is altered by chlorpyrifos- and glyphosate-treated commensal gut bacteria
J. Immunotoxicol. **17** (1), 10 - 20
30. **Mendler, A., Pierzchalski, A., Bauer, M., Röder, S., Sattler, A., Standl, M., Borte, M., von Bergen, M., Rolle-Kampczyk, U., Herberth, G.** (2020):
MAIT cell activation in adolescents is impacted by bile acid concentrations and body weight
Clin. Exp. Immunol. **200** (2), 199 - 213
31. **Meyer, N., Schumacher, A., Coenen, U., Woidacki, K., Schmidt, H., Lindquist, J.A., Mertens, P.R., Zenclussen, A.C.** (2020):
Y-box binding protein 1 expression in trophoblast cells promotes fetal and placental development
Cells **9** (9), art. 1942
32. **Pereira, F.C., Wasmund, K., Cobankovic, I., Jehmlich, N., Herbold, C.W., Lee, K.S., Sziranyi, B., Vesely, C., Decker, T., Stocker, R., Warth, B., von Bergen, M., Wagner, M., Berry, D.** (2020):
Rational design of a microbial consortium of mucosal sugar utilizers reduces *Clostridiodes difficile* colonization
Nat. Commun. **11**, art. 5104
33. **Philips, E.M., Santos, S., Trasande, L., Aurrekoetxea, J.J., Barros, H., von Berg, A., Bergström, A., Bird, P.K., Brescianini, S., Ní Chaoimh, C., Charles, M.-A., Chatzi, L., Chevrier, C., Chrousos, G.P., Costet, N., Criswell, R., Crozier, S., Eggesbø, M., Fantini, M.P., Farchi, S., Forastiere, F., van Gelder, M.M.H.J., Georgiu, V., Godfrey, K.M., Gori, D., Hanke, W., Heude, B., Hryhorczuk, D., Iñiguez, C., Inskip, H., Karvonen, A.M., Kenny, L.C., Kull, I., Lawlor, D.A., **Lehmann, I.**, Magnus, P., Manios, Y., Melén, E., Mommers, M., Morgen, C.S., Moschonis, G., Murray, D., Nohr, E.A., Nybo Andersen, A.-M., Oken, E., Oostvogels, A.J.J.M., Papadopoulou, E., Pekkanen, J., Pizzi, C., Polanska, K., Porta, D., Richiardi, L., Rifas-Shiman, S.L., Roeleveld, N., Rusconi, F., Santos, A.C., Sørensen, T.I.A., Standl, M., Stoltenberg, C., Sunyer, J., Thiering, E., Thijs, C., Torrent, M., Vrijkotte, T.G.M., Wright, J., Zvinchuk, O., Gaillard, R., Jaddoe, V.W.V.** (2020):
Changes in parental smoking during pregnancy and risks of adverse birth outcomes and childhood overweight in Europe and North America: An individual participant data meta-analysis of 229,000 singleton births
PLoS Med. **17** (8), e1003182

