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1. Cardiometabolic Diseases

1.1. Cardiology

2017

Doppler, Christian; Arnhard, Kathrin; Dumfarth, Julia; Heinz, Katharina; Messner, Barbara; Stern, Christian et al. (2017): Metabolomic profiling of ascending thoracic aortic aneurysms and dissections - Implications for pathophysiology and biomarker discovery. In: PLoS ONE 12 (5), S. e0176727. DOI: 10.1371/journal.pone.0176727.

Floegel A, Kühn T, Sookthai D, Johnson T, Prehn C, Rolle-Kampczyk U et al. (2017): Serum metabolites and risk of myocardial infarction and ischemic stroke: a targeted metabolomic approach in two German prospective cohorts. In: Eur. J. Epidemiol. DOI: 10.1007/s10654-017-0333-0.

Kirov, H.; Schwarzer, M.; Neugebauer, S.; Faerber, G.; Diab, M.; Doenst, T. (2017): Metabolomic profiling in patients undergoing Off-Pump or On-Pump coronary artery bypass surgery. In: BMC cardiovascular disorders 17 (1), S. 93. DOI: 10.1186/s12872-017-0518-1.

Paapstel K, Kals J, Eha J, Tootsi K, Ottas A, Piir A et al. (2017): Inverse relations of serum phosphatidylcholines and lysophosphatidylcholines with vascular damage and heart rate in patients with atherosclerosis. In: Nutrition, Metabolism and Cardiovascular Diseases. DOI: 10.1016/j.numecd.2017.07.011.

Ryan, Paul M.; London, Lis E E; Bjorndahl, Trent C.; Mandal, Rupasri; Murphy, Kiera; Fitzgerald, Gerald F. et al. (2017): Microbiome and metabolome modifying effects of several cardiovascular disease interventions in apo-E(-/-) mice. In: Microbiome 5 (1), S. 30. DOI: 10.1186/s40168-017-0246-x.

Stratmann, Bernd; Richter, Katrin; Wang, Ruichao; Yu, Zhonghao; Xu, Tao; Prehn, Cornelia et al. (2017): Metabolomic signature of Coronary Artery Disease in Type 2 Diabetes Mellitus. In: International journal of endocrinology. DOI: 10.1155/2017/7938216.

Wang C, Cheng M, Liu M, Kuo L, Shiao M. (2017): Metabolic profile provides prognostic value better than galectin-3 in patients with heart failure. In: Journal of cardiology; 70(1):92-8. DOI: 10.1016/j.jicc.2016.10.005.

Ward-Caviness, Cavin K.; Xu, Tao; Aspelund, Thor; Thorand, Barbara; Montrone, Corinna; Meisinger, Christa et al. (2017): Improvement of myocardial infarction risk prediction via inflammation-associated metabolite biomarkers. In: Heart; 103(16):1278-85. DOI: 10.1136/heartjnl-2016-310789.

2016

Chao de la Barca, Juan Manuel; Bakhta, Oussama; Kalakech, Hussein; Simard, Gilles; Tamareille, Sophie; Catros, Véronique et al. (2016): Metabolic Signature of Remote Ischemic Preconditioning Involving a Cocktail of Amino Acids and Biogenic Amines. In: Journal of the American Heart Association 5 (9). DOI: 10.1161/JAHA.116.003891.

Lacruz, Maria Elena; Kluttig, Alexander; Tiller, Daniel; Medenwald, Daniel; Giegling, Ina; Rujescu, Dan et al. (2016): Cardiovascular Risk Factors Associated With Blood Metabolite Concentrations and Their Alterations During a 4-Year Period in a Population-Based Cohort. In: Circulation. Cardiovascular genetics 9 (6), S. 487–494. DOI: 10.1161/CIRCGENETICS.116.001444.

Lacruz, Maria Elena; Kluttig, Alexander; Tiller, Daniel; Medenwald, Daniel; Giegling, Ina; Rujescu, Dan et al. (2016): Cardiovascular Risk Factors Associated with Blood Metabolite Concentrations and Their Alterations over a 4-Year Period in a Population-Based Cohort. In: Circulation. Cardiovascular genetics. DOI: 10.1161/CIRCGENETICS.116.001444.

Paapstel, Kaido; Kals, Jaak; Eha, Jaan; Tootsi, Kaspar; Ottas, Aigar; Piir, Anneli; Zilmer, Mihkel (2016): Metabolomic profiles of lipid metabolism, arterial stiffness and hemodynamics in male coronary artery disease patients. In: IJC Metabolic & Endocrine 11, S. 13–18. DOI: 10.1016/j.jicme.2016.05.001.

Sandlers, Yana; Mercier, Kelly; Pathmasiri, Wimal; Carlson, Jim; McRitchie, Susan; Sumner, Susan; Vernon, Hilary J. (2016): Metabolomics Reveals New Mechanisms for Pathogenesis in Barth Syndrome and Introduces Novel Roles for Cardiolipin in Cellular Function. In: PLoS ONE 11 (3), S. e0151802. DOI: 10.1371/journal.pone.0151802.

Schnackenberg, Laura K.; Pence, Lisa; Vijay, Vikrant; Moland, Carrie L.; George, Nysia; Cao, Zhijun et al. (2016): Early metabolomics changes in heart and plasma during chronic doxorubicin treatment in B6C3F1 mice. In: *Journal of applied toxicology: JAT*. DOI: 10.1002/jat.3307.

2015

Allam-Ndoul, Bénédicte; Guénard, Frédéric; Garneau, Véronique; Barbier, Olivier; Pérusse, Louis; Vohl, Marie-Claude (2015): Associations between branched chain amino acid levels, obesity and cardiometabolic complications. In: *Integrative Obesity Diabetes* 1 (6). DOI: 10.15761/IOD.1000134.

Aumailley, Lucie; Dubois, Marie Julie; Garand, Chantal; Marette, André; Lebel, Michel (2015): Impact of vitamin C on the cardiometabolic and inflammatory profiles of mice lacking a functional Werner syndrome protein helicase. In: *Experimental gerontology* 72, S. 192–203. DOI: 10.1016/j.exger.2015.10.012.

Aumailley, Lucie; Garand, Chantal; Dubois, Marie Julie; Johnson, F. Brad; Marette, André; Lebel, Michel (2015): Metabolic and Phenotypic Differences between Mice Producing a Werner Syndrome Helicase Mutant Protein and Wn Null Mice. In: *PLoS ONE* 10 (10), S. e0140292. DOI: 10.1371/journal.pone.0140292.

Cheng, Mei-Ling; Wang, Chao-Hung; Shiao, Ming-Shi; Liu, Min-Hui; Huang, Yu-Yen; Huang, Cheng-Yu et al. (2015): Metabolic disturbances identified in plasma are associated with outcomes in patients with heart failure: diagnostic and prognostic value of metabolomics. In: *Journal of the American College of Cardiology* 65 (15), S. 1509–1520. DOI: 10.1016/j.jacc.2015.02.018.

Deschamps, Chelsea L.; Connors, Kimberly E.; Klein, Matthias S.; Johnsen, Virginia L.; Shearer, Jane; Vogel, Hans J. et al. (2015): The ACTN3 R577X Polymorphism Is Associated with Cardiometabolic Fitness in Healthy Young Adults. In: *PLoS ONE* 10 (6), S. e0130644. DOI: 10.1371/journal.pone.0130644.

Kiermayer, Claudia; Northrup, Emily; Schrewe, Anja; Walch, Axel; Angelis, Martin Hrabe de; Schoensiegel, Frank et al. (2015): Heart-Specific Knockout of the Mitochondrial Thioredoxin Reductase (Txnrd2) Induces Metabolic and Contractile Dysfunction in the Aging Myocardium. In: *Journal of the American Heart Association* 4 (7). DOI: 10.1161/JAHA.115.002153.

Metzler-Zebeli, Barbara U.; Eberspächer, Eva; Grüll, Dietmar; Kowalczyk, Lidia; Molnar, Timea; Zebeli, Qendrim (2015): Enzymatically Modified Starch Ameliorates Postprandial Serum Triglycerides and Lipid Metabolome in Growing Pigs. In: *PLoS ONE* 10 (6), S. e0130553. DOI: 10.1371/journal.pone.0130553.

Wang, Thomas J.; Gupta, Deepak K. (2015): Metabolite profiles in heart failure: looking for unique signatures in a heterogeneous syndrome. In: *Journal of the American College of Cardiology* 65 (15), S. 1521–1524. DOI: 10.1016/j.jacc.2015.02.019.

Xu, Tao; Brandmaier, Stefan; Messias, Ana C.; Herder, Christian; Draisma, Harmen H M; Demirkan, Ayse et al. (2015): Effects of metformin on metabolite profiles and LDL cholesterol in patients with type 2 diabetes. In: *Diabetes Care* 38 (10), S. 1858–1867. DOI: 10.2337/dc15-0658.

Zordoky, Beshay N.; Sung, Miranda M.; Ezekowitz, Justin; Mandal, Rupasri; Han, Beomsoo; Bjorndahl, Trent C. et al. (2015): Metabolomic fingerprint of heart failure with preserved ejection fraction. In: *PLoS ONE* 10 (5), S. e0124844. DOI: 10.1371/journal.pone.0124844.

Zwadlo, Carolin; Schmidtman, Elisa; Szaroszyk, Malgorzata; Kattih, Badder; Froese, Natali; Hinz, Hebke et al. (2015): Antiandrogenic therapy with finasteride attenuates cardiac hypertrophy and left ventricular dysfunction. In: *Circulation* 131 (12), S. 1071–1081. DOI: 10.1161/CIRCULATIONAHA.114.012066.

2014

Bahado-Singh, Ray O.; Ertl, Rebecca; Mandal, Rupasri; Bjorndahl, Trent C.; Syngelaki, Argyro; Han, Beomsoo et al. (2014): Metabolomic prediction of fetal congenital heart defect in the first trimester. In: *Am. J. Obstet. Gynecol.* 211 (3), S. 240.e1-240.e14. DOI: 10.1016/j.ajog.2014.03.056.

Klein, Matthias S.; Connors, Kimberly E.; Shearer, Jane; Vogel, Hans J.; Hittel, Dustin S. (2014): Metabolomics reveals the sex-specific effects of the SORT1 low-density lipoprotein cholesterol locus in healthy young adults. In: *J. Proteome Res.* 13 (11), S. 5063–5070. DOI: 10.1021/pr500659r.

Wientzek, Angelika; Floegel, Anna; Knüppel, Sven; Vigl, Matthaeus; Drogan, Dagmar; Adamski, Jerzy et al. (2014): Serum metabolites related to cardiorespiratory fitness, physical activity energy expenditure, sedentary time and vigorous activity. In: *International journal of sport nutrition and exercise metabolism* 24 (2), S. 215–226. DOI: 10.1123/ijsnem.2013-0048.

Zeller, Tanja; Hughes, Maria; Tuovinen, Tarja; Schillert, Arne; Conrads-Frank, Annette; Ruijter, Hester den et al. (2014): BiomarCaRE: rationale and design of the European BiomarCaRE project including 300,000 participants from 13 European countries. In: *Eur. J. Epidemiol.* DOI: 10.1007/s10654-014-9952-x.

1.2. Diabetes

2017

Ambroziak, Urzula; Kuryłowicz, Alina; Kępczyńska-Nyk, Anna; Bartoszewicz, Zbigniew et al. (2017): Total testosterone to dihydrotestosterone ratio assessed by LC-MS/MS predicts a worse metabolic profile not only in PCOS patients. In: *Ginekologia Polska*. DOI: 10.5603/GP.a2017.0001.

Blutke A, Renner S, Flenkenthaler F, Backman M, Haesner S, Kemter E et al. (2017): The Munich MIDY Pig Biobank - A unique resource for studying organ crosstalk in diabetes. In: *Molecular metabolism*; 6(8):931–40. DOI: 10.1016/j.molmet.2017.06.004.

Boon, Mariëtte R.; Bakker, Leontine E. H.; Prehn, Cornelia; Adamski, Jerzy; Vosselman, Maarten J.; Jazet, Ingrid M. et al. (2017): LysoPC-acyl C16:0 is associated with brown adipose tissue activity in men. In: *Metabolomics* 13 (5), S. 210. DOI: 10.1007/s11306-017-1185-z.

Breier M, Wahl S, Prehn C, Ferrari U, Sacco V, Weise M et al. (2017): Immediate reduction of serum citrulline but no change of steroid profile after initiation of metformin in individuals with type 2 diabetes. In: *J. Steroid Biochem. Mol. Biol.* DOI: 10.1016/j.jsbmb.2017.08.004.

Chou C, Lin C, Chiu DT, Chen I, Chen S. (2017): Tryptophan as a Surrogate Prognostic Marker for Diabetic Nephropathy. In: *J Diabetes Investig.* DOI: 10.1111/jdi.12707.

Isherwood CM, Van der Veen, Daan R, Johnston JD, Skene DJ. (2017): Twenty-four-hour rhythmicity of circulating metabolites: effect of body mass and type 2 diabetes. In: *FASEB J.*; 31(12):5557-67. DOI: 10.1096/fj.201700323R.

Jäger S, Wahl S, Kröger J, Sharma S, Hoffmann P, Floegel A et al. (2017): Genetic variants including markers from the exome chip and metabolite traits of type 2 diabetes. In: *Scientific reports*; 7(1):6037. DOI: 10.1038/s41598-017-06158-3.

Liu J, van Klinken, Jan Bert, Semiz S, van Dijk, Ko Willems, Verhoeven A, Hankemeier T et al. (2017): A Mendelian Randomization Study of Metabolite Profiles, Fasting Glucose, and Type 2 Diabetes. In: *Diabetes*; 66(11):2915–26. DOI: 10.2337/db17-0199.

Liu J, Semiz S, van der Lee, Sven J, van der Spek, Ashley, Verhoeven A, van Klinken, Jan B et al. (2017): Metabolomics based markers predict type 2 diabetes in a 14-year follow-up study. In: *Metabolomics*; 13(9):104. DOI: 10.1007/s11306-017-1239-2.

Mirzoyan K, Klavins K, Koal T, Gillet M, Marsal D, Denis C et al. (2017): Increased urine acylcarnitines in diabetic ApoE^{-/-} mice: Hydroxytetradecadienoylcarnitine (C14:2-OH) reflects diabetic nephropathy in a context of hyperlipidemia. In: *Biochemical and biophysical research communications*; 487(1):109–15. DOI: 10.1016/j.bbrc.2017.04.026.

Newman, Monica A.; Zebeli, Qendrim; Eberspächer, Eva; Grüll, Dietmar; Molnar, Timea; Metzler-Zebeli, Barbara U. (2017): Transglycosylated Starch Improves Insulin Response and Alters Lipid and Amino Acid Metabolome in a Growing Pig Model. In: *Nutrients*; 9(3). DOI: 10.3390/nu9030291.

Stechemesser, Lars; Eder, Sebastian K.; Wagner, Andrej; Patsch, Wolfgang; Feldman, Alexandra; Strasser, Michael et al. (2017): Metabolomic profiling identifies potential pathways involved in the interaction of iron homeostasis with glucose metabolism. In: *Molecular metabolism* 6 (1), S. 38–47. DOI: 10.1016/j.molmet.2016.10.006.

Stratmann, Bernd; Richter, Katrin; Wang, Ruichao; Yu, Zhonghao; Xu, Tao; Prehn, Cornelia et al. (2017): Metabolomic signature of Coronary Artery Disease in Type 2 Diabetes Mellitus. In: *International journal of endocrinology*. DOI: 10.1155/2017/7938216.

Sung, Miranda M.; Kim, Ty T.; Denou, Emmanuel; Soltys, Carrie-Lynn M.; Hamza, Shereen M.; Byrne, Nikole J. et al. (2017): Improved Glucose Homeostasis in Obese Mice Treated With Resveratrol Is Associated With Alterations in the Gut Microbiome. In: *Diabetes*; 66(2):418-25. DOI: 10.2337/db16-0680.

van der Heijden, Amber Awa, Rauh SP, Dekker JM, Beulens JW, Elders P, 't Hart, Leen M et al. (2017): The Hoorn Diabetes Care System (DCS) cohort. A prospective cohort of persons with type 2 diabetes treated in primary care in the Netherlands. In: *BMJ Open*; 7(5):e015599. DOI: 10.1136/bmjopen-2016-015599.

2016

Allalou, Amina; Nalla, Amarnadh; Prentice, Kacey J.; Liu, Ying; Zhang, Ming; Dai, Feihan F. et al. (2016): A Predictive Metabolic Signature for the Transition from Gestational Diabetes to Type 2 Diabetes. In: *Diabetes*. DOI: 10.2337/db15-1720.

Allam-Ndoul, Bénédicte; Guénard, Frédéric; Garneau, Véronique; Cormier, Hubert; Barbier, Olivier; Pérusse, Louis; Vohl, Marie-Claude (2016): Association between Metabolite Profiles, Metabolic Syndrome and Obesity Status. In: *Nutrients* 8 (6). DOI: 10.3390/nu8060324.

Cho, K.; Moon, J. S.; Kang, J-H; Jang, H. B.; Lee, H-J; Park, S. I. et al. (2016): Combined untargeted and targeted metabolomic profiling reveals urinary biomarkers for discriminating obese from normal-weight adolescents. In: *Pediatric obesity*. DOI: 10.1111/ijpo.12114.

Curran, Aoife M.; Ryan, Miriam F.; Drummond, Elaine; Gibney, Eileen R.; Gibney, Michael J.; Roche, Helen M.; Brennan, Lorraine (2016): Uncovering Factors Related to Pancreatic Beta-Cell Function. In: *PLoS ONE* 11 (8), S. e0161350. DOI: 10.1371/journal.pone.0161350.

Franko, Andras; Huypens, Peter; Neschen, Susanne; Irmeler, Martin; Rozman, Jan; Rathkolb, Birgit et al. (2016): Bezafibrate improves insulin sensitivity and metabolic flexibility in STZ-treated diabetic mice. In: *Diabetes*. DOI: 10.2337/db15-1670.

Gao, Xiang; Zhang, Weidong; Wang, Yongbo; Pedram, Pardis; Cahill, Farrell; Zhai, Guangju et al. (2016): Serum metabolic biomarkers distinguish metabolically healthy peripherally obese from unhealthy centrally obese individuals. In: *Nutrition & metabolism* 13, S. 33. DOI: 10.1186/s12986-016-0095-9.

Humer, Elke; Khol-Parisini, Annabella; Metzler-Zebeli, Barbara U.; Gruber, Leonhard; Zebeli, Qendrim (2016): Alterations of the Lipid Metabolome in Dairy Cows Experiencing Excessive Lipolysis Early Postpartum. In: *PLoS ONE* 11 (7), S. e0158633. DOI: 10.1371/journal.pone.0158633.

Isherwood, Cheryl; Johnston, Jonathan D.; Skene, Debra J. (2016): The effect of obesity and type 2 diabetes (T2DM) on human metabolite rhythms. In: *Proc. Nutr. Soc.* 75 (OCE1). DOI: 10.1017/S0029665115004632.

Kazierad, D. J.; Bergman, A.; Tan, B.; Erion, D. M.; Somayaji, V.; Lee, D. S.; Rolph, T. (2016): Effects of multiple ascending doses of the glucagon receptor antagonist, PF-06291874, in patients with type 2 diabetes mellitus. In: *Diabetes, obesity & metabolism*. DOI: 10.1111/dom.12672.

Kim, Yeon-Jung; Lee, Heun-Sik; Kim, Yun Kyoung; Park, Suyeon; Kim, Jeong-Min; Yun, Jun Ho et al. (2016): Association of Metabolites with Obesity and Type 2 Diabetes Based on FTO Genotype. In: *PLoS ONE* 11 (6), S. e0156612. DOI: 10.1371/journal.pone.0156612.

Knebel, Birgit; Strassburger, Klaus; Szendroedi, Julia; Kotzka, Jorg; Scheer, Marsel; Nowotny, Bettina et al. (2016): Specific metabolic profiles and their relationship to insulin resistance in recent-onset type-1 and type-2 diabetes. In: *The Journal of clinical endocrinology and metabolism*, S. jc20154133. DOI: 10.1210/jc.2015-4133.

Lee, Heun-Sik; Xu, Tao; Lee, Young; Kim, Nam-Hee; Kim, Yeon-Jung; Kim, Jeong-Min et al. (2016): Identification of putative biomarkers for type 2 diabetes using metabolomics in the Korea Association Resource (KARE) cohort. In: *Metabolomics* 12 (12). DOI: 10.1007/s11306-016-1103-9.

Lotta, Luca A.; Scott, Robert A.; Sharp, Stephen J.; Burgess, Stephen; Luan, Jian'an; Tillin, Therese et al. (2016): Genetic Predisposition to an Impaired Metabolism of the Branched-Chain Amino Acids and Risk of Type 2 Diabetes: A Mendelian Randomisation Analysis. In: *PLoS medicine* 13 (11), S. e1002179. DOI: 10.1371/journal.pmed.1002179.

Merz, Benedikt; Nöthlings, Ute; Wahl, Simone; Haftenberger, Marjolein; Schienkiewitz, Anja; Adamski, Jerzy et al. (2016): Specific Metabolic Markers Are Associated with Future Waist-Gaining Phenotype in Women. In: *PLoS ONE* 11 (6), S. e0157733. DOI: 10.1371/journal.pone.0157733.

Mouzaki, Marialena; Wang, Alice Y.; Bandsma, Robert; Comelli, Elena M.; Arendt, Bianca M.; Zhang, Ling et al. (2016): Bile Acids and Dysbiosis in Non-Alcoholic Fatty Liver Disease. In: PLoS ONE 11 (5), S. e0151829. DOI: 10.1371/journal.pone.0151829.

Much, Daniela; Beyerlein, Andreas; Kindt, Alida; Krumsiek, Jan; Stücker, Ferdinand; Rossbauer, Michaela et al. (2016): Lactation is associated with altered metabolomic signatures in women with gestational diabetes. In: Diabetologia. DOI: 10.1007/s00125-016-4055-8.

Perng, W.; Oken, E.; Roumeliotaki, T.; Sood, D.; Siskos, A. P.; Chalkiadaki, G. et al. (2016): Leptin, acylcarnitine metabolites and development of adiposity in the Rhea mother-child cohort in Crete, Greece. In: Obesity science & practice 2 (4), S. 471–476. DOI: 10.1002/osp4.65.

