

References:

- R. Ebert**, R. Cumbana, C. Lehmann, L. Kutzner, A. Toewe, N. Ferreirós, M.J. Parnham, N. H. Schebb, D. Steinhilber, A.S. Kahnt (2020) Long-term stimulation of toll-like receptor-2 and -4 upregulates 5-LO and 15-LO-2 expression thereby inducing a lipid mediator shift in human monocyte-derived macrophages, *BBA Lipids*, 1865 (9), 158702.
- C. Gladine**, A.I. Ostermann, J.W. Newman, N. H. Schebb (2019) MS-based targeted metabolomics of eicosanoids and other oxylipins: analytical and inter-individual variabilities. *Free Radical Biology & Medicine*, 144, 72-89.
- N. M. Hartung**, M. Mainka, N. Kampschulte, A. I. Ostermann, N. H. Schebb (2019) A strategy for validating concentrations of oxylipin standards for external calibration. *Prostag Oth Lipid M*, 141, 22-24
- N. M. Hartung**, M. Mainka, R. Pfaff, M. Kuhn, S. Biernacki, L. Zinnert, N. H. Schebb (2023) Development of a quantitative proteomics approach for cyclooxygenases and lipoxygenases in parallel to quantitative oxylipin analysis allowing the comprehensive investigation of the arachidonic acid cascade. *Anal Bioanal Chem*, 415(5), 1-21.
- A. Kahnt**, N.H. Schebb, D. Steinhilber (2023) Formation of lipoxins and resolvins in human leukocytes. *Prostag Oth Lipid M*, 166, 106726.
- E. Koch**, M. Mainka, C. Dalle, A. I. Ostermann, K. M. Rund, L. Kutzner, L.-F. Froehlich, J. Bertrand-Michel, C. Gladine, N.H. Schebb (2020) Stability of oxylipins during plasma generation and long-term storage. *Talanta*, 217, 121074.
- E. Koch**, M. Wiebel, C. Hopmann, N. Kampschulte, N. H. Schebb (2021) Rapid quantification of fatty acids in plant oils and biological samples by LC-MS. *Anal Bioanal Chem*, 43, 5439-5451.
- L. Kutzner**, A. I. Ostermann, T. Konrad, D. Riegel, J. P. Schuchardt, N. H. Schebb (2017) Lipid class specific quantitative analysis of n3-polyunsaturated fatty acid in food supplements. *Agric Food Chem*, 65, 139-147.
- L. Kutzner**, K. M. Rund, A. I. Ostermann, N. M. Hartung, J.-M. Galano, L. Balas, T. Durand, M. S. Balzer, S. David, N. H. Schebb (2019) Development of an optimized LC-MS method for the detection of specialized pro-resolving mediators in biological samples. *Front. Pharmacol.* 10, 169.
- L. Kutzner**, K. Goloshchapova, M. Jübermann, M. Blum, M. Rothe, S. F. Kirsch, W.-H. Schunck, H.Kühn, Nils Helge Schebb (2020) Human lipoxygenase isoforms form complex patterns of di- and tri-oxygenated compounds from eicosapentaenoic acid. *BBA Lipids*, 1865 (12), 158806.
- M. Mainka**, C. Dalle, M. Pétéra, J. Dalloux-Chioccioli, N. Kampschulte, A. I. Ostermann, M. Rothe, J. Bertrand-Michel, J. W. Newman, C. Gladine, N. H. Schebb (2020) Harmonized procedures lead to comparable quantification of total oxylipins across laboratories. *J Lipid Research*, 61 (11), 1424 – 1436.
- M. Mainka**, S. George, C. Angioni, R. Ebert, T. Goebel, N. Kampschulte, A. Krommes, D. Thomas, N. H. Schebb, D. Steinhilber, A. S. Kahnt (2022) On the biosynthesis of specialized pro-resolving mediator in human neutrophils and the influence of cell integrity. *BBA Lipids*, 1867, 159093.

V. B O'Donnell, G. L. Milne, M. S. Nogueira, M. Giera., N. H. Schebb (2022) Quantitation of oxylipins in biological samples, focusing on plasma and urine. In: Mass Spectrometry for Lipidomics: Methods and Applications, M. Holcapek and K. Ekroos (eds.), Wiley-VCH.

A. I. Ostermann, I. Willenberg and N. H. Schebb (2015) Comparison of sample preparation methods for the quantitative analysis of eicosanoids and other oxylipins in plasma by means of LC-MS/MS. *Anal Bioanal Chem*, 407(5),1403-1414.

A. I. Ostermann, T. Greupner, L. Kutzner, N. M. Hartung, A. Hahn, J. P. Schuchardt, N. H. Schebb (2018) Intra-individual variance of human plasma oxylipin pattern: Low inter-day variability in fastened blood samples versus high variability during the day. *Anal Methods*, 10, 4935 – 4944.

A. I. Ostermann, E. Koch, K. M. Rund, L. Kutzner, M. Mainka, N. H. Schebb (2020) Targeting Esterified Oxylipins by LC-MS – Effect of Sample Preparation on Oxylipin Pattern. *Prostag Oth Lipid M.* 146, 106384.

K. M. Rund, A. I. Ostermann, L. Kutzner, J.-M. Galano, C. Oger, C. Vigor; S. Wecklein, N. Seiwert, T. Durand, N. H. Schebb (2018) Development of an LC-(ESI)-MS/MS method for the simultaneous quantification of 35 isoprostanes and isofurans derived from the major n3- and n6-PUFAs. *Anal Chim Acta*, 1037, 63-74.

K.M. Rund, D. Heylmann, N. Seiwert, S. Wecklein, C. Oger, J.-M. Galano, T. Durand, R. Chen, F. Gueler, J. Fahrner, J. Bornhorst, N. H. Schebb (2019) Formation of trans-epoxy fatty acids correlates with formation of isoprostanes and could serve as biomarker of oxidative stress. *Prostag Oth Lipid M.* 144, 1-10.

K. M. Rund, F. Nolte, J. Doricic, R. Greite, R. Lichtinghagen, F. Gueler, N. H. Schebb (2020) Clinical blood sampling for oxylipin analysis – Effect of storage and pneumatic tube transport of blood on free and total oxylipin profile in human plasma and serum. *Analyst*, 2020, 145, 2378.

K.M. Rund, N.H.Schebb (2023) Quantitative analysis of eicosanoids and other oxylipins – Investigation of oxidative stress and inflammation by means of targeted metabolomics of oxylipins in cell culture. Section in “A Practical Guide to Metabolomics Applications in Health and Disease: From Samples to Insights into Metabolism”.

N. H. Schebb, H. Kühn, A. S. Kahnt, K. M. Rund, V. B. O'Donnell, N. Flamand, M. Peters-Golden, P.J. Jakobsson, K. H. Weylandt, N. Rohwer, R. C. Murphy, G. Geisslinger, G. A. FitzGerald, J. Hanson, C. Dahlgren, M. Wessam Alnouri, S. Offermanns, D. Steinhilber (2022) Formation, signaling and occurrence of specialized pro-resolving lipid mediators – what is the evidence so far? *Frontiers in Pharmacology*, 13, 838782.

I. Willenberg, A. I. Ostermann and N. H. Schebb (2015) Targeted metabolomics of the arachidonic acid cascade – Current state and challenges of LC-MS analysis of oxylipins, 407, 2675–2683. *Anal Bioanal Chem*.