34. Prokopciuk, N., **Franck, U.**, Dudoitis, V., Tarasiuk, N., Juskiene, I., Cepuraite, D., Staras, K., Valiulis, A., Ulevicius, V., Valiulis, A. (2020):
Global alliance against chronic respiratory diseases demonstration project: aerosol pollution and its seasonal peculiarities in primary schools of Vilnius
Chin. Med. J. **133** (13), 1516 - 1525
35. Prokopciuk, N., **Franck, U.**, Dudoitis, V., Tarasiuk, N., Juskiene, I., Valiulis, A., Cepuraite, D., Staras, K., Ulevicius, V. (2020):
On the seasonal aerosol pollution levels and its sources in some primary schools in Vilnius, Lithuania
Environ. Sci. Pollut. Res. **27** (13), 15592 - 15606
36. Riba, A., Hassani, K., Walker, A., van Best, N., von Zeschwitz, D., Anslinger, T., Sillner, N., Rosenhain, S., Eibach, D., Maiga-Ascofaré, O., **Rolle-Kampczyk, U.**, Basic, M., Binz, A., Mocek, S., Sodeik, B., Bauerfeind, R., Mohs, A., Trautwein, C., Kiessling, F., May, J., Klingenspor, M., Gremse, F., Schmitt-Kopplin, P., Bleich, A., Torow, N., **von Bergen, M.**, Hornef, M.W. (2020):
Disturbed gut microbiota and bile homeostasis in *Giardia*-infected mice contributes to metabolic dysregulation and growth impairment
Sci. Transl. Med. **12** (565), eaay7019
37. **Rolle-Kampczyk, U.**, **Gebauer, S.**, **Haange, S.-B.**, **Schubert, K.**, Kern, M., Moulla, Y., Dietrich, A., Schön, M.R., Klötting, N., **von Bergen, M.**, Blüher, M. (2020):
Accumulation of distinct persistent organic pollutants is associated with adipose tissue inflammation
Sci. Total Environ. **748** , art. 142458
38. **Starke, R.**, Oliphant, K., **Jehmlich, N.**, **Schäpe, S.S.**, Sachsenberg, T., Kohlbacher, O., Allen-Vercoe, E., **von Bergen, M.** (2020):
Tracing incorporation of heavy water into proteins for species-specific metabolic activity in complex communities
J. Proteomics **222** , art. 103791
39. Thyssen, J.P., Ahluwalia, T.S., Paternoster, L., Ballardini, N., Bergström, A., Melén, E., Chawes, B.L., Stokholm, J., Hourihane, J.O., O'Sullivan, D.M., Bager, P., Melbye, M., Bustamante, M., Torrent, M., Esplugues, A., Duijts, L., Hu, C., Elbert, N.J., Pasmans, S.G.M.A., Nijsten, T.E.C., von Berg, A., Standl, M., Schikowski, T., **Herberth, G.**, Heinrich, J., Lee, Y.-A., Marenholz, I., Lau, S., Curtin, J.A., Simpson, A., Custovic, A., Pennell, C.E., Wang, C.A., Holt, P.G., Bisgaard, H., Bønnelykke, K. (2020):
Interaction between filaggrin mutations and neonatal cat exposure in atopic dermatitis. Letter to the editor
Allergy **75** (6), 1481 - 1485

40. Trump, S., Thürmann, L., Klös, M., **Polte, T.**, Eils, R., Lehmann, I. (2020):
We are what we experienced before birth: Lessons from epigenetics
World Allergy Organ. J. **13** (8), art. 100361
41. van Best, N., **Rolle-Kampczyk, U.**, Schaap, F.G., Basic, M., Olde Damink, S.W.M., Bleich, A., Savelkoul, P.H.M., **von Bergen, M.**, Penders, J., Hornef, M.W. (2020):
Bile acids drive the newborn's gut microbiota maturation
Nat. Commun. **11** , art. 3692
42. **Wang, Z., Karkossa, I., Großkopf, H., Rolle-Kampczyk, U., Hackermüller, J., von Bergen, M., Schubert, K.** (2020):
Comparison of quantitation methods in proteomics to define relevant toxicological information on AhR activation of HepG2 cells by BaP
Toxicology **448** , art. 152652
43. Zhao, J., Birmili, W., Wehner, B., Daniels, A., Weinhold, K., Wang, L., Merkel, M., Kecorius, S., Tuch, T., **Franck, U.**, Hussein, T., Wiedensohler, A. (2020):
Particle mass concentrations and number size distributions in 40 homes in Germany: Indoor-to-outdoor relationships, diurnal and seasonal variation
Aerosol Air Qual. Res. **20** (3), 576 - 589

Buchkapitel

44. Neale, P.A., **Escher, B.I.** (2020):
Mixture modelling and effect-directed analysis for identification of chemicals, mixtures and effects of concern
In: Jiang, G., Li, X. (eds.)
A new paradigm for environmental chemistry and toxicology : from concepts to insights
Springer Singapore, Singapore, p. 87 - 97

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