Schröder, Torsten; Kucharczyk, David; Bär, Florian; Pagel, René; Derer, Stefanie; Jendrek, Sebastian Torben et al. (2016): Mitochondrial gene polymorphisms alter hepatic cellular energy metabolism and aggravate diet-induced non-alcoholic steatohepatitis. In: Molecular metabolism. DOI: 10.1016/j.molmet.2016.01.010.

2015

Allam-Ndoul, Bénédicte; Guénard, Frédéric; Garneau, Véronique; Barbier, Olivier; Pérusse, Louis; Vohl, Marie-Claude (2015): Associations between branched chain amino acid levels, obesity and cardiometabolic complications. In: Integr Obesity Diabetes 1 (6). DOI: 10.15761/IOD.1000134.

Barrios, Clara; Spector, Tim D.; Menni, Cristina (2015): Blood, urine and faecal metabolite profiles in the study of adult renal disease. In: Archives of biochemistry and biophysics. DOI: 10.1016/j.abb.2015.10.006.

Halama, Anna; Horsch, Marion; Kastenmüller, Gabriele; Möller, Gabriele; Kumar, Pankaj; Prehn, Cornelia et al. (2015): Metabolic switch during adipogenesis: From branched chain amino acid catabolism to lipid synthesis. In: Archives of biochemistry and biophysics. DOI: 10.1016/j.abb.2015.09.013.

Hellmuth, Christian; Kirchberg, Franca Fabiana; Lass, Nina; Harder, Ulrike; Peissner, Wolfgang; Koletzko, Berthold; Reinehr, Thomas (2015): Tyrosine Is Associated with Insulin Resistance in Longitudinal Metabolomic Profiling of Obese Children. In: Journal of Diabetes Research.

Kahle, M.; Schäfer, A.; Seelig, A.; Schultheiß, J.; Wu, M.; Aichler, M. et al. (2015): High fat diet-induced modifications in membrane lipid and mitochondrial-membrane protein signatures precede the development of hepatic insulin resistance in mice. In: Molecular metabolism 4 (1), S. 39–50. DOI: 10.1016/j.molmet.2014.11.004.

Klötting, Nora; Hesselbarth, Nico; Gericke, Martin; Kunath, Anne; Biemann, Ronald; Chakaroun, Rima et al. (2015): Di-(2-Ethylhexyl)-Phthalate (DEHP) Causes Impaired Adipocyte Function and Alters Serum Metabolites. In: PLoS ONE 10 (12), S. e0143190. DOI: 10.1371/journal.pone.0143190.

Lehmann, R.; Friedrich, T.; Krebichl, G.; Sonntag, D.; Häring, H-U; Fritsche, A.; Hennige, A. M. (2015): Metabolic Profiles during an Oral Glucose Tolerance Test in Pregnant Women with and without Gestational Diabetes. In: Experimental and clinical endocrinology & diabetes : official journal, German Society of Endocrinology [and] German Diabetes Association 123 (7), S. 483-38. DOI: 10.1055/s-0035-1549887.

Metzler-Zebeli, Barbara U.; Eberspächer, Eva; Grüll, Dietmar; Kowalczyk, Lidia; Molnar, Timea; Zebeli, Qendrim (2015): Enzymatically Modified Starch Ameliorates Postprandial Serum Triglycerides and Lipid Metabolome in Growing Pigs. In: PLoS ONE 10 (6), S. e0130553. DOI: 10.1371/journal.pone.0130553.

Mook-Kanamori, Dennis O.; Mutsert, Renée de; Rensen, Patrick C N; Prehn, Cornelia; Adamski, Jerzy; den Heijer, Martin et al. (2015): Type 2 diabetes is associated with postprandial amino acid measures. In: Archives of biochemistry and biophysics. DOI: 10.1016/j.abb.2015.08.003.

Pena, Michelle J.; Zeeuw, Dick de; Mischak, Harald; Jankowski, Joachim; Oberbauer, Rainer; Woloszczuk, Wolfgang et al. (2015): Prognostic clinical and molecular biomarkers of renal disease in type 2 diabetes. In: Nephrol. Dial. Transplant. 30 Suppl 4, S. iv86-iv95. DOI: 10.1093/ndt/gfv252.

Renner, Simone; Blutke, Andreas; Streckel, Elisabeth; Wanke, Rüdiger; Wolf, Eckhard (2015): Incretin actions and consequences of incretin-based therapies: lessons from complementary animal models. In: The Journal of pathology. DOI: 10.1002/path.4655.

Shahzad M, Ullah E (2015): Integrative 1H-NMR-based Metabolomic Profiling to Identify Type-2 Diabetes Biomarkers: An Application to a Population of Qatar. In: Metabolomics 05 (01). DOI: 10.4172/2153-0769.1000136.

van den Berg, Rosa; Mook-Kanamori, Dennis O.; Donga, Esther; van Dijk, Marieke; van Gert Dijk, J.; Lammers, Gert-Jan et al. (2015): A single night of sleep curtailment increases plasma acylcarnitines: novel insights in the relationship between sleep and insulin resistance. In: *Archives of biochemistry and biophysics*. DOI: 10.1016/j.abb.2015.09.017.

Wittenbecher, Clemens; Mühlenbruch, Kristin; Kröger, Janine; Jacobs, Simone; Kuxhaus, Olga; Floegel, Anna et al. (2015): Amino acids, lipid metabolites, and ferritin as potential mediators linking red meat consumption to type 2 diabetes. In: *The American journal of clinical nutrition* 101 (6), S. 1241–1250. DOI: 10.3945/ajcn.114.099150.

Xu, Tao; Brandmaier, Stefan; Messias, Ana C.; Herder, Christian; Draisma, Harmen H M; Demirkan, Ayse et al. (2015): Effects of metformin on metabolite profiles and LDL cholesterol in patients with type 2 diabetes. In: *Diabetes Care* 38 (10), S. 1858–1867. DOI: 10.2337/dc15-0658.

2014

Böhm, Anja; Halama, Anna; Meile, Tobias; Zdichavsky, Marty; Lehmann, Rainer; Weigert, Cora et al. (2014): Metabolic signatures of cultured human adipocytes from metabolically healthy versus unhealthy obese individuals. In: *PLoS ONE* 9 (4), S. e93148. DOI: 10.1371/journal.pone.0093148.

Floegel, A.; Wientzek, A.; Bachlechner, U.; Jacobs, S.; Drohan, D.; Prehn, C. et al. (2014): Linking diet, physical activity, cardiorespiratory fitness and obesity to serum metabolite networks: findings from a population-based study. In: *Int J Obes (Lond)*. DOI: 10.1038/ijo.2014.39.

Jacobs, S.; Kroger, J.; Floegel, A.; Boeing, H.; Drohan, D.; Pischon, T. et al. (2014): Evaluation of various biomarkers as potential mediators of the association between coffee consumption and incident type 2 diabetes in the EPIC-Potsdam Study. In: *American Journal of Clinical Nutrition* 100 (3), S. 891–900. DOI: 10.3945/ajcn.113.080317.

Lee, AeJin; Jang, Han Byul; Ra, Moonjin; Choi, Youngshim; Lee, Hye-Ja; Park, Ju Yeon et al. (2014): Prediction of future risk of insulin resistance and metabolic syndrome based on Korean boy's metabolite profiling. In: *Obesity Research & Clinical Practice*. DOI: 10.1016/j.orcp.2014.10.220.

Mook-Kanamori, D. O.; Römisch-Margl, W.; Kastenmüller, G.; Prehn, C.; Petersen, A. K.; Illig, T. et al. (2014): Increased amino acids levels and the risk of developing of hypertriglyceridemia in a 7-year follow-up. In: *J. Endocrinol. Invest.* DOI: 10.1007/s40618-013-0044-7.

Niewczas, Monika A.; Sirich, Tammy L.; Mathew, Anna V.; Skupien, Jan; Mohny, Robert P.; Warram, James H. et al. (2014): Uremic solutes and risk of end-stage renal disease in type 2 diabetes: metabolomic study. In: *Kidney international* 85 (5), S. 1214–1224. DOI: 10.1038/ki.2013.497.

Pena, M. J.; Lambers Heerspink, H J; Hellemons, M. E.; Friedrich, T.; Dallmann, G.; Lajer, M. et al. (2014): Urine and plasma metabolites predict the development of diabetic nephropathy in individuals with Type 2 diabetes mellitus. In: *Diabet. Med.* DOI: 10.1111/dme.12447.

Rauschert, Sebastian; Uhl, Olaf; Koletzko, Berthold; Hellmuth, Christian (2014): Metabolomic Biomarkers for Obesity in -Humans. A Short Review. In: *Ann Nutr Metab* 64 (3-4), S. 314–324. DOI: 10.1159/000365040.

Reinehr, Thomas; Wolters, Barbara; Knop, Caroline; Lass, Nina; Hellmuth, Christian; Harder, Ulrike et al. (2014): Changes in the serum metabolite profile in obese children with weight loss. In: *Eur J Nutr*. DOI: 10.1007/s00394-014-0698-8.

Rzehak, Peter; Hellmuth, Christian; Uhl, Olaf; Kirchberg, Franca F.; Peissner, Wolfgang; Harder, Ulrike et al. (2014): Rapid Growth and Childhood Obesity Are Strongly Associated with LysoPC(14: 0). In: *Ann Nutr Metab* 64 (3-4), S. 294–303. DOI: 10.1159/000365037.

Schäfer, Nadine; Yu, Zhonghao; Wagener, Asja; Millrose, Marion K.; Reissmann, Monika; Bortfeldt, Ralf et al. (2014): Changes in metabolite profiles caused by genetically determined obesity in mice. In: *Metabolomics* 10, S. 461–472. DOI: 10.1007/s11306-013-0590-1.

Wallace, Martina; Morris, Ciara; O'Grada, Colm M.; Ryan, Miriam; Dillon, Eugene T.; Coleman, Eilish et al. (2014): Relationship between the lipidome, inflammatory markers and insulin resistance. In: *Mol Biosyst* 10 (6), S. 1586–1595. DOI: 10.1039/c3mb70529c.

Wolf, Eckhard; Braun-Reichhart, Christina; Streckel, Elisabeth; Renner, Simone (2014): Genetically engineered pig models for diabetes research. In: *Transgenic Res.* 23 (1), S. 27–38. DOI: 10.1007/s11248-013-9755-y.

1.3. Hepatology

2017

Anzai Á, Marcondes RR, Gonçalves TH, Carvalho KC, Simões MJ, Garcia N et al. (2017): Impaired branched-chain amino acid metabolism may underlie the nonalcoholic fatty liver disease-like pathology of neonatal testosterone-treated female rats. In: *Scientific reports*; 7(1):13167. DOI: 10.1038/s41598-017-13451-8.

Bothe MK, Meyer C, Mueller U, Queudot J, Roger V, Harleman J et al. (2017): Characterization of a rat model of moderate liver dysfunction based on alpha-naphthylisothiocyanate-induced cholestasis. In: *The Journal of toxicological sciences*; 42(6):715–21. DOI: 10.2131/jts.42.715.

Calkins KL, DeBarber A, Steiner RD, Flores MJ, Grogan TR, Henning SM et al. (2017): Intravenous Fish Oil and Pediatric Intestinal Failure-Associated Liver Disease: Changes in Plasma Phytosterols, Cytokines, and Bile Acids and Erythrocyte Fatty Acids. In: *JPEN. Journal of parenteral and enteral nutrition*. DOI: 10.1177/0148607117709196.

Goffredo M, Santoro N, Tricò D, Giannini C, D'Adamo E, Zhao H et al. (2017): A Branched-Chain Amino Acid-Related Metabolic Signature Characterizes Obese Adolescents with Non-Alcoholic Fatty Liver Disease. In: *Nutrients*; 9(7). DOI: 10.3390/nu9070642.

Kosack L, Gawish R, Lercher A, Vilagos B, Hladik A, Lakovits K et al. (2017): The lipid-sensor TREM2 aggravates disease in a model of LCMV-induced hepatitis. In: *Scientific reports*; 7(1):11289. DOI: 10.1038/s41598-017-10637-y.

Slopianka M, Herrmann A, Pavkovic M, Ellinger-Ziegelbauer H, Ernst R, Mally A et al. (2017): Quantitative targeted bile acid profiling as new markers for DILI in a model of methapyrilene-induced liver injury in rats. In: *Toxicology*; 386:1-10. DOI: 10.1016/j.tox.2017.05.009.

Wu, Tao; Zheng, Xiaojiao; Yang, Ming; Zhao, Aihua; Li, Meng; Chen, Tianlu et al. (2017): Serum lipid alterations identified in chronic hepatitis B, hepatitis B virus-associated cirrhosis and carcinoma patients. In: *Scientific reports*; 7:42710. DOI: 10.1038/srep42710.

2016

Chang, Ming-Ling; Cheng, Mei-Ling; Chang, Su-Wei; Tang, Hsiang-Yu; Chiu, Cheng-Tang; Yeh, Chau-Ting; Shiao, Ming-Shi (2016): Recovery of pan-genotypic and genotype-specific amino acid alterations in chronic hepatitis C after viral clearance: transition at the crossroad of metabolism and immunity. In: *Amino acids*. DOI: 10.1007/s00726-016-2360-7.

Feldman, Alexandra; Eder, Sebastian K.; Felder, Thomas K.; Kedenko, Lyudmyla; Paulweber, Bernhard; Stadlmayr, Andreas et al. (2016): Clinical and Metabolic Characterization of Lean Caucasian Subjects With Non-alcoholic Fatty Liver. In: *The American journal of gastroenterology*. DOI: 10.1038/ajg.2016.318.

Mouzaki, Marialena; Wang, Alice Y.; Bandsma, Robert; Comelli, Elena M.; Arendt, Bianca M.; Zhang, Ling et al. (2016): Bile Acids and Dysbiosis in Non-Alcoholic Fatty Liver Disease. In: *PLoS ONE* 11 (5), S. e0151829. DOI: 10.1371/journal.pone.0151829.

Schröder, Torsten; Kucharczyk, David; Bär, Florian; Pagel, René; Derer, Stefanie; Jendrek, Sebastian Torben et al. (2016): Mitochondrial gene polymorphisms alter hepatic cellular energy metabolism and aggravate diet-induced non-alcoholic steatohepatitis. In: *Molecular metabolism*. DOI: 10.1016/j.molmet.2016.01.010.

Yu, Nanyang; Wei, Si; Li, Meiyang; Yang, Jingping; Li, Kan; Jin, Ling et al. (2016): Effects of Perfluorooctanoic Acid on Metabolic Profiles in Brain and Liver of Mouse Revealed by a High-throughput Targeted Metabolomics Approach. In: *Scientific reports* 6, S. 23963. DOI: 10.1038/srep23963.

Zhang, Ling; Voskuijl, Wieger; Mouzaki, Marialena; Groen, Albert K.; Alexander, Jennifer; Bourdon, Celine et al. (2016): Impaired Bile Acid Homeostasis in Children with Severe Acute Malnutrition. In: *PLoS ONE* 11 (5), S. e0155143. DOI: 10.1371/journal.pone.0155143.

2015

Abuja, Peter M.; Ehrhart, Friederike; Schoen, Uwe; Schmidt, Tomm; Stracke, Frank; Dallmann, Guido et al. (2015): Alterations in Human Liver Metabolome during Prolonged Cryostorage. In: *J. Proteome Res.* 14 (7), S. 2758–2768. DOI: 10.1021/acs.jproteome.5b00025.

Aumailley, Lucie; Dubois, Marie Julie; Garand, Chantal; Marette, André; Lebel, Michel (2015): Impact of vitamin C on the cardiometabolic and inflammatory profiles of mice lacking a functional Werner syndrome protein helicase. In: *Experimental gerontology* 72, S. 192–203. DOI: 10.1016/j.exger.2015.10.012.

Aumailley, Lucie; Garand, Chantal; Dubois, Marie Julie; Johnson, F. Brad; Marette, André; Lebel, Michel (2015): Metabolic and Phenotypic Differences between Mice Producing a Werner Syndrome Helicase Mutant Protein and Wn Null Mice. In: *PLoS ONE* 10 (10), S. e0140292. DOI: 10.1371/journal.pone.0140292.

Bonhoure, Nicolas; Byrnes, Ashlee; Moir, Robyn D.; Hodroj, Wassim; Preitner, Frédéric; Praz, Viviane et al. (2015): Loss of the RNA polymerase III repressor MAF1 confers obesity resistance. In: *Genes & development* 29 (9), S. 934–947. DOI: 10.1101/gad.258350.115.

Geurts, Lucie; Everard, Amandine; van Hul, Matthias; Essaghir, Ahmed; Duparc, Thibaut; Matamoros, Sébastien et al. (2015): Adipose tissue NAPE-PLD controls fat mass development by altering the browning process and gut microbiota. In: *Nat Commun* 6, S. 6495. DOI: 10.1038/ncomms7495.

Kahle, M.; Schäfer, A.; Seelig, A.; Schultheiß, J.; Wu, M.; Aichler, M. et al. (2015): High fat diet-induced modifications in membrane lipid and mitochondrial-membrane protein signatures precede the development of hepatic insulin resistance in mice. In: *Molecular metabolism* 4 (1), S. 39–50. DOI: 10.1016/j.molmet.2014.11.004.

Tautenhahn, Hans-Michael; Brückner, Sandra; Baumann, Sven; Winkler, Sandra; Otto, Wolfgang; Bergen, Martin von et al. (2015): Attenuation of Postoperative Acute Liver Failure by Mesenchymal Stem Cell Treatment Due to Metabolic Implications. In: *Annals of surgery*. DOI: 10.1097/SLA.0000000000001155.

Vehmas, Anni P.; Adam, Marion; Laajala, Teemu D.; Kastenmüller, Gabi; Prehn, Cornelia; Rozman, Jan et al. (2015): Liver lipid metabolism is altered by increased circulating estrogen to androgen ratio in male mouse. In: *Journal of Proteomics*. DOI: 10.1016/j.jprot.2015.12.009.

2014

Bhattacharyya, Sudeepa; Yan, Ke; Pence, Lisa; Simpson, Pippa M.; Gill, Pritmohinder; Letzig, Lynda G. et al. (2014): Targeted liquid chromatography-mass spectrometry analysis of serum acylcarnitines in acetaminophen toxicity in children. In: *Biomarkers in medicine* 8 (2), S. 147–159. DOI: 10.2217/bmm.13.150.

Cheema, Amrita K.; Pathak, Rupak; Zandkarimi, Fereshteh; Kaur, Prabhjit; Alkhalil, Lynn; Singh, Rajbir et al. (2014): Liver Metabolomics Reveals Increased Oxidative Stress and Fibrogenic Potential in Gfrp Transgenic Mice in Response to Ionizing Radiation. In: *J. Proteome Res.* DOI: 10.1021/pr500278t.

Dahlhoff, Christoph; Worsch, Stefanie; Sailer, Manuela; Hummel, Björn A.; Fiamoncini, Jarlei; Uebel, Kirsten et al. (2014): Methyl-donor supplementation in obese mice prevents the progression of NAFLD, activates AMPK and decreases acyl-carnitine levels. In: *Molecular metabolism* 3 (5), S. 565–580. DOI: 10.1016/j.molmet.2014.04.010.

Imhasly, Sandro; Naegeli, Hanspeter; Baumann, Sven; Bergen, Martin von; Luch, Andreas; Jungnickel, Harald et al. (2014): Metabolomic biomarkers correlating with hepatic lipidosis in dairy cows. In: *BMC Vet. Res.* 10 (1), S. 122. DOI: 10.1186/1746-6148-10-122.

Pandey, Vikash; Sultan, Marc; Kashofer, Karl; Ralser, Meryem; Amstislavskiy, Vyacheslav; Starmann, Julia et al. (2014): Comparative Analysis and Modeling of the Severity of Steatohepatitis in DDC-Treated Mouse Strains. In: *PLoS ONE* 9 (10), S. e111006. DOI: 10.1371/journal.pone.0111006.

1.4. Nephrology

2017

Bassi, Roberto; Niewczas, Monika A.; Biancone, Luigi; Bussolino, Stefania; Merugumala, Sai; Tezza, Sara et al. (2017): Metabolomic Profiling in Individuals with a Failing Kidney Allograft. In: PLoS ONE 12 (1), S. e0169077. DOI: 10.1371/journal.pone.0169077.

Blydt-Hansen TD, Sharma A, Gibson IW, Wishart DS, Mandal R, Ho J et al. (2017): Urinary Metabolomics for Noninvasive Detection of Antibody-Mediated Rejection in Children After Kidney Transplantation. In: Transplantation; 101(10):2553–61. DOI: 10.1097/TP.0000000000001662.

Chou C, Lin C, Chiu DT, Chen I, Chen S. (2017): Tryptophan as a Surrogate Prognostic Marker for Diabetic Nephropathy. In: J Diabetes Investig. DOI: 10.1111/jdi.12707.

Leuthold, Patrick; Schaeffeler, Elke; Winter, Stefan; Büttner, Florian; Hofmann, Ute; Mürdter, Thomas E. et al. (2017): Comprehensive Metabolomic and Lipidomic Profiling of Human Kidney Tissue: A Platform Comparison. In: J. Proteome Res. DOI: 10.1021/acs.jproteome.6b00875.

Mirzoyan K, Klavins K, Koal T, Gillet M, Marsal D, Denis C et al. (2017): Increased urine acylcarnitines in diabetic ApoE^{-/-} mice: Hydroxytetradecadienoylcarnitine (C14:2-OH) reflects diabetic nephropathy in a context of hyperlipidemia. In: Biochemical and biophysical research communications; 487(1):109–15. DOI: 10.1016/j.bbrc.2017.04.026.

2016

Ho, Julie; Sharma, Atul; Mandal, Rupasri; Wishart, David S.; Wiebe, Chris; Storsley, Leroy et al. (2016): Detecting Renal Allograft Inflammation Using Quantitative Urine Metabolomics and CXCL10. In: Transplantation Direct; 2(6):e78. DOI: 10.1097/TXD.0000000000000589.

Nikolaeva, Svetlana; Ansermet, Camille; Centeno, Gabriel; Pradervand, Sylvain; Bize, Vincent; Mordasini, David et al. (2016): Nephron-Specific Deletion of Circadian Clock Gene Bmal1 Alters the Plasma and Renal Metabolome and Impairs Drug Disposition. In: Journal of the American Society of Nephrology: JASN. DOI: 10.1681/ASN.2015091055.

Pena, Michelle J.; Heinzl, Andreas; Rossing, Peter; Parving, Hans-Henrik; Dallmann, Guido; Rossing, Kasper et al. (2016): Serum metabolites predict response to angiotensin II receptor blockers in patients with diabetes mellitus. In: J Transl Med 14 (1), S. 203. DOI: 10.1186/s12967-016-0960-3.

2015

Barrios, Clara; Spector, Tim D.; Menni, Cristina (2015): Blood, urine and faecal metabolite profiles in the study of adult renal disease. In: Archives of biochemistry and biophysics. DOI: 10.1016/j.abb.2015.10.006.

Breit, Marc; Weinberger, Klaus M. (2015): Metabolic biomarkers for chronic kidney disease. In: Archives of biochemistry and biophysics. DOI: 10.1016/j.abb.2015.07.018.

Pena, Michelle J.; Zeeuw, Dick de; Mischak, Harald; Jankowski, Joachim; Oberbauer, Rainer; Woloszczuk, Wolfgang et al. (2015): Prognostic clinical and molecular biomarkers of renal disease in type 2 diabetes. In: Nephrol. Dial. Transplant. 30 Suppl 4, S. iv86-iv95. DOI: 10.1093/ndt/gfv252.

Tsuprykov, Oleg; Chaykovska, Lyubov; Kretschmer, Axel; Stasch, Johannes-Peter; Pfab, Thimo; Krause-Relle, Katharina et al. (2015): Endothelin-1 Overexpression Improves Renal Function in eNOS Knockout Mice. In: Cellular physiology and biochemistry: international journal of experimental cellular physiology, biochemistry, and pharmacology 37 (4), S. 1474–1490. DOI: 10.1159/000438516.

2014

Blydt-Hansen, T. D.; Sharma, A.; Gibson, I. W.; Mandal, R.; Wishart, D. S. (2014): Urinary Metabolomics for Noninvasive Detection of Borderline and Acute T Cell-Mediated Rejection in Children After Kidney Transplantation. In: Am. J. Transplant. DOI: 10.1111/ajt.12837.

Duranton, Flore; Lundin, Ulrika; Gayraud, Nathalie; Mischak, Harald; Aparicio, Michel; Mourad, Georges et al. (2014): Plasma and urinary amino acid metabolomic profiling in patients with different levels of kidney function. In: *Clinical journal of the American Society of Nephrology: CJASN* 9 (1), S. 37–45. DOI: 10.2215/CJN.06000613.

Niewczas, Monika A.; Sirich, Tammy L.; Mathew, Anna V.; Skupien, Jan; Mohney, Robert P.; Warram, James H. et al. (2014): Uremic solutes and risk of end-stage renal disease in type 2 diabetes: metabolomic study. In: *Kidney international* 85 (5), S. 1214–1224. DOI: 10.1038/ki.2013.497.

Nkuipou-Kenfack, Esther; Duranton, Flore; Gayraud, Nathalie; Argilés, Angel; Lundin, Ulrika; Weinberger, Klaus M. et al. (2014): Assessment of metabolomic and proteomic biomarkers in detection and prognosis of progression of renal function in chronic kidney disease. In: *PLoS ONE* 9 (5), S. e96955. DOI: 10.1371/journal.pone.0096955.

Pena, M. J.; Lambers Heerspink, H J; Hellemons, M. E.; Friedrich, T.; Dallmann, G.; Lajer, M. et al. (2014): Urine and plasma metabolites predict the development of diabetic nephropathy in individuals with Type 2 diabetes mellitus. In: *Diabet. Med.* DOI: 10.1111/dme.12447.

2. Neuroscience

2017

An Y, Varma VR, Varma S, Casanova R, Dammer E, Pletnikova O et al. (2017): Evidence for brain glucose dysregulation in Alzheimer's disease. In: *Alzheimer's & dementia: the journal of the Alzheimer's Association.* DOI: 10.1016/j.jalz.2017.09.011.

Blaise BJ, Schwendimann L, Chhor V, Degos V, Hodson MP, Dallmann G et al. (2017): Persistently Altered Metabolic Phenotype following Perinatal Excitotoxic Brain Injury. In: *Developmental neuroscience.* DOI: 10.1159/000464131.

Brito A, Grapov D, Fahrman J, Harvey D, Green R, Miller JW et al. (2017): The Human Serum Metabolome of Vitamin B-12 Deficiency and Repletion, and Associations with Neurological Function in Elderly Adults. In: *J. Nutr.* DOI: 10.3945/jn.117.248278.

Chao de la Barca, Juan Manuel; Simard, Gilles; Sarzi, Emmanuelle; Chaumette, Tanguy; Rousseau, Guillaume; Chupin, Stephanie et al. (2017): Targeted Metabolomics Reveals Early Dominant Optic Atrophy Signature in Optic Nerves of Opa1delTTAG/+ Mice. In: *Investigative ophthalmology & visual science* 58 (2), S. 812–820. DOI: 10.1167/iovs.16-21116.

Costa AC, Joaquim, Helena P G, Forlenza O, Talib LL, Gattaz WF. (2017): Plasma lipids metabolism in mild cognitive impairment and Alzheimer's disease. In: *The world journal of biological psychiatry: the official journal of the World Federation of Societies of Biological Psychiatry*:1–7. DOI: 10.1080/15622975.2017.1369566.

González-Domínguez, Raúl; Sayago, Ana; Fernández-Recamales, Ángeles (2017): Metabolomics in Alzheimer's disease: The need of complementary analytical platforms for the identification of biomarkers to unravel the underlying pathology. In: *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* DOI: 10.1016/j.jchromb.2017.02.008.

Graham SF, Turkoglu O, Kumar P, Yilmaz A, Bjorndahl TC, Han B et al. (2017): Targeted Metabolic Profiling of Post-Mortem Brain from Infants Who Died from Sudden Infant Death Syndrome. In: *J. Proteome Res.* DOI: 10.1021/acs.jproteome.7b00157.

Gupta S, Seydel K, Miranda-Roman MA, Feintuch CM, Saidi A, Kim RS et al. (2017): Extensive alterations of blood metabolites in pediatric cerebral malaria. In: *PLoS ONE*; 12(4):e0175686. In: 10.1371/journal.pone.0175686.

Hindle SJ, Munji RN, Dolgih E, Gaskins G, Orng S, Ishimoto H et al. (2017): Evolutionarily Conserved Roles for Blood-Brain Barrier Xenobiotic Transporters in Endogenous Steroid Partitioning and Behavior. In: *Cell reports*; 21(5):1304–16. DOI: 10.1016/j.celrep.2017.10.026.

Imam SZ, He Z, Cuevas E, Rosas-Hernandez H, Lantz SM, Sarkar S et al. (2017): Changes in the metabolome and microRNA levels in biological fluids might represent biomarkers of neurotoxicity: A trimethyltin study. In: *Experimental biology and medicine (Maywood, N.J.)*:1535370217739859. DOI: 10.1177/1535370217739859.

Kriisa K, Leppik L, Balõtshev R, Ottas A, Soomets U, Koido K et al. (2017): Profiling of Acylcarnitines in First Episode Psychosis before and after Antipsychotic Treatment. In: *J. Proteome Res.*; 16(10):3558-66. DOI: 10.1021/acs.jproteome.7b00279.

Li, Danni; Misialek, Jeffrey R.; Boerwinkle, Eric; Gottesman, Rebecca F.; Sharrett, A. Richey; Mosley, Thomas H. et al. (2017): Prospective associations of plasma phospholipids and mild cognitive impairment/dementia among African Americans in the ARIC Neurocognitive Study. In: *Alzheimer's & dementia (Amsterdam, Netherlands)* 6, S. 1–10. DOI: 10.1016/j.dadm.2016.09.003.

Mapstone, Mark; Lin, Feng; Nalls, Mike A.; Cheema, Amrita K.; Singleton, Andrew B.; Fiandaca, Massimo S.; Federoff, Howard J. (2017): What success can teach us about failure: the plasma metabolome of older adults with superior memory and lessons for Alzheimer's disease. In: *Neurobiology of Aging*; 51:148-55. DOI: 10.1016/j.neurobiolaging.2016.11.007.

Marini S, Santangeli O, Saarelainen P, Middleton B, Chowdhury N, Skene DJ et al. (2017): Abnormalities in the Polysomnographic, Adenosine and Metabolic Response to Sleep Deprivation in an Animal Model of Hyperammonemia. In: *Frontiers in physiology*; 8:636. DOI: 10.3389/fphys.2017.00636.

Oberacher, Herbert; Arnhard, Kathrin; Linhart, Caroline; Diwo, Angela; Marksteiner, Josef; Humpel, Christian (2017): Targeted Metabolomic Analysis of Soluble Lysates from Platelets of Patients with Mild Cognitive Impairment and Alzheimer's Disease Compared to Healthy Controls: Is PC aeC40:4 a Promising Diagnostic Tool? In: *Journal of Alzheimer's disease: JAD*. DOI: 10.3233/JAD-160172.

Pan X, Elliott CT, McGuinness B, Passmore P, Kehoe PG, Hölscher C et al. (2017): Metabolomic Profiling of Bile Acids in Clinical and Experimental Samples of Alzheimer's Disease. In: *Metabolites*; 7(2). DOI: 10.3390/metabo7020028.

Skene, Debra J.; Middleton, Benita; Fraser, Cara K.; Pennings, Jeroen L A; Kuchel, Timothy R.; Rudiger, Skye R. et al. (2017): Metabolic profiling of presymptomatic Huntington's disease sheep reveals novel biomarkers. In: *Scientific reports*; 7:43030. DOI: 10.1038/srep43030.

St John-Williams L, Blach C, Toledo JB, Rotroff DM, Kim S, Klavins K et al. (2017): Targeted metabolomics and medication classification data from participants in the ADNI1 cohort. In: *Scientific data*; 4:170140. DOI: 10.1038/sdata.2017.140.

Tang H, Chiu DT, Lin J, Huang C, Chang K, Lyu R et al. (2017): Disturbance of Plasma Lipid Metabolic Profile in Guillain-Barre Syndrome. In: *Scientific reports*; 7(1):8140. DOI: 10.1038/s41598-017-08338-7.

Toledo, Jon B.; Arnold, Matthias; Kastenmüller, Gabi; Chang, Rui; Baillie, Rebecca A.; Han, Xianlin et al. (2017): Metabolic network failures in Alzheimer's disease—A biochemical road map. In: *Alzheimer's & Dementia*; 13(9):965-84. DOI: 10.1016/j.jalz.2017.01.020.

Verma M, Kipari, Tiina M J, Zhang Z, Man TY, Forster T, Homer, Natalie Z M et al. (2017): 11 β -hydroxysteroid dehydrogenase-1 deficiency alters brain energy metabolism in acute systemic inflammation. In: *Brain, behavior, and immunity*. DOI: 10.1016/j.bbi.2017.11.015.

2016

Bahado-Singh, Ray O.; Graham, Stewart F.; Han, Beomsoo; Turkoglu, Onur; Ziadeh, James; Mandal, Rupasri et al. (2016): Serum metabolomic markers for traumatic brain injury: a mouse model. In: *Metabolomics* 12 (6). DOI: 10.1007/s11306-016-1044-3.

Boeck, Christina; Koenig, Alexandra Maria; Schury, Katharina; Geiger, Martha Leonie; Karabatsiakos, Alexander; Wilker, Sarah et al. (2016): Inflammation in adult women with a history of child maltreatment: The involvement of mitochondrial alterations and oxidative stress. In: *Mitochondrion* 30, S. 197–207. DOI: 10.1016/j.mito.2016.08.006.

Casanova, Ramon; Varma, Sudhir; Simpson, Brittany; Kim, Min; An, Yang; Saldana, Santiago et al. (2016): Blood metabolite markers of preclinical Alzheimer's disease in two longitudinally followed cohorts of older individuals. In: *Alzheimer's & dementia: the journal of the Alzheimer's Association*. DOI: 10.1016/j.jalz.2015.12.008.

Chao de la Barca, Juan Manuel; Simard, Gilles; Amati-Bonneau, Patrizia; Safiedeen, Zainab; Prunier-Mirebeau, Delphine; Chupin, Stéphanie et al. (2016): The metabolomic signature of Leber's hereditary optic neuropathy reveals endoplasmic reticulum stress. In: *Brain: a journal of neurology*. DOI: 10.1093/brain/aww222.

Cheng, Mei-Ling; Chang, Kuo-Hsuan; Wu, Yih-Ru; Chen, Chiung-Mei (2016): Metabolic Disturbances in Plasma as Biomarkers for Huntington's Disease. In: *The Journal of Nutritional Biochemistry*. DOI: 10.1016/j.jnutbio.2015.12.001.

Daley, Mark; Dekaban, Greg; Bartha, Robert; Brown, Arthur; Stewart, Tanya Charyk; Doherty, Timothy et al. (2016): Metabolomics profiling of concussion in adolescent male hockey players: a novel diagnostic method. In: *Metabolomics* 12 (12). DOI: 10.1007/s11306-016-1131-5.

Denihan, N. M. (2016): Investigating metabolomic biomarkers of hypoxic ischaemic encephalopathy. PhD Thesis. Investigating metabolomic biomarkers of hypoxic ischaemic. Online available: 2016_DenihanNM_PhD2016_Hypoxic Encephalopathy.pdf.

Koido, Kati; Innos, Jürgen; Haring, Liina; Zilmer, Mihkel; Ottas, Aigar; Vasar, Eero (2016): Taurine and Epidermal Growth Factor Belong to the Signature of First-Episode Psychosis. In: *Frontiers in neuroscience* 10, S. 331. DOI: 10.3389/fnins.2016.00331.

Li, Danni; Misialek, Jeffrey R.; Boerwinkle, Eric; Gottesman, Rebecca F.; Sharrett, A. Richey; Mosley, Thomas H. et al. (2016): Plasma phospholipids and prevalence of mild cognitive impairment and/or dementia in the ARIC Neurocognitive Study (ARIC-NCS). In: *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*. DOI: 10.1016/j.dadm.2016.02.008.

Mastrokoulas, Anastasios; Pool, Rene; Mina, Eleni; Hettne, Kristina M.; van Duijn, Erik; van der Mast, Roos C et al. (2016): Integration of targeted metabolomics and transcriptomics identifies deregulation of phosphatidylcholine metabolism in Huntington's disease peripheral blood samples. In: *Metabolomics* 12, S. 137. DOI: 10.1007/s11306-016-1084-8.

Patin, Franck; Baranek, Thomas; Vourc'h, Patrick; Nadal-Desbarats, Lydie; Goossens, Jean-François; Marouillat, Sylviane et al. (2016): Combined Metabolomics and Transcriptomics Approaches to Assess the IL-6 Blockade as a Therapeutic of ALS: Deleterious Alteration of Lipid Metabolism. In: *Neurotherapeutics: the journal of the American Society for Experimental NeuroTherapeutics*. DOI: 10.1007/s13311-016-0461-3.

Patin F, Corcia P, Vourc'h P, Nadal-Desbarats L, Baranek T, Goossens J et al. (2016): Omics to Explore Amyotrophic Lateral Sclerosis Evolution: the Central Role of Arginine and Proline Metabolism. In: *Molecular neurobiology*. DOI: 10.1007/s12035-016-0078-x.

Pischiutta, Francesca; Brunelli, Laura; Romele, Pietro; Silini, Antonietta; Sammali, Eliana; Paracchini, Lara et al. (2016): Protection of Brain Injury by Amniotic Mesenchymal Stromal Cell-Secreted Metabolites. In: *Crit. Care Med*. DOI: 10.1097/CCM.0000000000001864.

Tulipani, Sara; Palau-Rodriguez, Magali; Miñarro Alonso, Antonio; Cardona, Fernando; Marco-Ramell, Anna; Zonja, Bozo et al. (2016): Biomarkers of Morbid Obesity and Prediabetes by Metabolomic Profiling of Human Discordant Phenotypes. In: *Clinica chimica acta; international journal of clinical chemistry* 463, S. 53–61. DOI: 10.1016/j.cca.2016.10.005.

Voyle, N.; Kim, M.; Proitsi, P.; Ashton, N. J.; Baird, A. L.; Bazenet, C. et al. (2016): Blood metabolite markers of neocortical amyloid- β burden: discovery and enrichment using candidate proteins. In: *Transl Psychiatry* 6, S. e719. DOI: 10.1038/tp.2015.205.

Yu, Nanyang; Wei, Si; Li, Meiyang; Yang, Jingping; Li, Kan; Jin, Ling et al. (2016): Effects of Perfluorooctanoic Acid on Metabolic Profiles in Brain and Liver of Mouse Revealed by a High-throughput Targeted Metabolomics Approach. In: *Scientific reports* 6, S. 23963. DOI: 10.1038/srep23963.

Zheng, Xiaojiao; Chen, Tianlu; Zhao, Aihua; Wang, Xiaoyan; Xie, Guoxiang; Huang, Fengjie et al. (2016): The Brain Metabolome of Male Rats across the Lifespan. In: *Scientific reports* 6, S. 24125. DOI: 10.1038/srep24125.

2015

Cermenati, Gaia; Audano, Matteo; Giatti, Silvia; Carozzi, Valentina; Porretta-Serapiglia, Carla; Pettinato, Emanuela et al. (2015): Lack of Sterol Regulatory Element Binding Factor-1c Imposes Glial Fatty Acid Utilization Leading to Peripheral Neuropathy. In: *Cell metabolism*. DOI: 10.1016/j.cmet.2015.02.016.

Ellis, Ben; Hye, Abdul; Snowden, Stuart G. (2015): Metabolic Modifications in Human Biofluids Suggest the Involvement of Sphingolipid, Antioxidant, and Glutamate Metabolism in Alzheimer's Disease Pathogenesis. In: *Journal of Alzheimer's disease: JAD*. DOI: 10.3233/JAD-141899.

Fiandaca, Massimo S.; Zhong, Xiaogang; Cheema, Amrita K.; Orquiza, Michael H.; Chidambaram, Swathi; Tan, Ming T. et al. (2015): Plasma 24-metabolite Panel Predicts Preclinical Transition to Clinical Stages of Alzheimer's Disease. In: *Frontiers in neurology* 6, S. 237. DOI: 10.3389/fneur.2015.00237.

Klavins, Kristaps; Koal, Therese; Dallmann, Guido; Marksteiner, Josef; Kemmler, Georg; Humpel, Christian (2015): The ratio of phosphatidylcholines to lysophosphatidylcholines in plasma differentiates healthy controls from patients with Alzheimer's disease and mild cognitive impairment. In: *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*. DOI: 10.1016/j.dadm.2015.05.003.

Liu, Xinyu; Zheng, Peng; Zhao, Xinjie; Zhang, Yuqing; Hu, Chunxiu; Li, Jia et al. (2015): Discovery and Validation of Plasma Biomarkers for Major Depressive Disorder Classification Based on Liquid Chromatography-Mass Spectrometry. In: *J. Proteome Res.* DOI: 10.1021/acs.jproteome.5b00144.

Pan, Xiaobei; Nasaruddin, Muhammad L.; Elliott, Christopher T.; McGuinness, Bernadette; Passmore, Peter; Kehoe, Patrick G. et al. (2015): Alzheimer's disease-like pathology has transient effects on the brain and blood metabolome. In: *Neurobiology of Aging*. DOI: 10.1016/j.neurobiolaging.2015.11.014.

Ruiz, Montserrat; Jove, Mariona; Schluter, Agatha; Casasnovas, Carlos; Villarroya, Francesc; Guilera, Cristina et al. (2015): Altered glycolipid and glycerophospholipid signaling drive inflammatory cascades in adrenomyeloneuropathy. In: *Hum. Mol. Genet.* DOI: 10.1093/hmg/ddv375.

Sirrs, Sandra; van Karnebeek, Clara D M; Peng, Xiaoxue; Shyr, Casper; Tarailo-Graovac, Maja; Mandal, Rupasri et al. (2015): Defects in fatty acid amide hydrolase 2 in a male with neurologic and psychiatric symptoms. In: *Orphanet journal of rare diseases* 10, S. 38. DOI: 10.1186/s13023-015-0248-3.

2014

Davies, S. K.; Ang, J. E.; Revell, V. L.; Holmes, B.; Mann, A.; Robertson, F. P. et al. (2014): Effect of sleep deprivation on the human metabolome. In: *Proceedings of the National Academy of Sciences* 111 (29), S. 10761–10766. DOI: 10.1073/pnas.1402663111.

Koal, Therese; Klavins, Kristaps; Seppi, Daniele; Kemmler, Georg; Humpel, Christian (2014): Sphingomyelin SM(d18:1/18:0) is Significantly Enhanced in Cerebrospinal Fluid Samples Dichotomized by Pathological Amyloid- β 42, Tau, and Phospho-Tau-181 Levels. In: *Journal of Alzheimer's disease: JAD*. DOI: 10.3233/JAD-142319.

Krug, A. K.; Gutbier, S.; Zhao, L.; Pörtl, D.; Kullmann, C.; Ivanova, V. et al. (2014): Transcriptional and metabolic adaptation of human neurons to the mitochondrial toxicant MPP(+). In: *Cell death & disease* 5, S. e1222. DOI: 10.1038/cddis.2014.166.

Mapstone, Mark; Cheema, Amrita K.; Fiandaca, Massimo S.; Zhong, Xiaogang; Mhyre, Timothy R.; MacArthur, Linda H. et al. (2014): Plasma phospholipids identify antecedent memory impairment in older adults. In: *Nat. Med.* 20 (4), S. 415–418. DOI: 10.1038/nm.3466.

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2017

Boon, Mariëtte R.; Bakker, Leontine E. H.; Prehn, Cornelia; Adamski, Jerzy; Vosselman, Maarten J.; Jazet, Ingrid M. et al. (2017): LysoPC-acyl C16:0 is associated with brown adipose tissue activity in men. In: *Metabolomics* 13 (5), S. 210. DOI: 10.1007/s11306-017-1185-z.

Borzouie S. (2017): Application of metabolomics to measure the Alberta "Foodome" [Master Thesis]: University of Alberta.

Boxler MI, Liechti ME, Schmid Y, Kraemer T, Steuer AE. (2017): First time view on human metabolome changes after a single intake of 3,4 methylenedioxymethamphetamine (MDMA) in healthy placebo-controlled subjects. In: *J. Proteome Res.* DOI: 10.1021/acs.jproteome.7b00294.

Brito A, Grapov D, Fahrman J, Harvey D, Green R, Miller JW et al. (2017): The Human Serum Metabolome of Vitamin B-12 Deficiency and Repletion, and Associations with Neurological Function in Elderly Adults. In: *J. Nutr.* DOI: 10.3945/jn.117.248278.

Calkins KL, DeBarber A, Steiner RD, Flores MJ, Grogan TR, Henning SM et al. (2017): Intravenous Fish Oil and Pediatric Intestinal Failure-Associated Liver Disease: Changes in Plasma Phytosterols, Cytokines, and Bile Acids and Erythrocyte Fatty Acids. In: *JPEN. Journal of parenteral and enteral nutrition*. DOI: 10.1177/0148607117709196.

Carayol M, Leitzmann MF, Ferrari P, Zamora-Ros R, Achaintre D, Stepien M et al. (2017): Blood Metabolic Signatures of Body Mass Index: A Targeted Metabolomics Study in the EPIC Cohort. In: *J. Proteome Res.*; 16(9):3137–46. DOI: 10.1021/acs.jproteome.6b01062.

Choi B, Kim SP, Jang C, Yang CH, Lee S. (2017): Comparative analysis of urinary metabolites in methamphetamine self-administrated rats. In: *Analytical Science & Technology*.

Datta P, Zhang Y, Parousis A, Sharma A, Rossomacha E, Endisha H et al. (2017): High-fat diet-induced acceleration of osteoarthritis is associated with a distinct and sustained plasma metabolite signature. In: *Scientific reports*; 7(1):8205. DOI: 10.1038/s41598-017-07963-6.

Felder TK, Ring-Dimitriou S, Auer S, Soyal SM, Kedenko L, Rinnerthaler M et al. (2017): Specific circulating phospholipids, acylcarnitines, amino acids and biogenic amines are aerobic exercise markers. In: *Journal of science and medicine in sport*; 20(7):700–5. DOI: 10.1016/j.jsams.2016.11.011.

Goffredo M, Santoro N, Tricò D, Giannini C, D'Adamo E, Zhao H et al. (2017): A Branched-Chain Amino Acid-Related Metabolic Signature Characterizes Obese Adolescents with Non-Alcoholic Fatty Liver Disease. In: *Nutrients*; 9(7). DOI: 10.3390/nu9070642.

Isherwood CM, Van der Veen, Daan R, Johnston JD, Skene DJ. (2017): Twenty-four-hour rhythmicity of circulating metabolites: effect of body mass and type 2 diabetes. In: *FASEB J.*; 31(12):5557-67. DOI: 10.1096/fj.201700323R.

Keshteli AH, van den Brand, Floris F, Madsen KL, Mandal R, Valcheva R, Kroeker KI et al. (2017): Dietary and metabolomic determinants of relapse in ulcerative colitis patients: A pilot prospective cohort study. In: *World journal of gastroenterology*; 23(21):3890–9. DOI: 10.3748/wjg.v23.i21.3890.

Meale SJ, Morgavi DP, Cassar-Malek I, Andueza D, Ortigues-Marty I, Robins RJ et al. (2017): Exploration of Biological Markers of Feed Efficiency in Young Bulls. In: *Journal of agricultural and food chemistry*; 65(45):9817–27. DOI: 10.1021/acs.jafc.7b03503.

Menni, Cristina (2017): Lessons on dietary biomarkers from twin studies. In: *The Proceedings of the Nutrition Society*; 76(3):303-7. DOI: 10.1017/S0029665116002810.

Newman, Monica A.; Zebeli, Qendrim; Eberspächer, Eva; Grüll, Dietmar; Molnar, Timea; Metzler-Zebeli, Barbara U. (2017): Transglycosylated Starch Improves Insulin Response and Alters Lipid and Amino Acid Metabolome in a Growing Pig Model. In: *Nutrients*; 9(3). DOI: 10.3390/nu9030291.

O'Gorman, Aoife; Gibbons, Helena; Ryan, Miriam F.; Gibney, Eileen R.; Gibney, Michael J.; Frost, Gary S. et al. (2017): Exploring the Links between Diet and Health in an Irish Cohort: A Lipidomic Approach. In: *J. Proteome Res.*; 16(3):1280-7. DOI: 10.1021/acs.jproteome.6b00912.

Roy-Bellavance C, Grants JM, Miard S, Lee K, Rondeau É, Guillemette C et al. (2017): The R148.3 Gene Modulates *Caenorhabditis elegans* Lifespan and Fat Metabolism. In: *G3 (Bethesda, Md.)*; 7(8):2739–47. DOI: 10.1534/g3.117.041681.

Ryan, Paul M.; London, Lis E E; Bjorndahl, Trent C.; Mandal, Rupasri; Murphy, Kiera; Fitzgerald, Gerald F. et al. (2017): Microbiome and metabolome modifying effects of several cardiovascular disease interventions in apo-E(-/-) mice. In: *Microbiome*; 5(1):S. 30. DOI: 10.1186/s40168-017-0246-x.

Sadri, Hassan; Soosten, Dirk von; Meyer, Ulrich; Kluess, Jeannette; Dänicke, Sven; Saremi, Behnam; Sauerwein, Helga (2017): Plasma amino acids and metabolic profiling of dairy cows in response to a bolus duodenal infusion of leucine. In: *PLoS ONE*; 12(4):e0176647. DOI: 10.1371/journal.pone.0176647.

Semba, Richard D.; Trehan, Indi; Li, Ximin; Moaddel, Ruin; Ordiz, M. Isabel; Maleta, Kenneth M. et al. (2017): Environmental Enteric Dysfunction is Associated with Carnitine Deficiency and Altered Fatty Acid Oxidation. In: *EBioMedicine*. DOI: 10.1016/j.ebiom.2017.01.026.

Sung, Miranda M.; Kim, Ty T.; Denou, Emmanuel; Soltys, Carrie-Lynn M.; Hamza, Shereen M.; Byrne, Nikole J. et al. (2017): Improved Glucose Homeostasis in Obese Mice Treated With Resveratrol Is Associated With Alterations in the Gut Microbiome. In: *Diabetes*; 66(2):418-25. DOI: 10.2337/db16-0680.

Thöni V, Pfister A, Melmer A, Enrich B, Salzmann K, Kaser S et al. (2017): Dynamics of Bile Acid Profiles, GLP-1 and FGF19 after Laparoscopic Gastric Banding. In: *The Journal of clinical endocrinology and metabolism*; 102(8):2974–84. DOI: 10.1210/jc.2017-00235.

Yin X, Gibbons H, Rundle M, Frost G, McNulty BA, Nugent AP et al. (2017): Estimation of Chicken Intake by Adults Using Metabolomics-Derived Markers. In: *J. Nutr.* DOI: 10.3945/jn.117.252197.

2016

Auer, Matthias K.; Cecil, Alexander; Roepke, Yasmin; Bultynck, Charlotte; Pas, Charlotte; Fuss, Johannes et al. (2016): 12-months metabolic changes among gender dysphoric individuals under cross-sex hormone treatment: a targeted metabolomics study. In: *Scientific reports* 6, S. 37005. DOI: 10.1038/srep37005.

Bachlechner, U.; Floegel, A.; Steffen, A.; Prehn, C.; Adamski, J.; Pischon, T.; Boeing, H. (2016): Associations of anthropometric markers with serum metabolites using a targeted metabolomics approach: results of the EPIC-potsdam study. In: *Nutrition & diabetes* 6, S. e215. DOI: 10.1038/nutd.2016.23.

Bovo, S.; Mazzoni, G.; Galimberti, G.; Calò, D. G.; Fanelli, F.; Mezzullo, M. et al. (2016): Metabolomics evidences plasma and serum biomarkers differentiating two heavy pig breeds. In: *Animal: an international journal of animal bioscience*, S. 1–8. DOI: 10.1017/S1751731116000483.

Brahmbhatt, Viral; Montoliu, Ivan (2016): Characterization of Selected Metabolic and Immunologic Markers Following Exclusive Enteral Nutrition of Pediatric Crohn's Disease Patients. In: *J Gastrointest Dig Syst* 6 (4). DOI: 10.4172/2161-069X.1000466.

Bub, Achim; Kriebel, Anita; Dörr, Claudia; Bandt, Susanne; Rist, Manuela; Roth, Alexander et al. (2016): The Karlsruhe Metabolomics and Nutrition (KarMeN) Study: Protocol and Methods of a Cross-Sectional Study to Characterize the Metabolome of Healthy Men and Women. In: *JMIR research protocols* 5 (3), S. e146. DOI: 10.2196/resprot.5792.

Cho, K.; Moon, J. S.; Kang, J-H; Jang, H. B.; Lee, H-J; Park, S. I. et al. (2016): Combined untargeted and targeted metabolomic profiling reveals urinary biomarkers for discriminating obese from normal-weight adolescents. In: *Pediatric obesity*. DOI: 10.1111/ijpo.12114.

Dhungana, Suraj; Carlson, James E.; Pathmasiri, Wimal; McRitchie, Susan; Davis, Matt; Sumner, Susan; Appt, Susan E. (2016): Impact of a western diet on the ovarian and serum metabolome. In: *Maturitas* 92, S. 134–142. DOI: 10.1016/j.maturitas.2016.07.008.

Di Giovanni, Valeria; Bourdon, Celine; Wang, Dominic X.; Seshadri, Swapna; Senga, Edward; Versloot, Christian J. et al. (2016): Metabolomic Changes in Serum of Children with Different Clinical Diagnoses of Malnutrition. In: *J. Nutr.* 146 (12), S. 2436–2444. DOI: 10.3945/jn.116.239145.

Gao, Xiang; Zhang, Weidong; Wang, Yongbo; Pedram, Pardis; Cahill, Farrell; Zhai, Guangju et al. (2016): Serum metabolic biomarkers distinguish metabolically healthy peripherally obese from unhealthy centrally obese individuals. In: *Nutrition & metabolism* 13, S. 33. DOI: 10.1186/s12986-016-0095-9.

Hochkogler, Christina M.; Lieder, Barbara; Rust, Petra; Berry, David; Meier, Samuel M.; Pignitter, Marc et al. (2016): A 12-week intervention with nonivamide, a TRPV1 agonist, prevents a dietary-induced body fat gain and increases peripheral serotonin in moderately overweight subjects. In: *Mol Nutr Food Res*. DOI: 10.1002/mnfr.201600731.

Huber, K.; Dänicke, S.; Rehage, J.; Sauerwein, H.; Otto, W.; Rolle-Kampczyk, U.; Bergen, M. von (2016): Metabotypes with properly functioning mitochondria and anti-inflammation predict extended productive life span in dairy cows. In: *Scientific reports* 6, S. 24642. DOI: 10.1038/srep24642.

Kim, Yeon-Jung; Lee, Heun-Sik; Kim, Yun Kyoung; Park, Suyeon; Kim, Jeong-Min; Yun, Jun Ho et al. (2016): Association of Metabolites with Obesity and Type 2 Diabetes Based on FTO Genotype. In: *PLoS ONE* 11 (6), S. e0156612. DOI: 10.1371/journal.pone.0156612.

McIntosh, Keith; Reed, David E.; Schneider, Theresa; Dang, Frances; Keshteli, Ammar H.; Palma, Giada de et al. (2016): FODMAPs alter symptoms and the metabolome of patients with IBS: a randomised controlled trial. In: *Gut*. DOI: 10.1136/gutjnl-2015-311339.

Mera, Paula; Laue, Kathrin; Ferron, Mathieu; Confavreux, Cyril; Wei, Jianwen; Galan-Diez, Marta et al. (2016): Osteocalcin Signaling in Myofibers Is Necessary and Sufficient for Optimum Adaptation to Exercise. In: *Cell metabolism* 23 (6), S. 1078–1092. DOI: 10.1016/j.cmet.2016.05.004.

Merz, Benedikt; Nöthlings, Ute; Wahl, Simone; Haftenberger, Marjolein; Schienkiewitz, Anja; Adamski, Jerzy et al. (2016): Specific Metabolic Markers Are Associated with Future Waist-Gaining Phenotype in Women. In: PLoS ONE 11 (6), S. e0157733. DOI: 10.1371/journal.pone.0157733.

Miranda, Andreia Machado; Carioca, Antonio Augusto Ferreira; Steluti, Josiane; da Silva, Ismael Dale Cotrim Guerreiro; Fisberg, Regina Mara; Marchioni, Dirce Maria (2016): The effect of coffee intake on lysophosphatidylcholines: A targeted metabolomic approach. In: Clinical nutrition (Edinburgh, Scotland). DOI: 10.1016/j.clnu.2016.10.012.

Much, Daniela; Beyerlein, Andreas; Kindt, Alida; Krumsiek, Jan; Stücker, Ferdinand; Rossbauer, Michaela et al. (2016): Lactation is associated with altered metabolomic signatures in women with gestational diabetes. In: Diabetologia. DOI: 10.1007/s00125-016-4055-8.

Pallister, Tess; Haller, Toomas; Thorand, Barbara; Altmaier, Elisabeth; Cassidy, Aedin; Martin, Tiphaine et al. (2016): Metabolites of milk intake: a metabolomic approach in UK twins with findings replicated in two European cohorts. In: Eur J Nutr. DOI: 10.1007/s00394-016-1278-x.

Pallister, Tess; Jennings, Amy; Mohney, Robert P.; Yarand, Darioush; Mangino, Massimo; Cassidy, Aedin et al. (2016): Characterizing Blood Metabolomics Profiles Associated with Self-Reported Food Intakes in Female Twins. In: PLoS ONE 11 (6), S. e0158568. DOI: 10.1371/journal.pone.0158568.

Perng, W.; Oken, E.; Roumeliotaki, T.; Sood, D.; Siskos, A. P.; Chalkiadaki, G. et al. (2016): Leptin, acylcarnitine metabolites and development of adiposity in the Rhea mother-child cohort in Crete, Greece. In: Obesity science & practice 2 (4), S. 471–476. DOI: 10.1002/osp4.65.

Peterson, Christine Tara; Lucas, Joseph; John-Williams, Lisa St; Thompson, J. Will; Moseley, M. Arthur; Patel, Sheila et al. (2016): Identification of Altered Metabolomic Profiles Following a Panchakarma-based Ayurvedic Intervention in Healthy Subjects: The Self-Directed Biological Transformation Initiative (SBTI). In: Scientific reports 6, S. 32609. DOI: 10.1038/srep32609.

Reis, Felipe C G; Branquinho, Jessica L O; Brandao, Bruna B.; Guerra, Beatriz A.; Silva, Ismael D.; Frontini, Andrea et al. (2016): Fat-specific Dicer deficiency accelerates aging and mitigates several effects of dietary restriction in mice. In: Aging.

Rolle-Kampczyk, Ulrike E.; Krumsiek, Jan; Otto, Wolfgang; Röder, Stefan W.; Kohajda, Tibor; Borte, Michael et al. (2016): Metabolomics reveals effects of maternal smoking on endogenous metabolites from lipid metabolism in cord blood of newborns. In: Metabolomics 12 (4). DOI: 10.1007/s11306-016-0983-z.

Schipper, Lidewij; van Dijk, Gertjan; Broersen, Laus M.; Loos, Maarten; Bartke, Nana; Scheurink, Anton Jw; van der Beek, Eline M (2016): A Postnatal Diet Containing Phospholipids, Processed to Yield Large, Phospholipid-Coated Lipid Droplets, Affects Specific Cognitive Behaviors in Healthy Male Mice. In: J. Nutr. DOI: 10.3945/jn.115.224998.

Schröder, Torsten; Kucharczyk, David; Bär, Florian; Pagel, René; Derer, Stefanie; Jendrek, Sebastian Torben et al. (2016): Mitochondrial gene polymorphisms alter hepatic cellular energy metabolism and aggravate diet-induced non-alcoholic steatohepatitis. In: Molecular metabolism. DOI: 10.1016/j.molmet.2016.01.010.

Semba, Richard D.; Gonzalez-Freire, Marta; Moaddel, Ruin; Trehan, Indi; Maleta, Kenneth M.; Khadeer, Mohammed et al. (2016): Environmental Enteric Dysfunction is Associated with Altered Bile Acid Metabolism. In: Journal of pediatric gastroenterology and nutrition. DOI: 10.1097/MPG.0000000000001313.

Semba, Richard D.; Shardell, Michelle; Trehan, Indi; Moaddel, Ruin; Maleta, Kenneth M.; Ordiz, M. Isabel et al. (2016): Metabolic alterations in children with environmental enteric dysfunction. In: Scientific reports 6, S. 28009. DOI: 10.1038/srep28009.

Turrioni, Silvia; Fiori, Jessica; Rampelli, Simone; Schnorr, Stephanie L.; Consolandi, Clarissa; Barone, Monica et al. (2016): Fecal metabolome of the Hadza hunter-gatherers: a host-microbiome integrative view. In: Scientific reports 6, S. 32826. DOI: 10.1038/srep32826.

Weinert, Christoph H.; Empl, Michael T.; Krüger, Ralf; Frommherz, Lara; Egert, Björn; Steinberg, Pablo; Kulling, Sabine E. (2016): The influence of a chronic L-carnitine administration on the plasma metabolome of male Fischer 344 rats. In: Mol Nutr Food Res. DOI: 10.1002/mnfr.201600651.

Zhang, Ling; Voskuijl, Wieger; Mouzaki, Marialena; Groen, Albert K.; Alexander, Jennifer; Bourdon, Celine et al. (2016): Impaired Bile Acid Homeostasis in Children with Severe Acute Malnutrition. In: PLoS ONE 11 (5), S. e0155143. DOI: 10.1371/journal.pone.0155143.

- Allam-Ndoul, Bénédicte; Guénard, Frédéric; Garneau, Véronique; Barbier, Olivier; Pérusse, Louis; Vohl, Marie-Claude (2015): Associations between branched chain amino acid levels, obesity and cardiometabolic complications. In: *Integr Obesity Diabetes* 1 (6). DOI: 10.15761/IOD.1000134.
- Bonhoure, Nicolas; Byrnes, Ashlee; Moir, Robyn D.; Hodroj, Wassim; Preitner, Frédéric; Praz, Viviane et al. (2015): Loss of the RNA polymerase III repressor MAF1 confers obesity resistance. In: *Genes & development* 29 (9), S. 934–947. DOI: 10.1101/gad.258350.115.
- Breit, Marc; Netzer, Michael; Weinberger, Klaus M.; Baumgartner, Christian (2015): Modeling and Classification of Kinetic Patterns of Dynamic Metabolic Biomarkers in Physical Activity. In: *PLoS computational biology* 11 (8), S. e1004454. DOI: 10.1371/journal.pcbi.1004454.
- Daskalaki, Evangelia; Easton, Chris; G. Watson, David (2015): The Application of Metabolomic Profiling to the Effects of Physical Activity. In: *CMB* 2 (4), S. 233–263. DOI: 10.2174/2213235X03666150211000831.
- Geurts, Lucie; Everard, Amandine; van Hul, Matthias; Essaghir, Ahmed; Duparc, Thibaut; Matamoros, Sébastien et al. (2015): Adipose tissue NAPE-PLD controls fat mass development by altering the browning process and gut microbiota. In: *Nat Commun* 6, S. 6495. DOI: 10.1038/ncomms7495.
- Halama, Anna; Horsch, Marion; Kastenmüller, Gabriele; Möller, Gabriele; Kumar, Pankaj; Prehn, Cornelia et al. (2015): Metabolic switch during adipogenesis: From branched chain amino acid catabolism to lipid synthesis. In: *Archives of biochemistry and biophysics*. DOI: 10.1016/j.abb.2015.09.013.
- Hellmuth, Christian; Kirchberg, Franca Fabiana; Lass, Nina; Harder, Ulrike; Peissner, Wolfgang; Koletzko, Berthold; Reinehr, Thomas (2015): Tyrosine Is Associated with Insulin Resistance in Longitudinal Metabolomic Profiling of Obese Children. In: *Journal of Diabetes Research*.
- Holz, Olaf; Roepcke, Stefan; Watz, Henrik; Tegtbur, Uwe; Lahu, Gezim; Hohlfeld, Jens M. (2015): Constant-load exercise decreases the serum concentration of myeloperoxidase in healthy smokers and smokers with COPD. In: *Int J Chron Obstruct Pulmon Dis*. 10, S. 1393–1402. DOI: 10.2147/COPD.S83269.
- Kahle, M.; Schäfer, A.; Seelig, A.; Schultheiß, J.; Wu, M.; Aichler, M. et al. (2015): High fat diet-induced modifications in membrane lipid and mitochondrial-membrane protein signatures precede the development of hepatic insulin resistance in mice. In: *Molecular metabolism* 4 (1), S. 39–50. DOI: 10.1016/j.molmet.2014.11.004.
- Metzler-Zebeli, Barbara U.; Eberspächer, Eva; Grüll, Dietmar; Kowalczyk, Lidia; Molnar, Timea; Zebeli, Qendrim (2015): Enzymatically Modified Starch Ameliorates Postprandial Serum Triglycerides and Lipid Metabolome in Growing Pigs. In: *PLoS ONE* 10 (6), S. e0130553. DOI: 10.1371/journal.pone.0130553.
- Metzler-Zebeli, Barbara U.; Ertl, Reinhard; Klein, Dieter; Zebeli, Qendrim (2015): Explorative study of metabolic adaptations to various dietary calcium intakes and cereal sources on serum metabolome and hepatic gene expression in juvenile pigs. In: *Metabolomics* 11 (3), S. 545–558. DOI: 10.1007/s11306-014-0714-2.
- Mook-Kanamori, Dennis O.; Mutsert, Renée de; Rensen, Patrick C N; Prehn, Cornelia; Adamski, Jerzy; den Heijer, Martin et al. (2015): Type 2 diabetes is associated with postprandial amino acid measures. In: *Archives of biochemistry and biophysics*. DOI: 10.1016/j.abb.2015.08.003.
- Morris, Ciara; O'Grada, Colm M.; Ryan, Miriam F.; Gibney, Michael J.; Roche, Helen M.; Gibney, Eileen R.; Brennan, Lorraine (2015): Modulation of the lipidomic profile due to a lipid challenge and fitness level: a postprandial study. In: *Lipids in health and disease* 14 (1), S. 65. DOI: 10.1186/s12944-015-0062-x.
- Nahon, Kimberly J.; Boon, Mariëtte R.; Bakker, Leontine E. H.; Prehn, Cornelia; Adamski, Jerzy; Jazet, Ingrid M. et al. (2015): Physiological changes due to mild cooling in healthy lean males of white Caucasian and South Asian descent: a metabolomics study. In: *Archives of biochemistry and biophysics*. DOI: 10.1016/j.abb.2015.09.001.
- Ost, Mario; Coleman, Verena; Voigt, Anja; van Schothorst, Evert M.; Keipert, Susanne; van der Stelt, Inge et al. (2015): Muscle mitochondrial stress adaptation operates independently of endogenous FGF21 action. In: *Molecular metabolism*. DOI: 10.1016/j.molmet.2015.11.002.
- Schmidt, J. A.; Rinaldi, S.; Scalbert, A.; Ferrari, P.; Achaintre, D.; Gunter, M. J. et al. (2015): Plasma concentrations and intakes of amino acids in male meat-eaters, fish-eaters, vegetarians and vegans: a cross-sectional analysis in the EPIC-Oxford cohort. In: *Eur J Clin Nutr*. DOI: 10.1038/ejcn.2015.144.

Schmidt, Julie A.; Rinaldi, Sabina; Ferrari, Pietro; Carayol, Marion; Achaintre, David; Scalbert, Augustin et al. (2015): Metabolic profiles of male meat eaters, fish eaters, vegetarians, and vegans from the EPIC-Oxford cohort. In: *The American journal of clinical nutrition* 102 (6), S. 1518–1526. DOI: 10.3945/ajcn.115.111989.

van den Berg, Rosa; Mook-Kanamori, Dennis O.; Donga, Esther; van Dijk, Marieke; van Gert Dijk, J.; Lammers, Gert-Jan et al. (2015): A single night of sleep curtailment increases plasma acylcarnitines: novel insights in the relationship between sleep and insulin resistance. In: *Archives of biochemistry and biophysics*. DOI: 10.1016/j.abb.2015.09.017.

Widmann, Philipp; Reverter, Antonio; Weikard, Rosemarie; Suhre, Karsten; Hammon, Harald M.; Albrecht, Elke; Kuehn, Christa (2015): Systems biology analysis merging phenotype, metabolomic and genomic data identifies Non-SMC Condensin I Complex, Subunit G (NCAPG) and cellular maintenance processes as major contributors to genetic variability in bovine feed efficiency. In: *PLoS ONE* 10 (4), S. e0124574. DOI: 10.1371/journal.pone.0124574.

Wittenbecher, Clemens; Mühlenbruch, Kristin; Kröger, Janine; Jacobs, Simone; Kuxhaus, Olga; Floegel, Anna et al. (2015): Amino acids, lipid metabolites, and ferritin as potential mediators linking red meat consumption to type 2 diabetes. In: *The American journal of clinical nutrition* 101 (6), S. 1241–1250. DOI: 10.3945/ajcn.114.099150.

Shrestha, Aahana; Müllner, Elisabeth; Poutanen, Kaisa; Mykkänen, Hannu; Moazzami, Ali A. (2015): Metabolic changes in serum metabolome in response to a meal. In: *Eur J Nutr*. Online verfügbar unter <https://www.springermedizin.de/metabolic-changes-in-serum-metabolome-in-response-to-a-meal/8392576>.

2014

Antje Damms-Machado (2014): Effects of Surgical and Dietary Weight Loss Therapy for Obesity on Gut Microbiota Composition and Nutrient Absorption. In: *BioMed Research International*. DOI: 10.1155/2015/806248.

Davies, S. K.; Ang, J. E.; Revell, V. L.; Holmes, B.; Mann, A.; Robertson, F. P. et al. (2014): Effect of sleep deprivation on the human metabolome. In: *Proceedings of the National Academy of Sciences* 111 (29), S. 10761–10766. DOI: 10.1073/pnas.1402663111.

Floegel, A.; Wientzek, A.; Bachlechner, U.; Jacobs, S.; Drogan, D.; Prehn, C. et al. (2014): Linking diet, physical activity, cardiorespiratory fitness and obesity to serum metabolite networks: findings from a population-based study. In: *Int J Obes (Lond)*. DOI: 10.1038/ijo.2014.39.

Jacobs, S.; Kroger, J.; Floegel, A.; Boeing, H.; Drogan, D.; Pischon, T. et al. (2014): Evaluation of various biomarkers as potential mediators of the association between coffee consumption and incident type 2 diabetes in the EPIC-Potsdam Study. In: *American Journal of Clinical Nutrition* 100 (3), S. 891–900. DOI: 10.3945/ajcn.113.080317.

Kirchberg, Franca F.; Harder, Ulrike; Weber, Martina; Grote, Veit; Demmelmair, Hans; Peissner, Wolfgang et al. (2014): Dietary protein intake affects amino acid and acylcarnitine metabolism in infants aged 6 months. In: *The Journal of clinical endocrinology and metabolism*, S. jc20143157. DOI: 10.1210/jc.2014-3157.

Mathew, Sweetie; Krug, Susanne; Skurk, Thomas; Halama, Anna; Stank, Antonia; Artati, Anna et al. (2014): Metabolomics of Ramadan fasting: an opportunity for the controlled study of physiological responses to food intake. In: *J Transl Med* 12 (1), S. 161. DOI: 10.1186/1479-5876-12-161.

Missios, Pavlos; Zhou, Yuan; Guachalla, Luis Miguel; Figura, Guido von; Wegner, Andre; Chakkarappan, Sundaram Reddy et al. (2014): Glucose substitution prolongs maintenance of energy homeostasis and lifespan of telomere dysfunctional mice. In: *Nat Commun* 5, S. 4924. DOI: 10.1038/ncomms5924.

Moazzami, Ali A.; Shrestha, Aahana; Morrison, David A.; Poutanen, Kaisa; Mykkänen, Hannu (2014): Metabolomics reveals differences in postprandial responses to breads and fasting metabolic characteristics associated with postprandial insulin demand in postmenopausal women. In: *J. Nutr.* 144 (6), S. 807–814. DOI: 10.3945/jn.113.188912.

Müller, Daniel C.; Degen, Christian; Scherer, Gerhard; Jahreis, Gerhard; Niessner, Reinhard; Scherer, Max (2014): Metabolomics using GC-TOF-MS followed by subsequent GC-FID and HILIC-MS/MS analysis revealed significantly altered fatty acid and phospholipid species profiles in plasma of smokers. In: *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* DOI: 10.1016/j.jchromb.2014.02.044.

O’Gorman, A.; Morris, C.; Ryan, M.; O’Grada, C. M.; Roche, H. M.; Gibney, E. R. et al. (2014): Habitual dietary intake impacts on the lipidomic profile. In: *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* DOI: 10.1016/j.jchromb.2014.01.032.

Rauschert, Sebastian; Uhl, Olaf; Koletzko, Berthold; Hellmuth, Christian (2014): Metabolomic Biomarkers for Obesity in Humans. A Short Review. In: *Ann Nutr Metab* 64 (3-4), S. 314–324. DOI: 10.1159/000365040.

Reinehr, Thomas; Wolters, Barbara; Knop, Caroline; Lass, Nina; Hellmuth, Christian; Harder, Ulrike et al. (2014): Changes in the serum metabolite profile in obese children with weight loss. In: *Eur J Nutr*. DOI: 10.1007/s00394-014-0698-8.

Rzehak, Peter; Hellmuth, Christian; Uhl, Olaf; Kirchberg, Franca F.; Peissner, Wolfgang; Harder, Ulrike et al. (2014): Rapid Growth and Childhood Obesity Are Strongly Associated with LysoPC(14: 0). In: *Ann Nutr Metab* 64 (3-4), S. 294–303. DOI: 10.1159/000365037.

Vrijheid, Martine; Slama, Rémy; Robinson, Oliver; Chatzi, Leda; Coen, Muireann; van den Hazel, Peter et al. (2014): The Human Early-Life Exposome (HELIX): Project Rationale and Design. In: *Environ. Health Perspect*. DOI: 10.1289/ehp.1307204.

Wientzek, Angelika; Floegel, Anna; Knüppel, Sven; Vigl, Matthaeus; Drogan, Dagmar; Adamski, Jerzy et al. (2014): Serum metabolites related to cardiorespiratory fitness, physical activity energy expenditure, sedentary time and vigorous activity. In: *International journal of sport nutrition and exercise metabolism* 24 (2), S. 215–226. DOI: 10.1123/ijsnem.2013-0048.

Winkels, Renate M.; Heine-Bröring, Renate C.; van Zutphen, Moniek; van Harten-Gerritsen, Suzanne; Kok, Dieuwertje E G; van Duijnhoven, Fränzel J B; Kampman, Ellen (2014): The COLON study: Colorectal cancer: Longitudinal, Observational study on Nutritional and lifestyle factors that may influence colorectal tumour recurrence, survival and quality of life. In: *BMC cancer* 14, S. 374. DOI: 10.1186/1471-2407-14-374.

4. Oncology

2017

Ang JE, Pal A, Asad YJ, Henley AT, Valenti M, Box G et al. (2017): Modulation of plasma metabolite biomarkers of MAPK pathway with the MEK inhibitor RO4987655: pharmacodynamic and predictive potential in metastatic melanoma. In: *Molecular cancer therapeutics*. DOI: 10.1158/1535-7163.MCT-16-0881.

Aust, Stefanie; Felix, Sophie; Auer, Katharina; Bachmayr-Heyda, Anna; Kenner, Lukas; Dekan, Sabine et al. (2017): Absence of PD-L1 on tumor cells is associated with reduced MHC I expression and PD-L1 expression increases in recurrent serous ovarian cancer. In: *Scientific reports* 7, S. 42929. DOI: 10.1038/srep42929.

Bakiri, Latifa; Hamacher, Rainer; Graña, Osvaldo; Guío-Carrión, Ana; Campos-Olivas, Ramón; Martínez, Lola et al. (2017): Liver carcinogenesis by FOS-dependent inflammation and cholesterol dysregulation. In: *The Journal of experimental medicine*. DOI: 10.1084/jem.20160935.

Fedirko V, Tran HQ, Gewirtz AT, Stepien M, Trichopoulou A, Aleksandrova K et al. (2017): Exposure to bacterial products lipopolysaccharide and flagellin and hepatocellular carcinoma: a nested case-control study. *BMC Med*; 15(1):72. DOI: 10.1186/s12916-017-0830-8.

Klutzny S, Lesche R, Keck M, Kaulfuss S, Schlicker A, Christian S et al. (2017): Functional inhibition of acid sphingomyelinase by Fluphenazine triggers hypoxia-specific tumor cell death. In: *Cell death & disease*; 8(3):e2709. DOI: 10.1038/cddis.2017.130.

Lee S, Jang W, Choi B, Joo SH, Jeong C. (2017): Comparative metabolomic analysis of HPAC cells following the acquisition of erlotinib resistance. In: *Oncology letters*; 13(5):3437–44. DOI: 10.3892/ol.2017.5940.

Leuthold, Patrick; Schaeffeler, Elke; Winter, Stefan; Büttner, Florian; Hofmann, Ute; Mürdter, Thomas E. et al. (2017): Comprehensive Metabolomic and Lipidomic Profiling of Human Kidney Tissue: A Platform Comparison. In: *J. Proteome Res*. DOI: 10.1021/acs.jproteome.6b00875.

Mayer RL, Schwarzmeier JD, Gerner MC, Bileck A, Mader JC, Meier-Menches SM et al. (2017): Proteomics and metabolomics identify molecular mechanisms of aging potentially predisposing for chronic lymphocytic leukemia. In: *Mol. Cell Proteomics*. DOI: 10.1074/mcp.RA117.000425.

Muqaku B, Eisinger M, Meier SM, Tahir A, Pukrop T, Haferkamp S et al. (2017): Multi-omics Analysis of Serum Samples Demonstrates Reprogramming of Organ Functions Via Systemic Calcium Mobilization and Platelet Activation in Metastatic Melanoma. In: *Mol. Cell Proteomics*; 16(1):86–99. DOI: 10.1074/mcp.M116.063313.

Piyarathna, Danthasinghe Waduge Badrajee, Rajendiran TM, Putluri V, Vantaku V, Soni T, Rundstedt F von et al. (2017): Distinct Lipidomic Landscapes Associated with Clinical Stages of Urothelial Cancer of the Bladder. In: *European Urology Focus*. DOI: 10.1016/j.euf.2017.04.005.

Schmidt JA, Fensom GK, Rinaldi S, Scalbert A, Appleby PN, Achaintre D et al. (2017): Pre-diagnostic metabolite concentrations and prostate cancer risk in 1077 cases and 1077 matched controls in the European Prospective Investigation into Cancer and Nutrition. In: *BMC Med*; 15(1):122. DOI: 10.1186/s12916-017-0885-6.

Wu, Tao; Zheng, Xiaojiao; Yang, Ming; Zhao, Aihua; Li, Meng; Chen, Tianlu et al. (2017): Serum lipid alterations identified in chronic hepatitis B, hepatitis B virus-associated cirrhosis and carcinoma patients. In: *Scientific reports*; 7:42710. DOI: 10.1038/srep42710.

2016

Ang, Joo Ern; Pandher, Rupinder; Ang, Joo Chew; Asad, Yasmin J.; Henley, Alan T.; Valenti, Melanie et al. (2016): Plasma Metabolomic Changes following PI3K Inhibition as Pharmacodynamic Biomarkers: Preclinical Discovery to Phase I Trial Evaluation. In: *Molecular cancer therapeutics*. DOI: 10.1158/1535-7163.MCT-15-0815.

Bachmayr-Heyda, Anna; Aust, Stefanie; Auer, Katharina; Meier, Samuel M.; Schmetterer, Klaus G.; Dekan, Sabine et al. (2016): Integrative Systemic and Local Metabolomics with Impact on Survival in High Grade Serous Ovarian Cancer. In: *Clinical cancer research: an official journal of the American Association for Cancer Research*. DOI: 10.1158/1078-0432.CCR-16-1647.

Brunelli, Laura; Caiola, Elisa; Marabese, Mirko; Broggin, Massimo; Pastorelli, Roberta (2016): Comparative metabolomics profiling of isogenic KRAS wild type and mutant NSCLC cells in vitro and in vivo. In: *Scientific reports* 6, S. 28398. DOI: 10.1038/srep28398.

Caiola, Elisa; Brunelli, Laura; Marabese, Mirko; Broggin, Massimo; Lupi, Monica; Pastorelli, Roberta (2016): Different metabolic responses to PI3K inhibition in NSCLC cells harboring wild-type and G12C mutant KRAS. In: *Oncotarget*. DOI: 10.18632/oncotarget.9849.

Fontana, Andrea; Copetti, Massimiliano; Di Gangi, Iole Maria; Mazza, Tommaso; Tavano, Francesca; Gioffreda, Domenica et al. (2016): Development of a metabolites risk score for one-year mortality risk prediction in pancreatic adenocarcinoma patients. In: *Oncotarget*. DOI: 10.18632/oncotarget.7108.

Kühn, Tilman; Floegel, Anna; Sookthai, Disorn; Johnson, Theron; Rolle-Kampczyk, Ulrike; Otto, Wolfgang et al. (2016): Higher plasma levels of lysophosphatidylcholine 18:0 are related to a lower risk of common cancers in a prospective metabolomics study. In: (*BMC medicine*) 14 (1), S. 13. DOI: 10.1186/s12916-016-0552-3.

Miolo, Gianmaria; Muraro, Elena; Caruso, Donatella; Crivellari, Diana; Ash, Anthony; Scalone, Simona et al. (2016): Pharmacometabolomics study identifies circulating spermidine and tryptophan as potential biomarkers associated with the complete pathological response to trastuzumab-paclitaxel neoadjuvant therapy in HER-2 positive breast cancer. In: *Oncotarget*. DOI: 10.18632/oncotarget.9489.

Panneerselvam, Jayabal; Xie, Guoxiang; Che, Raymond; Su, Mingming; Zhang, Jun; Jia, Wei; Fei, Peiwen (2016): Distinct Metabolic Signature of Human Bladder Cancer Cells Carrying an Impaired Fanconi Anemia Tumor-Suppressor Signaling Pathway. In: *J. Proteome Res*. DOI: 10.1021/acs.jproteome.6b00076.

Schnackenberg, Laura K.; Pence, Lisa; Vijay, Vikrant; Moland, Carrie L.; George, Nysia; Cao, Zhijun et al. (2016): Early metabolomics changes in heart and plasma during chronic doxorubicin treatment in B6C3F1 mice. In: *Journal of applied toxicology: JAT*. DOI: 10.1002/jat.3307.

Stepien, Magdalena; Duarte-Salles, Talita; Fedirko, Veronika; Floegel, Anne; Barupal, Dinesh Kumar; Rinaldi, Sabina et al. (2016): Alteration of amino acid and biogenic amine metabolism in hepatobiliary cancers: Findings from a prospective cohort study. In: *International journal of cancer* 138 (2), S. 348–360. DOI: 10.1002/ijc.29718.

2015

Dale, I.; Roscher, A.; Fiegel, H.; et al. (2015): New circulating lipid markers related to breast cancer [Conference Proceedings]. In: *The Breast* (24).

Dale, I.; Roscher, A.; Lopes Carvalho, A.; et al. (2015): Metabolic signature predicts progression and response after taxane-anthracycline neoadjuvant regimen [Conference Proceedings]. In: *The Breast* (24).

Di Gangi, Iole Maria; Mazza, Tommaso; Fontana, Andrea; Copetti, Massimiliano; Fusilli, Caterina; Ippolito, Antonio et al. (2015): Metabolomic profile in pancreatic cancer patients: a consensus-based approach to identify highly discriminating metabolites. In: *Oncotarget*. DOI: 10.18632/oncotarget.6808.

Giskeødegård, Guro F.; Hansen, Ailin Falkmo; Bertilsson, Helena; Gonzalez, Susana Villa; Kristiansen, Kåre Andre; Bruheim, Per et al. (2015): Metabolic markers in blood can separate prostate cancer from benign prostatic hyperplasia. In: *British journal of cancer*. DOI: 10.1038/bjc.2015.411.

Liu, Xingyin; Secombe, Julie (2015): The Histone Demethylase KDM5 Activates Gene Expression by Recognizing Chromatin Context through Its PHD Reader Motif. In: *Cell reports* 13 (10), S. 2219–2231. DOI: 10.1016/j.celrep.2015.11.007.

Richter, Martin E.; Neugebauer, Sophie; Engelmann, Falco; Hagel, Stefan; Ludewig, Katrin; La Rosée, Paul et al. (2015): Biomarker candidates for the detection of an infectious etiology of febrile neutropenia. In: *Infection*. DOI: 10.1007/s15010-015-0830-6.

Tautenhahn, Hans-Michael; Brückner, Sandra; Baumann, Sven; Winkler, Sandra; Otto, Wolfgang; Bergen, Martin von et al. (2015): Attenuation of Postoperative Acute Liver Failure by Mesenchymal Stem Cell Treatment Due to Metabolic Implications. In: *Annals of surgery*. DOI: 10.1097/SLA.0000000000001155.

Wang, Zhi-Qiang; Faddaoui, Adnen; Bachvarova, Magdalena; Plante, Marie; Gregoire, Jean; Renaud, Marie-Claude et al. (2015): BCAT1 expression associates with ovarian cancer progression: possible implications in altered disease metabolism. In: *Oncotarget* 6 (31), S. 31522–31543. DOI: 10.18632/oncotarget.5159.

2014

Belcheva, Antoaneta; Irrazabal, Thergiorjy; Robertson, Susan J.; Streutker, Catherine; Maughan, Heather; Rubino, Stephen et al. (2014): Gut microbial metabolism drives transformation of MSH2-deficient colon epithelial cells. In: *Cell* 158 (2), S. 288–299. DOI: 10.1016/j.cell.2014.04.051.

Corona, Giuseppe; Polesel, Jerry; Fratino, Lucia; Miolo, Gianmaria; Rizzolio, Flavio; Crivellari, Diana et al. (2014): Metabolomics biomarkers of frailty in elderly breast cancer patients. In: *J. Cell. Physiol.* 229 (7), S. 898–902. DOI: 10.1002/jcp.24520.

Fedirko, Veronika; Duarte-Salles, Talita; Bamia, Christina; Trichopoulou, Antonia; Aleksandrova, Krasimira; Trichopoulos, Dimitrios et al. (2014): Pre-diagnostic circulating vitamin D levels and risk of hepatocellular carcinoma in European populations: A nested case-control study. In: *Hepatology*. DOI: 10.1002/hep.27079.

Laiakis, Evagelia C.; Strassburg, Katrin; Bogumil, Ralf; Lai, Steven; Vreeken, Rob J.; Hankemeier, Thomas et al. (2014): Metabolic Phenotyping Reveals a Lipid Mediator Response to Ionizing Radiation. In: *J. Proteome Res.* DOI: 10.1021/pr5005295.

Nishiumi, Shin; Suzuki, Makoto; Kobayashi, Takashi; Matsubara, Atsuki; Azuma, Takeshi; Yoshida, Masaru (2014): Metabolomics for Biomarker Discovery in Gastroenterological Cancer. In: *Metabolites* 4 (3), S. 547–571. DOI: 10.3390/metabo4030547.

Priolo, Carmen; Pyne, Saumyadipta; Rose, Joshua; Regan, Erzsébet Ravasz; Zadra, Giorgia; Photopoulos, Cornelia et al. (2014): AKT1 and MYC induce distinctive metabolic fingerprints in human prostate cancer. In: *Cancer research* 74 (24), S. 7198–7204. DOI: 10.1158/0008-5472.CAN-14-1490.

Winkels, Renate M.; Heine-Bröring, Renate C.; van Zutphen, Moniek; van Harten-Gerritsen, Suzanne; Kok, Dieuwertje E G; van Duijnhoven, Fränzel J B; Kampman, Ellen (2014): The COLON study: Colorectal cancer: Longitudinal, Observational study on Nutritional and lifestyle factors that may influence colorectal tumour recurrence, survival and quality of life. In: *BMC cancer* 14, S. 374. DOI: 10.1186/1471-2407-14-374.

5. Pharmaceutical Research

2017

Ang JE, Pal A, Asad YJ, Henley AT, Valenti M, Box G et al. (2017): Modulation of plasma metabolite biomarkers of MAPK pathway with the MEK inhibitor RO4987655: pharmacodynamic and predictive potential in metastatic melanoma. In: *Molecular cancer therapeutics*. DOI: 10.1158/1535-7163.MCT-16-0881.

Boxler MI, Liechti ME, Schmid Y, Kraemer T, Steuer AE. (2017): First time view on human metabolome changes after a single intake of 3,4 methylenedioxymethamphetamine (MDMA) in healthy placebo-controlled subjects. In: *J. Proteome Res.* DOI: 10.1021/acs.jproteome.7b00294.

Breier M, Wahl S, Prehn C, Ferrari U, Sacco V, Weise M et al. (2017): Immediate reduction of serum citrulline but no change of steroid profile after initiation of metformin in individuals with type 2 diabetes. In: *J. Steroid Biochem. Mol. Biol.* DOI: 10.1016/j.jsbmb.2017.08.004.

Brito A, Grapov D, Fahrman J, Harvey D, Green R, Miller JW et al. (2017): The Human Serum Metabolome of Vitamin B-12 Deficiency and Repletion, and Associations with Neurological Function in Elderly Adults. In: *J. Nutr.* DOI: 10.3945/jn.117.248278.

Cámara, Elena; Landes, Nils; Albiol, Joan; Gasser, Brigitte; Mattanovich, Diethard; Ferrer, Pau (2017): Increased dosage of AOX1 promoter-regulated expression cassettes leads to transcription attenuation of the methanol metabolism in *Pichia pastoris*. In: *Scientific reports*, S. 44302. DOI: 10.1038/srep44302.

Cambiaghi A, Pinto BB, Brunelli L, Falcetta F, Aletti F, Bendjelid K et al. (2017): Characterization of a metabolomic profile associated with responsiveness to therapy in the acute phase of septic shock. In: *Scientific reports*; 7(1):9748. DOI: 10.1038/s41598-017-09619-x.

de Souza, Janaina Sena; Kizys, Marina Malta Letro; da Conceição, Rodrigo Rodrigues; Glebocki, Gabriel; Romano, Renata Marino; Ortiga-Carvalho, Tania Maria et al. (2017): Perinatal exposure to glyphosate-based herbicide alters the thyrotrophic axis and causes thyroid hormone homeostasis imbalance in male rats. In: *Toxicology* 377, S. 25–37. DOI: 10.1016/j.tox.2016.11.005.

Hindle SJ, Munji RN, Dolgih E, Gaskins G, Orng S, Ishimoto H et al. (2017): Evolutionarily Conserved Roles for Blood-Brain Barrier Xenobiotic Transporters in Endogenous Steroid Partitioning and Behavior. In: *Cell reports*; 21(5):1304–16. DOI: 10.1016/j.celrep.2017.10.026.

Imam SZ, He Z, Cuevas E, Rosas-Hernandez H, Lantz SM, Sarkar S et al. (2017): Changes in the metabolome and microRNA levels in biological fluids might represent biomarkers of neurotoxicity: A trimethyltin study. In: *Experimental biology and medicine (Maywood, N.J.)*:1535370217739859. DOI: 10.1177/1535370217739859.

Kriisa K, Leppik L, Balõtšev R, Ottas A, Soomets U, Koido K et al. (2017): Profiling of Acylcarnitines in First Episode Psychosis before and after Antipsychotic Treatment. In: *J. Proteome Res.*; 16(10):3558-66. DOI: 10.1021/acs.jproteome.7b00279.

Lee S, Jang W, Choi B, Joo SH, Jeong C. (2017): Comparative metabolomic analysis of HPAC cells following the acquisition of erlotinib resistance. In: *Oncology letters*; 13(5):3437–44. DOI: 10.3892/ol.2017.5940.

Ryan, Paul M.; London, Lis E E; Bjorndahl, Trent C.; Mandal, Rupasri; Murphy, Kiera; Fitzgerald, Gerald F. et al. (2017): Microbiome and metabolome modifying effects of several cardiovascular disease interventions in apo-E(-/-) mice. In: *Microbiome* 5 (1), S. 30. DOI: 10.1186/s40168-017-0246-x.

Slopianka M, Herrmann A, Pavkovic M, Ellinger-Ziegelbauer H, Ernst R, Mally A et al. (2017): Quantitative targeted bile acid profiling as new markers for DILI in a model of methapyrilene-induced liver injury in rats. In: *Toxicology*; 386:1-10. DOI: 10.1016/j.tox.2017.05.009.

2016

Ang, Joo Ern; Pandher, Rupinder; Ang, Joo Chew; Asad, Yasmin J.; Henley, Alan T.; Valenti, Melanie et al. (2016): Plasma Metabolomic Changes following PI3K Inhibition as Pharmacodynamic Biomarkers: Preclinical Discovery to Phase I Trial Evaluation. In: *Molecular cancer therapeutics*. DOI: 10.1158/1535-7163.MCT-15-0815.

Bhattacharyya, Sudeepa; Pence, Lisa; Yan, Ke; Gill, Pritmohinder; Luo, Chunqiao; Letzig, Lynda G. et al. (2016): Targeted Metabolomic Profiling Indicates Structure-based Perturbations in Serum Phospholipids in Children with Acetaminophen Overdose. In: *Toxicology Reports*. DOI: 10.1016/j.toxrep.2016.08.004.

Breitner, Susanne; Schneider, Alexandra; Devlin, Robert B.; Ward-Caviness, Cavin K.; Diaz-Sanchez, David; Neas, Lucas M. et al. (2016): Associations among plasma metabolite levels and short-term exposure to PM2.5 and ozone in a cardiac catheterization cohort. In: *Environment international* 97, S. 76–84. DOI: 10.1016/j.envint.2016.10.012.

Brunelli, Laura; Caiola, Elisa; Marabese, Mirko; Broggin, Massimo; Pastorelli, Roberta (2016): Comparative metabolomics profiling of isogenic KRAS wild type and mutant NSCLC cells in vitro and in vivo. In: Scientific reports 6, S. 28398. DOI: 10.1038/srep28398.

Caiola, Elisa; Brunelli, Laura; Marabese, Mirko; Broggin, Massimo; Lupi, Monica; Pastorelli, Roberta (2016): Different metabolic responses to PI3K inhibition in NSCLC cells harboring wild-type and G12C mutant KRAS. In: Oncotarget. DOI: 10.18632/oncotarget.9849.

Eguchi, Akifumi; Miyaso, Hidenobu; Mori, Chisato (2016): The effects of early postnatal exposure to a low dose of decabromodiphenyl ether (BDE-209) on serum metabolites in male mice. In: The Journal of toxicological sciences 41 (5), S. 667–675. DOI: 10.2131/jts.41.667.

Franko, Andras; Huypens, Peter; Neschen, Susanne; Irmeler, Martin; Rozman, Jan; Rathkolb, Birgit et al. (2016): Bezafibrate improves insulin sensitivity and metabolic flexibility in STZ-treated diabetic mice. In: Diabetes. DOI: 10.2337/db15-1670.

Hochkogler, Christina M.; Lieder, Barbara; Rust, Petra; Berry, David; Meier, Samuel M.; Pignitter, Marc et al. (2016): A 12-week intervention with nonivamide, a TRPV1 agonist, prevents a dietary-induced body fat gain and increases peripheral serotonin in moderately overweight subjects. In: Mol Nutr Food Res. DOI: 10.1002/mnfr.201600731.

Kazierad, D. J.; Bergman, A.; Tan, B.; Erion, D. M.; Somayaji, V.; Lee, D. S.; Rolph, T. (2016): Effects of multiple ascending doses of the glucagon receptor antagonist, PF-06291874, in patients with type 2 diabetes mellitus. In: Diabetes, obesity & metabolism. DOI: 10.1111/dom.12672.

Koido, Kati; Innos, Jürgen; Haring, Liina; Zilmer, Mihkel; Ottas, Aigar; Vasar, Eero (2016): Taurine and Epidermal Growth Factor Belong to the Signature of First-Episode Psychosis. In: Frontiers in neuroscience 10, S. 331. DOI: 10.3389/fnins.2016.00331.

Miolo, Gianmaria; Muraro, Elena; Caruso, Donatella; Crivellari, Diana; Ash, Anthony; Scalone, Simona et al. (2016): Phamacometabolomics study identifies circulating spermidine and tryptophan as potential biomarkers associated with the complete pathological response to trastuzumab-paclitaxel neoadjuvant therapy in HER-2 positive breast cancer. In: Oncotarget. DOI: 10.18632/oncotarget.9489.

Pannkuk, Evan L.; Laiakis, Evagelia C.; Authier, Simon; Wong, Karen; Fornace, Albert J. (2016): Targeted metabolomics of nonhuman primate serum after exposure to ionizing radiation: potential tools for high-throughput biodosimetry. In: RSC Adv 6 (56), S. 51192–51202. DOI: 10.1039/C6RA07757A.

Patin, Franck; Baranek, Thomas; Vourc'h, Patrick; Nadal-Desbarats, Lydie; Goossens, Jean-François; Marouillat, Sylviane et al. (2016): Combined Metabolomics and Transcriptomics Approaches to Assess the IL-6 Blockade as a Therapeutic of ALS: Deleterious Alteration of Lipid Metabolism. In: Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics. DOI: 10.1007/s13311-016-0461-3.

Pena, Michelle J.; Heinzl, Andreas; Rossing, Peter; Parving, Hans-Henrik; Dallmann, Guido; Rossing, Kasper et al. (2016): Serum metabolites predict response to angiotensin II receptor blockers in patients with diabetes mellitus. In: J Transl Med 14 (1), S. 203. DOI: 10.1186/s12967-016-0960-3.

Peterson, Christine Tara; Lucas, Joseph; John-Williams, Lisa St; Thompson, J. Will; Moseley, M. Arthur; Patel, Sheila et al. (2016): Identification of Altered Metabolomic Profiles Following a Panchakarma-based Ayurvedic Intervention in Healthy Subjects: The Self-Directed Biological Transformation Initiative (SBTI). In: Scientific reports 6, S. 32609. DOI: 10.1038/srep32609.

Potratz, Sarah; Jungnickel, Harald; Grabiger, Stefan; Tarnow, Patrick; Otto, Wolfgang; Fritsche, Ellen et al. (2016): Differential cellular metabolite alterations in HaCaT cells caused by exposure to the aryl hydrocarbon receptor-binding polycyclic aromatic hydrocarbons chrysene, benzo[a]pyrene and dibenzo[a,l]pyrene. In: Toxicology Reports. DOI: 10.1016/j.toxrep.2016.09.003.

Potratz, Sarah; Tarnow, Patrick; Jungnickel, Harald; Baumann, Sven; Bergen, Martin von; Tralau, Tewes; Luch, Andreas (2016): Combination of Metabolomics with Cellular Assays Reveals New Biomarkers and Mechanistic Insights on Xenoestrogenic Exposures in MCF-7 Cells. In: Chemical research in toxicology. DOI: 10.1021/acs.chemrestox.6b00106.

Schnackenberg, Laura K.; Pence, Lisa; Vijay, Vikrant; Moland, Carrie L.; George, Nysia; Cao, Zhijun et al. (2016): Early metabolomics changes in heart and plasma during chronic doxorubicin treatment in B6C3F1 mice. In: Journal of applied toxicology: JAT. DOI: 10.1002/jat.3307.

2015

Dale, I.; Roscher, A.; Lopes Carvalho, A.; et al. (2015): Metabolic signature predicts progression and response after taxane-anthracycline neoadjuvant regimen [Conference Proceedings]. In: *The Breast* (24).

Klötting, Nora; Hesselbarth, Nico; Gericke, Martin; Kunath, Anne; Biemann, Ronald; Chakaroun, Rima et al. (2015): Di-(2-Ethylhexyl)-Phthalate (DEHP) Causes Impaired Adipocyte Function and Alters Serum Metabolites. In: *PLoS ONE* 10 (12), S. e0143190. DOI: 10.1371/journal.pone.0143190.

Meier, Samuel M.; Muqaku, Besnik; Ullmann, Ronald; Bileck, Andrea; Kreutz, Dominique; Mader, Johanna C. et al. (2015): Proteomic and Metabolomic Analyses Reveal Contrasting Anti-Inflammatory Effects of an Extract of *Mucor Racemosus* Secondary Metabolites Compared to Dexamethasone. In: *PLoS ONE* 10 (10), S. e0140367. DOI: 10.1371/journal.pone.0140367.

Moser, Virginia C.; Stewart, Nicholas; Freeborn, Danielle L.; Crooks, James; MacMillan, Denise K.; Hedge, Joan M. et al. (2015): Assessment of serum biomarkers in rats after exposure to pesticides of different chemical classes. In: *Toxicology and applied pharmacology* 282 (2), S. 161–174. DOI: 10.1016/j.taap.2014.11.016.

Stanley, Joanna L.; Sulek, Karolina; Andersson, Irene J.; Davidge, Sandra T.; Kenny, Louise C.; Sibley, Colin P. et al. (2015): Sildenafil Therapy Normalizes the Aberrant Metabolomic Profile in the *Comt(-/-)* Mouse Model of Preeclampsia/Fetal Growth Restriction. In: *Scientific reports* 5, S. 18241. DOI: 10.1038/srep18241.

Xu, Tao; Brandmaier, Stefan; Messias, Ana C.; Herder, Christian; Draisma, Harmen H M; Demirkan, Ayse et al. (2015): Effects of metformin on metabolite profiles and LDL cholesterol in patients with type 2 diabetes. In: *Diabetes Care* 38 (10), S. 1858–1867. DOI: 10.2337/dc15-0658.

Zwadlo, Carolin; Schmidtman, Elisa; Szaroszyk, Malgorzata; Kattih, Badder; Froese, Natali; Hinz, Hebe et al. (2015): Antiandrogenic therapy with finasteride attenuates cardiac hypertrophy and left ventricular dysfunction. In: *Circulation* 131 (12), S. 1071–1081. DOI: 10.1161/CIRCULATIONAHA.114.012066.

2014

Baumann, Sven; Rockstroh, Maxie; Barthel, Jörg; Krumsiek, Jan; Otto, Wolfgang; Jungnickel, Harald et al. (2014): Subtoxic concentrations of benzo[a]pyrene induce metabolic changes and oxidative stress in non-activated and affect the mTOR pathway in activated Jurkat T cells. In: *JIOMICS* 4 (1). DOI: 10.5584/jiomics.v4i1.157.

Bhattacharyya, Sudeepa; Yan, Ke; Pence, Lisa; Simpson, Pippa M.; Gill, Pritmohinder; Letzig, Lynda G. et al. (2014): Targeted liquid chromatography-mass spectrometry analysis of serum acylcarnitines in acetaminophen toxicity in children. In: *Biomarkers in medicine* 8 (2), S. 147–159. DOI: 10.2217/bmm.13.150.

Cheema, Amrita K.; Pathak, Rupak; Zandkarimi, Fereshteh; Kaur, Prabhjit; Alkhalil, Lynn; Singh, Rajbir et al. (2014): Liver Metabolomics Reveals Increased Oxidative Stress and Fibrogenic Potential in *Gfrp* Transgenic Mice in Response to Ionizing Radiation. In: *J. Proteome Res.* DOI: 10.1021/pr500278t.

Hotze, M.; Baurecht, H.; Rodríguez, E.; Chapman-Rothe, N.; Ollert, M.; Fölster-Holst, R. et al. (2014): Increased efficacy of omalizumab in atopic dermatitis patients with wild-type filaggrin status and higher serum levels of phosphatidylcholines. In: *Allergy* 69 (1), S. 132–135. DOI: 10.1111/all.12234.

Jungnickel, Harald; Potratz, Sarah; Baumann, Sven; Tarnow, Patrick; Bergen, Martin von; Luch, Andreas (2014): Identification of Lipidomic Biomarkers for Coexposure to Subtoxic Doses of Benzo[a]pyrene and Cadmium: The Toxicological Cascade Biomarker Approach. In: *Environ. Sci. Technol.* DOI: 10.1021/es502419w.

Kalkhof, Stefan; Dautel, Franziska; Loguercio, Salvatore; Baumann, Sven; Trump, Saskia; Jungnickel, Harald et al. (2014): Establishing the pathway and time resolved benzo[a]pyrene toxicity on Hepa1c1c7 cells at toxic and subtoxic exposure. In: *J. Proteome Res.* DOI: 10.1021/pr500957t.

Krug, A. K.; Gutbier, S.; Zhao, L.; Pörtl, D.; Kullmann, C.; Ivanova, V. et al. (2014): Transcriptional and metabolic adaptation of human neurons to the mitochondrial toxicant MPP(+). In: *Cell death & disease* 5, S. e1222. DOI: 10.1038/cddis.2014.166.

Laiakis, Evagelia C.; Strassburg, Katrin; Bogumil, Ralf; Lai, Steven; Vreeken, Rob J.; Hankemeier, Thomas et al. (2014): Metabolic Phenotyping Reveals a Lipid Mediator Response to Ionizing Radiation. In: *J. Proteome Res.* DOI: 10.1021/pr5005295.

Pandey, Vikash; Sultan, Marc; Kashofer, Karl; Ralser, Meryem; Amstislavskiy, Vyacheslav; Starmann, Julia et al. (2014): Comparative Analysis and Modeling of the Severity of Steatohepatitis in DDC-Treated Mouse Strains. In: PLoS ONE 9 (10), S. e111006. DOI: 10.1371/journal.pone.0111006.

Vincent, Isabel M.; Barrett, Michael P. (2014): Metabolomic-Based Strategies for Anti-Parasite Drug Discovery. In: J Biomol Screen. DOI: 10.1177/1087057114551519.

6. Others

2017

Chao de la Barca, Juan Manuel; Huang, Nuan-Ting; Jiao, Haihan; Tessier, Lydie; Gadras, Cédric; Simard, Gilles et al. (2017): Retinal metabolic events in preconditioning light stress as revealed by wide-spectrum targeted metabolomics. In: Metabolomics 13 (3). DOI: 10.1007/s11306-016-1156-9.

Chao de la Barca, Juan Manuel; Simard, Gilles; Sarzi, Emmanuelle; Chaumette, Tanguy; Rousseau, Guillaume; Chupin, Stephanie et al. (2017): Targeted Metabolomics Reveals Early Dominant Optic Atrophy Signature in Optic Nerves of Opa1delTTAG/+ Mice. In: Investigative ophthalmology & visual science 58 (2), S. 812–820. DOI: 10.1167/iovs.16-21116.

Cho K, Yoon DW, Lee M, So D, Hong I, Rhee C et al. (2017): Urinary Metabolomic Signatures in Obstructive Sleep Apnea through Targeted Metabolomic Analysis: A Pilot Study. In: Metabolomics; 13(8):1073. DOI: 10.1007/s11306-017-1216-9.

Choi B, Kim SP, Jang C, Yang CH, Lee S. (2017): Comparative analysis of urinary metabolites in methamphetamine self-administrated rats. In: Analytical Science & Technology.

Dervishi E, Zhang G, Mandal R, Wishart DS, Ametaj BN. (2017): Targeted metabolomics: new insights into pathobiology of retained placenta in dairy cows and potential risk biomarkers. In: Animal:1–10. DOI: 10.1017/S1751731117002506.

Dobosz M, Manda-Handzlik A, Pyrzak B, Demkow U. (2017): The Diagnostics of Human Steroid Hormone Disorders. In: Advances in experimental medicine and biology. DOI: 10.1007/5584_2017_80.

Furtado, Danielle Zildeana Sousa; de Moura Leite, Fernando Brunale Vilela; Barreto, Cleber Nunes; Faria, Bernadete; Jedlicka, Leticia Dias Lima; de Jesus Silva, Elisângela et al. (2017): Profiles of amino acids and biogenic amines in the plasma of Cri-du-Chat patients. In: Journal of pharmaceutical and biomedical analysis 140, S. 137–145. DOI: 10.1016/j.jpba.2017.03.034.

Lech K, Liu F, Davies SK, Ackermann K, Ang JE, Middleton B et al. (2017): Investigation of metabolites for estimating blood deposition time. In: International journal of legal medicine. DOI: 10.1007/s00414-017-1638-y.

Moon J, Kim OY, Jo G, Shin M. (2017): Alterations in Circulating Amino Acid Metabolite Ratio Associated with Arginase Activity Are Potential Indicators of Metabolic Syndrome: The Korean Genome and Epidemiology Study. In: Nutrients; 9(7). DOI: 10.3390/nu9070740.

Sadri, Hassan; Soosten, Dirk von; Meyer, Ulrich; Kluess, Jeannette; Dänicke, Sven; Saremi, Behnam; Sauerwein, Helga (2017): Plasma amino acids and metabolic profiling of dairy cows in response to a bolus duodenal infusion of leucine. In: PLoS ONE; 12(4):e0176647. DOI: 10.1371/journal.pone.0176647.

Zhang, Guanshi; Dervishi, Elda; Dunn, Suzanna M.; Mandal, Rupasri; Liu, Philip; Han, Beomsoo et al. (2017): Metabotyping reveals distinct metabolic alterations in ketotic cows and identifies early predictive serum biomarkers for the risk of disease. In: Metabolomics; 13(4):1073. DOI: 10.1007/s11306-017-1180-4.

2016

Chandler, J. D.; Horati, H.; Scholte, B. J.; Jones, D. P.; Peng, L.; Gaggar, A. et al. (2016): Untargeted metabolomics of CF infant calf identifies signatures associated with early airway disease based on pragma CT scoring. In: Pediatric Pulmonology Journal.

Welinder, Karen Gjesing; Hansen, Rasmus; Overgaard, Michael Toft; Brohus, Malene; Sønderkær, Mads; Bergen, Martin von et al. (2016): Biochemical Foundations of Health and Energy Conservation in Hibernating Free-ranging

Subadult Brown Bear *Ursus arctos*. In: The Journal of biological chemistry 291 (43), S. 22509–22523. DOI: 10.1074/jbc.M116.742916.

Isherwood, Cheryl (2016): Metabolite and hormone rhythms. PhD Thesis. University of Surrey.

2015

González-Beltrán, Alejandra; Li, Peter; Zhao, Jun; Avila-Garcia, Maria Susana; Roos, Marco; Thompson, Mark et al. (2015): From Peer-Reviewed to Peer-Reproduced in Scholarly Publishing: The Complementary Roles of Data Models and Workflows in Bioinformatics. In: PLoS ONE 10 (7), S. e0127612. DOI: 10.1371/journal.pone.0127612.

Hagel, Jillian M.; Mandal, Rupasri; Han, Beomsoo; Han, Jun; Dinsmore, Donald R.; Borchers, Christoph H. et al. (2015): Metabolome analysis of 20 taxonomically related benzylisoquinoline alkaloid-producing plants. In: BMC plant biology 15 (1), S. 220. DOI: 10.1186/s12870-015-0594-2.

Rußmayer, Hannes; Buchetics, Markus; Gruber, Clemens; Valli, Minoska; Grillitsch, Karlheinz; Modarres, Gerda et al. (2015): Systems-level organization of yeast methylotrophic lifestyle. In: BMC biology 13 (1), S. 80. DOI: 10.1186/s12915-015-0186-5.

6.1. Aging

2017

Mapstone, Mark; Lin, Feng; Nalls, Mike A.; Cheema, Amrita K.; Singleton, Andrew B.; Fiandaca, Massimo S.; Federoff, Howard J. (2017): What success can teach us about failure: the plasma metabolome of older adults with superior memory and lessons for Alzheimer's disease. In: Neurobiology of Aging; 51:148-55. DOI: 10.1016/j.neurobiolaging.2016.11.007.

Mayer RL, Schwarzmeier JD, Gerner MC, Bileck A, Mader JC, Meier-Menches SM et al. (2017): Proteomics and metabolomics identify molecular mechanisms of aging potentially predisposing for chronic lymphocytic leukemia. In: Mol. Cell Proteomics. DOI: 10.1074/mcp.RA117.000425.

2016

Moaddel, Ruin; Fabbri, Elisa; Khadeer, Mohammed A.; Carlson, Olga D.; Gonzalez-Freire, Marta; Zhang, Pingbo et al. (2016): Plasma Biomarkers of Poor Muscle Quality in Older Men and Plasma Biomarkers of Poor Muscle Quality in Older Men and Women from the Baltimore Longitudinal Study of Aging. In: The journals of gerontology. Series A, Biological sciences and medical sciences. DOI: 10.1093/gerona/glw046.

Reis, Felipe C G; Branquinho, Jessica L O; Brandao, Bruna B.; Guerra, Beatriz A.; Silva, Ismael D.; Frontini, Andrea et al. (2016): Fat-specific Dicer deficiency accelerates aging and mitigates several effects of dietary restriction in mice. In: Aging.

Welinder, Karen Gjesing; Hansen, Rasmus; Overgaard, Michael Toft; Brohus, Malene; Sønderkær, Mads; Bergen, Martin von et al. (2016): Biochemical Foundations of Health and Energy Conservation in Hibernating Free-ranging Subadult Brown Bear *Ursus arctos*. In: The Journal of biological chemistry 291 (43), S. 22509–22523. DOI: 10.1074/jbc.M116.742916.

Zhang, W.; Sun, G.; Aitken, D.; Likhodii, S.; Liu, M.; Martin, G. et al. (2016): Lysophosphatidylcholines to phosphatidylcholines ratio predicts advanced knee osteoarthritis. In: Osteoarthritis and Cartilage 24, S. S73. DOI: 10.1016/j.joca.2016.01.158.

2015

Aumailley, Lucie; Dubois, Marie Julie; Garand, Chantal; Murette, André; Lebel, Michel (2015): Impact of vitamin C on the cardiometabolic and inflammatory profiles of mice lacking a functional Werner syndrome protein helicase. In: Experimental gerontology 72, S. 192–203. DOI: 10.1016/j.exger.2015.10.012.

Aumailley, Lucie; Garand, Chantal; Dubois, Marie Julie; Johnson, F. Brad; Marette, André; Lebel, Michel (2015): Metabolic and Phenotypic Differences between Mice Producing a Werner Syndrome Helicase Mutant Protein and Wrn Null Mice. In: PLoS ONE 10 (10), S. e0140292. DOI: 10.1371/journal.pone.0140292.

da Costa, João Pinto; Rocha-Santos, Teresa; Duarte, Armando C. (2015): Analytical tools to human assess aging. The rise of geri-omics. In: TrAC Trends in Analytical Chemistry. DOI: 10.1016/j.trac.2015.09.011.

Kiermayer, Claudia; Northrup, Emily; Schrewe, Anja; Walch, Axel; Angelis, Martin Hrabec de; Schoensiegel, Frank et al. (2015): Heart-Specific Knockout of the Mitochondrial Thioredoxin Reductase (Txnrd2) Induces Metabolic and Contractile Dysfunction in the Aging Myocardium. In: Journal of the American Heart Association 4 (7). DOI: 10.1161/JAHA.115.002153.

Zhang, W.; Sun, G.; Likhodii, S.; Liu, M.; Aref-Eshghi, E.; Harper, P. E. et al. (2015): Metabolomic analysis of human plasma reveals that arginine is depleted in knee osteoarthritis patients. In: Osteoarthritis and cartilage / OARS, Osteoarthritis Research Society. DOI: 10.1016/j.joca.2015.12.004.

Zhang, Weidong; Likhodii, Sergei; Aref-Eshghi, Erfan; Zhang, Yuhua; Harper, Patricia E.; Randell, Edward et al. (2015): Relationship Between Blood Plasma and Synovial Fluid Metabolite Concentrations in Patients with Osteoarthritis. In: The Journal of Rheumatology. DOI: 10.3899/jrheum.141252.

2014

Corona, Giuseppe; Polesel, Jerry; Fratino, Lucia; Miolo, Gianmaria; Rizzolio, Flavio; Crivellari, Diana et al. (2014): Metabolomics biomarkers of frailty in elderly breast cancer patients. In: J. Cell. Physiol. 229 (7), S. 898–902. DOI: 10.1002/jcp.24520.

Davies, S. K.; Ang, J. E.; Revell, V. L.; Holmes, B.; Mann, A.; Robertson, F. P. et al. (2014): Effect of sleep deprivation on the human metabolome. In: Proceedings of the National Academy of Sciences 111 (29), S. 10761–10766. DOI: 10.1073/pnas.1402663111.

Kim, Seungwoo; Cheon, Hyo-Soon; Song, Jae-Chun; Yun, Sang-Moon; Park, Sang Ick; Jeon, Jae-Pil (2014): Aging-related changes in mouse serum glycerophospholipid profiles. In: Osong Public Health and Research Perspectives. DOI: 10.1016/j.phrp.2014.10.002.

6.2. Bioprocessing

2017

Cámara, Elena; Landes, Nils; Albiol, Joan; Gasser, Brigitte; Mattanovich, Diethard; Ferrer, Pau (2017): Increased dosage of AOX1 promoter-regulated expression cassettes leads to transcription attenuation of the methanol metabolism in *Pichia pastoris*. In: Scientific reports 7, S. 44302. DOI: 10.1038/srep44302.

Gillespie AL, Pan X, Marco-Ramell A, Meharg C, Green BD. (2017): Detailed characterisation of STC-1 cells and the pGIP/Neo sub-clone suggests the incretin hormones are translationally regulated. In: Peptides; 96:20–30. DOI: 10.1016/j.peptides.2017.08.010.

Marsalek, Lukas; Gruber, Clemens; Altmann, Friedrich; Aleschko, Markus; Mattanovich, Diethard; Gasser, Brigitte; Puxbaum, Verena (2017): Disruption of genes involved in CORVET complex leads to enhanced secretion of heterologous carboxylesterase only in protease deficient *Pichia pastoris*. In: Biotechnology journal; 12(5). DOI: 10.1002/biot.201600584.

Papathanassiou AE, Ko J, Imprialou M, Bagnati M, Srivastava PK, Vu HA et al. (2017): BCAT1 controls metabolic reprogramming in activated human macrophages and is associated with inflammatory diseases. In: Nat Commun; 8:16040. DOI: 10.1038/ncomms16040.

Wakim, Jamal; Goudenege, David; Perrot, Rodolphe; Gueguen, Naig; Desquirit-Dumas, Valerie; de la Barca, Juan Manuel Chao et al. (2017): CLUH couples mitochondrial distribution to the energetic and metabolic status. In: Journal of cell science; 130(11):1940-51. DOI: 10.1242/jcs.201616.

2014

Hernández Bort, Juan A; Shanmukam, Vinoth; Pabst, Martin; Windwarder, Markus; Neumann, Laura; Alchalabi, Ali et al. (2014): Reduced quenching and extraction time for mammalian cells using filtration and syringe extraction. In: *J. Biotechnol.* DOI: 10.1016/j.jbiotec.2014.04.014.

Jungandreas, A.; Benjamin Schellenberger Costa, Torsten Jakob, Martin von Bergen, Sven Baumann, Christian Wilhelm (2014): The Acclimation of *Phaeodactylum tricornutum* to Blue and Red Light Does Not Influence the Photosynthetic Light Reaction but Strongly Disturbs the Carbon Allocation Pattern. In: *PLoS ONE* (PLoS ONE 9(8): e99727). DOI: 10.1371/journal.pone.

Ruth, Claudia; Buchetics, Markus; Vidimce, Viktorija; Kotz, Daniela; Naschberger, Stefan; Mattanovich, Diethard et al. (2014): *Pichia pastoris* Aft1 - a novel transcription factor, enhancing recombinant protein secretion. In: *Microb. Cell Fact.* 13 (1), S. 120. DOI: 10.1186/s12934-014-0120-5.

6.3. Epidemiology and Genetics

2017

An Y, Varma VR, Varma S, Casanova R, Dammer E, Pletnikova O et al. (2017): Evidence for brain glucose dysregulation in Alzheimer's disease. In: *Alzheimer's & dementia: the journal of the Alzheimer's Association.* DOI: 10.1016/j.jalz.2017.09.011.

Carayol M, Leitzmann MF, Ferrari P, Zamora-Ros R, Achaintre D, Stepien M et al. (2017): Blood Metabolic Signatures of Body Mass Index: A Targeted Metabolomics Study in the EPIC Cohort. In: *J. Proteome Res.*; 16(9):3137–46. DOI: 10.1021/acs.jproteome.6b01062.

Floegel A, Kühn T, Sookthai D, Johnson T, Prehn C, Rolle-Kampczyk U et al. (2017): Serum metabolites and risk of myocardial infarction and ischemic stroke: a targeted metabolomic approach in two German prospective cohorts. In: *Eur. J. Epidemiol.* DOI: 10.1007/s10654-017-0333-0.

Furtado, Danielle Zildeana Sousa, de Moura Leite, Fernando Brunale Vilela, Barreto CN, Faria B, Jedlicka, Leticia Dias Lima, de Jesus Silva, Elisângela et al. (2017): Profiles of amino acids and biogenic amines in the plasma of Cri-du-Chat patients. In: *Journal of pharmaceutical and biomedical analysis*; 140:137–45. DOI: 10.1016/j.jpba.2017.03.034.

Jäger S, Wahl S, Kröger J, Sharma S, Hoffmann P, Floegel A et al. (2017): Genetic variants including markers from the exome chip and metabolite traits of type 2 diabetes. In: *Scientific reports*; 7(1):6037. DOI: 10.1038/s41598-017-06158-3.

Li D, Misialek JR, Huang F, Windham BG, Yu F, Alonso A. (2017): Independent association of plasma hydroxysphingomyelins with physical function in the Atherosclerosis Risk in Communities (ARIC) study. In: *The journals of gerontology. Series A, Biological sciences and medical sciences.* DOI: 10.1093/gerona/glx201.

Liu J, van Klinken, Jan Bert, Semiz S, van Dijk, Ko Willems, Verhoeven A, Hankemeier T et al. (2017): A Mendelian Randomization Study of Metabolite Profiles, Fasting Glucose, and Type 2 Diabetes. In: *Diabetes*; 66(11):2915–26. DOI: 10.2337/db17-0199.

Molnos S, Baumbach C, Wahl S, Müller-Nurasyid M, Strauch K, Wang-Sattler R et al. (2017): pulver: an R package for parallel ultra-rapid p-value computation for linear regression interaction terms. In: *BMC Bioinformatics*; 18(1):429. DOI: 10.1186/s12859-017-1838-y.

O'Gorman, Aoife; Gibbons, Helena; Ryan, Miriam F.; Gibney, Eileen R.; Gibney, Michael J.; Frost, Gary S. et al. (2017): Exploring the Links between Diet and Health in an Irish Cohort: A Lipidomic Approach. In: *J. Proteome Res.*; 16(3):1280-7. DOI: 10.1021/acs.jproteome.6b00912.

Pietzner M, Kaul A, Henning A, Kastenmüller G, Artati A, Lerch MM et al. (2017): Comprehensive metabolic profiling of chronic low-grade inflammation among generally healthy individuals. In: *BMC Med*; 15(1):210. DOI: 10.1186/s12916-017-0974-6.

Rist MJ, Roth A, Frommherz L, Weinert CH, Krüger R, Merz B et al. (2017): Metabolite patterns predicting sex and age in participants of the Karlsruhe Metabolomics and Nutrition (KarMeN) study. In: *PLoS ONE*; 12(8):e0183228. DOI: 10.1371/journal.pone.0183228.

Roy-Bellavance C, Grants JM, Miard S, Lee K, Rondeau É, Guillemette C et al. (2017): The R148.3 Gene Modulates *Caenorhabditis elegans* Lifespan and Fat Metabolism. In: *G3* (Bethesda, Md.); 7(8):2739–47. DOI: 10.1534/g3.117.041681.

Schmidt JA, Fensom GK, Rinaldi S, Scalbert A, Appleby PN, Achaintre D et al. (2017): Pre-diagnostic metabolite concentrations and prostate cancer risk in 1077 cases and 1077 matched controls in the European Prospective Investigation into Cancer and Nutrition. In: *BMC Med*; 15(1):122. DOI: 10.1186/s12916-017-0885-6.

St John-Williams L, Blach C, Toledo JB, Rotroff DM, Kim S, Klavins K et al. (2017): Targeted metabolomics and medication classification data from participants in the ADNI1 cohort. In: *Scientific data*; 4:170140. DOI: 10.1038/sdata.2017.140.

Trabado, Séverine; Al-Salameh, Abdallah; Croixmarie, Vincent; Masson, Perrine; Corruble, Emmanuelle; Fève, Bruno et al. (2017): The human plasma-metabolome: Reference values in 800 French healthy volunteers; impact of cholesterol, gender and age. In: *PLoS ONE*; 12(3):e0173615. DOI: 10.1371/journal.pone.0173615.

van der Heijden, Amber Awa, Rauh SP, Dekker JM, Beulens JW, Elders P, 't Hart, Leen M et al. (2017): The Hoorn Diabetes Care System (DCS) cohort. A prospective cohort of persons with type 2 diabetes treated in primary care in the Netherlands. In: *BMJ Open*; 7(5):e015599. DOI: 10.1136/bmjopen-2016-015599.

Yin X, Gibbons H, Rundle M, Frost G, McNulty BA, Nugent AP et al. (2017): Estimation of Chicken Intake by Adults Using Metabolomics-Derived Markers. In: *J. Nutr.* DOI: 10.3945/jn.117.252197.

Zhang W, Randell EW, Sun G, Likhodii S, Liu M, Furey A et al. (2017): Hyperglycemia-related advanced glycation end-products is associated with the altered phosphatidylcholine metabolism in osteoarthritis patients with diabetes. In: *PLoS ONE*; 12(9):e0184105. DOI: 10.1371/journal.pone.0184105.

2016

Dietrich, Stefan; Floegel, Anna; Troll, Martina; Kühn, Tilman; Rathmann, Wolfgang; Peters, Anette et al. (2016): Random Survival Forest in practice: a method for modelling complex metabolomics data in time to event analysis. In: *Int J Epidemiol.* DOI: 10.1093/ije/dyw145.

Lee, Heun-Sik; Xu, Tao; Lee, Young; Kim, Nam-Hee; Kim, Yeon-Jung; Kim, Jeong-Min et al. (2016): Identification of putative biomarkers for type 2 diabetes using metabolomics in the Korea Association REsource (KARE) cohort. In: *Metabolomics* 12 (12). DOI: 10.1007/s11306-016-1103-9.

Lotta, Luca A.; Scott, Robert A.; Sharp, Stephen J.; Burgess, Stephen; Luan, Jian'an; Tillin, Therese et al. (2016): Genetic Predisposition to an Impaired Metabolism of the Branched-Chain Amino Acids and Risk of Type 2 Diabetes: A Mendelian Randomisation Analysis. In: *PLoS medicine* 13 (11), S. e1002179. DOI: 10.1371/journal.pmed.1002179.

Perng, W.; Oken, E.; Roumeliotaki, T.; Sood, D.; Siskos, A. P.; Chalkiadaki, G. et al. (2016): Leptin, acylcarnitine metabolites and development of adiposity in the Rhea mother-child cohort in Crete, Greece. In: *Obesity science & practice* 2 (4), S. 471–476. DOI: 10.1002/osp4.65.

Tsepilov, Yakov A.; Sharapov, Sodbo Zh.; Zaytseva, Olga O.; Krumsiek, Jan; Prehn, Cornelia; Adamski, Jerzy et al. (2016): Network based conditional genome wide association analysis of human metabolomics. In: *bioRxiv.* DOI: 10.1101/096982.

Ward-Caviness, Cavin K.; Breitner, Susanne; Wolf, Kathrin; Cyrus, Josef; Kastenmüller, Gabi; Wang-Sattler, Rui et al. (2016): Short-term NO₂ exposure is associated with long-chain fatty acids in prospective cohorts from Augsburg, Germany: results from an analysis of 138 metabolites and three exposures. In: *Int J Epidemiol.* S. dyw247. DOI: 10.1093/ije/dyw247.

Yet, Idil; Menni, Cristina; Shin, So-Youn; Mangino, Massimo; Soranzo, Nicole; Adamski, Jerzy et al. (2016): Genetic Influences on Metabolite Levels: A Comparison across Metabolomic Platforms. In: *PLoS ONE* 11 (4), S. e0153672. DOI: 10.1371/journal.pone.0153672.

2015

Carayol, Marion; Licaj, Idlir; Achaintre, David; Sacerdote, Carlotta; Vineis, Paolo; Key, Timothy J. et al. (2015): Reliability of Serum Metabolites over a Two-Year Period: A Targeted Metabolomic Approach in Fasting and Non-Fasting Samples from EPIC. In: *PLoS ONE* 10 (8), S. e0135437. DOI: 10.1371/journal.pone.0135437.

Draisma, Harmen H M; Pool, René; Kobl, Michael; Jansen, Rick; Petersen, Ann-Kristin; Vaarhorst, Anika A M et al. (2015): Genome-wide association study identifies novel genetic variants contributing to variation in blood metabolite levels. In: *Nat Commun* 6, S. 7208. DOI: 10.1038/ncomms8208.

Kastenmüller, Gabi; Raffler, Johannes; Gieger, Christian; Suhre, Karsten (2015): Genetics of human metabolism: an update. In: *Hum. Mol. Genet.* DOI: 10.1093/hmg/ddv263.

Schmidt, J. A.; Rinaldi, S.; Scalbert, A.; Ferrari, P.; Achaintre, D.; Gunter, M. J. et al. (2015): Plasma concentrations and intakes of amino acids in male meat-eaters, fish-eaters, vegetarians and vegans: a cross-sectional analysis in the EPIC-Oxford cohort. In: *Eur J Clin Nutr.* DOI: 10.1038/ejcn.2015.144.

Schmidt, Julie A.; Rinaldi, Sabina; Ferrari, Pietro; Carayol, Marion; Achaintre, David; Scalbert, Augustin et al. (2015): Metabolic profiles of male meat eaters, fish eaters, vegetarians, and vegans from the EPIC-Oxford cohort. In: *The American journal of clinical nutrition* 102 (6), S. 1518–1526. DOI: 10.3945/ajcn.115.111989.

2014

Jourdan, Carolin; Linseisen, Jakob; Meisinger, Christa; Petersen, Ann-Kristin; Gieger, Christian; Rawal, Rajesh et al. (2014): Associations between thyroid hormones and serum metabolite profiles in an euthyroid population. In: *Metabolomics* 10 (1), S. 152–164. DOI: 10.1007/s11306-013-0563-4.

Petersen, Ann-Kristin; Zeilinger, Sonja; Kastenmüller, Gabi; Römisch-Margl, Werner; Brugger, Markus; Peters, Annette et al. (2014): Epigenetics meets metabolomics: an epigenome-wide association study with blood serum metabolic traits. In: *Hum. Mol. Genet.* 23 (2), S. 534–545. DOI: 10.1093/hmg/ddt430.

Ried, Janina S.; Shin, So-Youn; Krumsiek, Jan; Illig, Thomas; Theis, Fabian J.; Spector, Tim D. et al. (2014): Novel Genetic Associations with Serum Level Metabolites Identified by Phenotype Set Enrichment Analyses. In: *Hum. Mol. Genet.* DOI: 10.1093/hmg/ddu301.

Shin, So-Youn; Petersen, Ann-Kristin; Wahl, Simone; Zhai, Guangju; Römisch-Margl, Werner; Small, Kerrin S. et al. (2014): Interrogating causal pathways linking genetic variants, small molecule metabolites and circulating lipids. In: *Genome Med* 6 (3), S. 25. DOI: 10.1186/gm542.

Tzoulaki, I.; Ebbels, T. M. D.; Valdes, A.; Elliott, P.; Ioannidis, J. P. A. (2014): Design and Analysis of Metabolomics Studies in Epidemiologic Research: A Primer on -Omic Technologies. In: *American Journal of Epidemiology* 180 (2), S. 129–139. DOI: 10.1093/aje/kwu143.

6.4. Gynecology and Fertility

2017

Ambroziak, Urzula; Kuryłowicz, Alina; Kępczyńska-Nyk, Anna; Bartoszewicz, Zbigniew et al. (2017): Total testosterone to dihydrotestosterone ratio assessed by LC-MS/MS predicts a worse metabolic profile not only in PCOS patients. In: *Ginekologika Polska.* DOI: 10.5603/GP.a2017.0001.

Anzai Á, Marcondes RR, Gonçalves TH, Carvalho KC, Simões MJ, Garcia N et al. (2017): Impaired branched-chain amino acid metabolism may underlie the nonalcoholic fatty liver disease-like pathology of neonatal testosterone-treated female rats. In: *Scientific reports*; 7(1):13167. DOI: 10.1038/s41598-017-13451-8.

Aust, Stefanie; Felix, Sophie; Auer, Katharina; Bachmayr-Heyda, Anna; Kenner, Lukas; Dekan, Sabine et al. (2017): Absence of PD-L1 on tumor cells is associated with reduced MHC I expression and PD-L1 expression increases in recurrent serous ovarian cancer. In: *Scientific reports* 7, S. 42929. DOI: 10.1038/srep42929.

Bahado-Singh R, Poon LC, Yilmaz A, Syngelaki A, Turkoglu O, Kumar P et al. (2017): Integrated Proteomic and Metabolomic prediction of Term Preeclampsia. In: *Scientific reports*; 7(1):16189. DOI: 10.1038/s41598-017-15882-9.

de la Barca, J M Chao, Boueilh T, Simard G, Boucret L, Ferré-L'Hotellier V, Tessier L et al. (2017): Targeted metabolomics reveals reduced levels of polyunsaturated choline plasmalogens and a smaller dimethylarginine/arginine ratio in the follicular fluid of patients with a diminished ovarian reserve. In: *Hum. Reprod.* 2017; 32(11):2269–78. DOI: 10.1093/humrep/dex303.

de Souza, Janaina Sena; Kizys, Marina Malta Letro; da Conceição, Rodrigo Rodrigues; Glebocki, Gabriel; Romano, Renata Marino; Ortiga-Carvalho, Tania Maria et al. (2017): Perinatal exposure to glyphosate-based herbicide alters the thyrotrophic axis and causes thyroid hormone homeostasis imbalance in male rats. In: *Toxicology* 377, S. 25–37. DOI: 10.1016/j.tox.2016.11.005.

Englich, B.; Herberth, G.; Rolle-Kampczyk, U.; Trump, S.; Röder, S.; Borte, M. et al. (2017): Maternal cytokine status may prime the metabolic profile and increase risk for obesity in children. In: *Int J Obes (Lond)*; 41(9):1440-6. DOI: 10.1038/ijo.2017.113.

Letsiou, Sophia; Peterse, Dirkje P.; Fassbender, Amelie; Hendriks, Margriet M.; van den Broek, Niels J; Berger, Rudolf et al. (2017): Endometriosis is associated with aberrant metabolite profiles in plasma. In: *Fertility and Sterility* 107 (3), S. 699-706.e6. DOI: 10.1016/j.fertnstert.2016.12.032.

2016

Allalou, Amina; Nalla, Amarnadh; Prentice, Kacey J.; Liu, Ying; Zhang, Ming; Dai, Feihan F. et al. (2016): A Predictive Metabolic Signature for the Transition from Gestational Diabetes to Type 2 Diabetes. In: *Diabetes*. DOI: 10.2337/db15-1720.

Denihan, N. M. (2016): Investigating metabolomic biomarkers of hypoxic ischaemic encephalopathy. PhD Thesis. Investigating metabolomic biomarkers of hypoxic ischaemic. Online available: 2016_DenihanNM_PhD2016_Hypoxic Encephalopathy.pdf.

Dhungana, Suraj; Carlson, James E.; Pathmasiri, Wimal; McRitchie, Susan; Davis, Matt; Sumner, Susan; Appt, Susan E. (2016): Impact of a western diet on the ovarian and serum metabolome. In: *Maturitas* 92, S. 134–142. DOI: 10.1016/j.maturitas.2016.07.008.

Gelaye, Bizu; Sumner, Susan J.; McRitchie, Susan; Carlson, James E.; Ananth, Cande V.; Enquobahrie, Daniel A. et al. (2016): Maternal Early Pregnancy Serum Metabolomics Profile and Abnormal Vaginal Bleeding as Predictors of Placental Abruption: A Prospective Study. In: *PLoS ONE* 11 (6), S. e0156755. DOI: 10.1371/journal.pone.0156755.

Huber, K.; Dänicke, S.; Rehage, J.; Sauerwein, H.; Otto, W.; Rolle-Kampczyk, U.; Bergen, M. von (2016): Metabotypes with properly functioning mitochondria and anti-inflammation predict extended productive life span in dairy cows. In: *Scientific reports* 6, S. 24642. DOI: 10.1038/srep24642.

Humer, Elke; Khol-Parisini, Annabella; Metzler-Zebeli, Barbara U.; Gruber, Leonhard; Zebeli, Qendrim (2016): Alterations of the Lipid Metabolome in Dairy Cows Experiencing Excessive Lipolysis Early Postpartum. In: *PLoS ONE* 11 (7), S. e0158633. DOI: 10.1371/journal.pone.0158633.

Kenéz, Ákos; Dänicke, Sven; Rolle-Kampczyk, Ulrike; Bergen, Martin von; Huber, Korinna (2016): A metabolomics approach to characterize phenotypes of metabolic transition from late pregnancy to early lactation in dairy cows. In: *Metabolomics* 12 (11). DOI: 10.1007/s11306-016-1112-8.

Li, Jian; Lu, Yong Ping; Reichetzeder, Christoph; Kalk, Philipp; Kleuser, Burkhard; Adamski, Jerzy; Hocher, Berthold (2016): Maternal PCaaC38:6 is Associated With Preterm Birth - a Risk Factor for Early and Late Adverse Outcome of the Offspring. In: *Kidney & blood pressure research* 41 (3), S. 250–257. DOI: 10.1159/000443428.

Much, Daniela; Beyerlein, Andreas; Kindt, Alida; Krumsiek, Jan; Stücker, Ferdinand; Rossbauer, Michaela et al. (2016): Lactation is associated with altered metabolomic signatures in women with gestational diabetes. In: *Diabetologia*. DOI: 10.1007/s00125-016-4055-8.

Rolle-Kampczyk, Ulrike E.; Krumsiek, Jan; Otto, Wolfgang; Röder, Stefan W.; Kohajda, Tibor; Borte, Michael et al. (2016): Metabolomics reveals effects of maternal smoking on endogenous metabolites from lipid metabolism in cord blood of newborns. In: *Metabolomics* 12 (4). DOI: 10.1007/s11306-016-0983-z.

Schipper, Lidewij; van Dijk, Gertjan; Broersen, Laus M.; Loos, Maarten; Bartke, Nana; Scheurink, Anton Jw; van der Beek, Eline M (2016): A Postnatal Diet Containing Phospholipids, Processed to Yield Large, Phospholipid-Coated Lipid Droplets, Affects Specific Cognitive Behaviors in Healthy Male Mice. In: *J. Nutr.* DOI: 10.3945/jn.115.224998.

Vouk, Katja; Ribič-Pucelj, Martina; Adamski, Jerzy; Rižner, Tea Lanišnik (2016): Altered levels of acylcarnitines, phosphatidylcholines, and sphingomyelins in peritoneal fluid from ovarian endometriosis patients. In: *J. Steroid Biochem. Mol. Biol.* DOI: 10.1016/j.jsbmb.2016.02.023.

2015

Camillo, J.; Victorino, A. B.; Melo, A. A. de; Cordeiro, F. B.; Braga, D. P.; Borges, E.; Lo Turco, E. G. (2015): Non-invasive prediction of embryo developmental potential by embryo culture medium quantitative secretomic. A pilot study. In: *Fertility and Sterility* 104 (3), S. e310-e311. DOI: 10.1016/j.fertnstert.2015.07.971.

Greaves, Ronda F.; Pitkin, Janne; Ho, Chung Shun; Baglin, James; Hunt, Rodney W.; Zacharin, Margaret R. (2015): Hormone Modelling in Preterm Neonates: Establishment of Pituitary and Steroid Hormone Reference Intervals. In: *The Journal of clinical endocrinology and metabolism*, S. jc20143681. DOI: 10.1210/jc.2014-3681.

Lehmann, R.; Friedrich, T.; Kriebiel, G.; Sonntag, D.; Häring, H-U; Fritsche, A.; Hennige, A. M. (2015): Metabolic Profiles during an Oral Glucose Tolerance Test in Pregnant Women with and without Gestational Diabetes. In: *Experimental and clinical endocrinology & diabetes: official journal, German Society of Endocrinology [and] German Diabetes Association* 123 (7), S. 483-38. DOI: 10.1055/s-0035-1549887.

Stanley, Joanna L.; Sulek, Karolina; Andersson, Irene J.; Davidge, Sandra T.; Kenny, Louise C.; Sibley, Colin P. et al. (2015): Sildenafil Therapy Normalizes the Aberrant Metabolomic Profile in the Comt(-/-) Mouse Model of Preeclampsia/Fetal Growth Restriction. In: *Scientific reports* 5, S. 18241. DOI: 10.1038/srep18241.

2014

Ambroziak, Urszula; Kępczyńska-Nyk, Anna; Kuryłowicz, Alina; Wysłouch-Cieszyńska, Aleksandra; Małunowicz, Ewa Maria; Bartoszewicz, Zbigniew et al. (2014): LC-MS/MS improves screening towards 21-hydroxylase deficiency. In: *Gynecological endocrinology: the official journal of the International Society of Gynecological Endocrinology*, S. 1–5. DOI: 10.3109/09513590.2014.994599.

Bahado-Singh, Ray O.; Ertl, Rebecca; Mandal, Rupasri; Bjorndahl, Trent C.; Syngelaki, Argyro; Han, Beomsoo et al. (2014): Metabolomic prediction of fetal congenital heart defect in the first trimester. In: *Am. J. Obstet. Gynecol.* 211 (3), S. 240.e1-240.e14. DOI: 10.1016/j.ajog.2014.03.056.

Björkgren, Ida; Gylling, Helena; Turunen, Heikki; Huhtaniemi, Ilpo; Strauss, Leena; Poutanen, Matti; Sipila, Petra (2014): Imbalanced lipid homeostasis in the conditional Dicer1 knockout mouse epididymis causes instability of the sperm membrane. In: *The FASEB Journal*. DOI: 10.1096/fj.14-259382.

Hailemariam, D.; Mandal, R.; Saleem, F.; Dunn, S. M.; Wishart, D. S.; Ametaj, B. N. (2014): Identification of predictive biomarkers of disease state in transition dairy cows. In: *J. Dairy Sci.* 97 (5), S. 2680–2693. DOI: 10.3168/jds.2013-6803.

Moazzami, Ali A.; Shrestha, Aahana; Morrison, David A.; Poutanen, Kaisa; Mykkänen, Hannu (2014): Metabolomics reveals differences in postprandial responses to breads and fasting metabolic characteristics associated with postprandial insulin demand in postmenopausal women. In: *J. Nutr.* 144 (6), S. 807–814. DOI: 10.3945/jn.113.188912.

Summers, Adam F.; Pohlmeier, William E.; Sargent, Kevin M.; Cole, Brizett D.; Vinton, Rebecca J.; Kurz, Scott G. et al. (2014): Altered Theca and Cumulus Oocyte Complex Gene Expression, Follicular Arrest and Reduced Fertility in Cows with Dominant Follicle Follicular Fluid Androgen Excess. In: *PLoS ONE* 9 (10), S. e110683. DOI: 10.1371/journal.pone.0110683.

6.5. Gastroenterology

2017

Gillespie AL, Pan X, Marco-Ramell A, Meharg C, Green BD. (2017): Detailed characterisation of STC-1 cells and the pGIP/Neo sub-clone suggests the incretin hormones are translationally regulated. In: *Peptides*; 96:20–30. DOI: 10.1016/j.peptides.2017.08.010.

Keshteli AH, van den Brand, Floris F, Madsen KL, Mandal R, Valcheva R, Kroeker KI et al. (2017): Dietary and metabolomic determinants of relapse in ulcerative colitis patients: A pilot prospective cohort study. In: *World journal of gastroenterology*; 23(21):3890–9. DOI: 10.3748/wjg.v23.i21.3890.

Semba, Richard D.; Trehan, Indi; Li, Ximin; Moaddel, Ruin; Ordiz, M. Isabel; Maleta, Kenneth M. et al. (2017): Environmental Enteric Dysfunction is Associated with Carnitine Deficiency and Altered Fatty Acid Oxidation. In: *EBioMedicine*. DOI: 10.1016/j.ebiom.2017.01.026.

Thöni V, Pfister A, Melmer A, Enrich B, Salzmann K, Kaser S et al. (2017): Dynamics of Bile Acid Profiles, GLP-1 and FGF19 after Laparoscopic Gastric Banding. In: *The Journal of clinical endocrinology and metabolism*; 102(8):2974–84. DOI: 10.1210/jc.2017-00235.

2016

Brahmbhatt, Viral; Montoliu, Ivan (2016): Characterization of Selected Metabolic and Immunologic Markers Following Exclusive Enteral Nutrition of Pediatric Crohn's Disease Patients. In: *J Gastrointest Dig Syst* 6 (4). DOI: 10.4172/2161-069X.1000466.

McIntosh, Keith; Reed, David E.; Schneider, Theresa; Dang, Frances; Keshteli, Ammar H.; Palma, Giada de et al. (2016): FODMAPs alter symptoms and the metabolome of patients with IBS: a randomised controlled trial. In: *Gut*. DOI: 10.1136/gutjnl-2015-311339.

Semba, Richard D.; Gonzalez-Freire, Marta; Moaddel, Ruin; Trehan, Indi; Maleta, Kenneth M.; Khadeer, Mohammed et al. (2016): Environmental Enteric Dysfunction is Associated with Altered Bile Acid Metabolism. In: *Journal of pediatric gastroenterology and nutrition*. DOI: 10.1097/MPG.0000000000001313.

Semba, Richard D.; Shardell, Michelle; Trehan, Indi; Moaddel, Ruin; Maleta, Kenneth M.; Ordiz, M. Isabel et al. (2016): Metabolic alterations in children with environmental enteric dysfunction. In: *Scientific reports* 6, S. 28009. DOI: 10.1038/srep28009.

2015

Antonissen, Gunther; Croubels, Siska; Pasmans, Frank; Ducatelle, Richard; Eeckhaut, Venessa; Devreese, Mathias et al. (2015): Fumonisin affect the intestinal microbial homeostasis in broiler chickens, predisposing to necrotic enteritis. In: *Veterinary research* 46 (1), S. 98. DOI: 10.1186/s13567-015-0234-8.

Zhou, Kejun; Xie, Guoxiang; Wang, Jun; Zhao, Aihua; Liu, Jiajian; Su, Mingming et al. (2015): Metabonomics Reveals Metabolite Changes in Biliary Atresia Infants. In: *J Proteome Res. (Journal of proteome research)*. DOI: 10.1021/acs.jproteome.5b00125.

2014

Nishiumi, Shin; Suzuki, Makoto; Kobayashi, Takashi; Matsubara, Atsuki; Azuma, Takeshi; Yoshida, Masaru (2014): Metabolomics for Biomarker Discovery in Gastroenterological Cancer. In: *Metabolites* 4 (3), S. 547–571. DOI: 10.3390/metabo4030547.

6.6. Inflammation and Immunology

2017

Aust, Stefanie; Felix, Sophie; Auer, Katharina; Bachmayr-Heyda, Anna; Kenner, Lukas; Dekan, Sabine et al. (2017): Absence of PD-L1 on tumor cells is associated with reduced MHC I expression and PD-L1 expression increases in recurrent serous ovarian cancer. In: *Scientific reports* 7, S. 42929. DOI: 10.1038/srep42929.

Bakiri, Latifa; Hamacher, Rainer; Graña, Osvaldo; Guío-Carrión, Ana; Campos-Olivas, Ramón; Martínez, Lola et al. (2017): Liver carcinogenesis by FOS-dependent inflammation and cholesterol dysregulation. In: *The Journal of experimental medicine*. DOI: 10.1084/jem.20160935.

Bassi, Roberto; Niewczas, Monika A.; Biancone, Luigi; Bussolino, Stefania; Merugumala, Sai; Tezza, Sara et al. (2017): Metabolomic Profiling in Individuals with a Failing Kidney Allograft. In: *PLoS ONE* 12 (1), S. e0169077. DOI: 10.1371/journal.pone.0169077.

Cambiaghi A, Pinto BB, Brunelli L, Falcetta F, Aletti F, Bendjelid K et al. (2017): Characterization of a metabolomic profile associated with responsiveness to therapy in the acute phase of septic shock. In: *Scientific reports*; 7(1):9748. DOI: 10.1038/s41598-017-09619-x.

Datta P, Zhang Y, Parousis A, Sharma A, Rossomacha E, Endisha H et al. (2017): High-fat diet-induced acceleration of osteoarthritis is associated with a distinct and sustained plasma metabolite signature. In: *Scientific reports*; 7(1):8205. DOI: 10.1038/s41598-017-07963-6.

Englich, B.; Herberth, G.; Rolle-Kampczyk, U.; Trump, S.; Röder, S.; Borte, M. et al. (2017): Maternal cytokine status may prime the metabolic profile and increase risk for obesity in children. In: *Int J Obes (Lond)*; 41(9):1440-6. DOI: 10.1038/ijo.2017.113.

Li D, Misialek JR, Huang F, Windham BG, Yu F, Alonso A. (2017): Independent association of plasma hydroxysphingomyelins with physical function in the Atherosclerosis Risk in Communities (ARIC) study. In: *The journals of gerontology. Series A, Biological sciences and medical sciences*. DOI: 10.1093/gerona/glx201.

Meier, Marc A.; Ottiger, Manuel; Vögeli, Alaadin; Steuer, Christian; Bernasconi, Luca; Thomann, Robert et al. (2017): Activation of the Serotonin Pathway is Associated with Poor Outcome in COPD Exacerbation: Results of a Long-Term Cohort Study. In: *Lung*; 195(3):303-11. DOI: 10.1007/s00408-017-0004-7.

Meier, Marc A.; Ottiger, Manuel; Vogeli, Alaadin; Steuer, Christian; Bernasconi, Luca; Thomann, Robert et al. (2017): Activation of the tryptophan/serotonin pathway is associated with severity and predicts outcomes in pneumonia: results of a long-term cohort study. In: *Clinical chemistry and laboratory medicine*; 55(7):1060-9. DOI: 10.1515/cclm-2016-0912.

Muqaku B, Eisinger M, Meier SM, Tahir A, Pukrop T, Haferkamp S et al. (2017): Multi-omics Analysis of Serum Samples Demonstrates Reprogramming of Organ Functions Via Systemic Calcium Mobilization and Platelet Activation in Metastatic Melanoma. In: *Mol. Cell Proteomics*; 16(1):86–99. DOI: 10.1074/mcp.M116.063313.

Ottas A, Fishman D, Okas T, Püssa T, Toomik P, Märtson A et al. (2017): Blood serum metabolome of atopic dermatitis: Altered energy cycle and the markers of systemic inflammation. In: *PLoS ONE*; 12(11):e0188580. DOI: 10.1371/journal.pone.0188580.

Ottas A, Fishman D, Okas T, Kingo K, Soomets U. (2017): The metabolic analysis of psoriasis identifies the associated metabolites while providing computational models for the monitoring of the disease. In: *Archives of dermatological research*. DOI: 10.1007/s00403-017-1760-1.

Papathanassiou AE, Ko J, Imprialou M, Bagnati M, Srivastava PK, Vu HA et al. (2017): BCAT1 controls metabolic reprogramming in activated human macrophages and is associated with inflammatory diseases. In: *Nat Commun*; 8:16040. DOI: 10.1038/ncomms16040.

Pietzner M, Kaul A, Henning A, Kastenmüller G, Artati A, Lerch MM et al. (2017): Comprehensive metabolic profiling of chronic low-grade inflammation among generally healthy individuals. In: *BMC Med*; 15(1):210. DOI: 10.1186/s12916-017-0974-6.

Raulien N, Friedrich K, Strobel S, Rubner S, Baumann S, Bergen M von et al. (2017): Fatty Acid Oxidation Compensates for Lipopolysaccharide-Induced Warburg Effect in Glucose-Deprived Monocytes. In: *Frontiers in immunology*; 8:609. DOI: 10.3389/fimmu.2017.00609.

Tahir, Ammar; Bileck, Andrea; Muqaku, Besnik; Niederstaetter, Laura; Kreutz, Dominique; Mayer, Rupert L. et al. (2017): Combined Proteome and Eicosanoid Profiling Approach for Revealing Implications of Human Fibroblasts in Chronic Inflammation. In: *Anal. Chem.*; 89(3):1945-54. DOI: 10.1021/acs.analchem.6b04433.

Verma M, Kipari, Tiina M J, Zhang Z, Man TY, Forster T, Homer, Natalie Z M et al. (2017): 11 β -hydroxysteroid dehydrogenase-1 deficiency alters brain energy metabolism in acute systemic inflammation. In: *Brain, behavior, and immunity*. DOI: 10.1016/j.bbi.2017.11.015.

Vögeli, Alaadin; Ottiger, Manuel; Meier, Marc A.; Steuer, Christian; Bernasconi, Luca; Kulkarni, Prasad et al. (2017): Admission levels of asymmetric and symmetric dimethylarginine predict long-term outcome in patients with community-acquired pneumonia. In: *Respiratory research*; 18(1):25. DOI: 10.1186/s12931-017-0502-4.

Ward-Caviness, Cavin K.; Xu, Tao; Aspelund, Thor; Thorand, Barbara; Montrone, Corinna; Meisinger, Christa et al. (2017): Improvement of myocardial infarction risk prediction via inflammation-associated metabolite biomarkers. In: *Heart*; 103(16):1278-85. DOI: 10.1136/heartjnl-2016-310789.

Wu, Tao; Zheng, Xiaojiao; Yang, Ming; Zhao, Aihua; Li, Meng; Chen, Tianlu et al. (2017): Serum lipid alterations identified in chronic hepatitis B, hepatitis B virus-associated cirrhosis and carcinoma patients. In: *Scientific reports*; 7:42710. DOI: 10.1038/srep42710.

Zhang W, Randell EW, Sun G, Likhodii S, Liu M, Furey A et al. (2017): Hyperglycemia-related advanced glycation end-products is associated with the altered phosphatidylcholine metabolism in osteoarthritis patients with diabetes. In: PLoS ONE; 12(9):e0184105. DOI: 10.1371/journal.pone.0184105.

2016

Chang, Ming-Ling; Cheng, Mei-Ling; Chang, Su-Wei; Tang, Hsiang-Yu; Chiu, Cheng-Tang; Yeh, Chau-Ting; Shiao, Ming-Shi (2016): Recovery of pan-genotypic and genotype-specific amino acid alterations in chronic hepatitis C after viral clearance: transition at the crossroad of metabolism and immunity. In: Amino acids. DOI: 10.1007/s00726-016-2360-7.

Ferrario, Manuela; Cambiaghi, Alice; Brunelli, Laura; Giordano, Silvia; Caironi, Pietro; Guatteri, Luca et al. (2016): Mortality prediction in patients with severe septic shock: a pilot study using a target metabolomics approach. In: Scientific reports 6, S. 20391. DOI: 10.1038/srep20391.

Förster, Yvonne; Schmidt, Johannes R.; Wissenbach, Dirk K.; Pfeiffer, Susanne E M; Baumann, Sven; Hofbauer, Lorenz C. et al. (2016): Microdialysis Sampling from Wound Fluids Enables Quantitative Assessment of Cytokines, Proteins, and Metabolites Reveals Bone Defect-Specific Molecular Profiles. In: PLoS ONE 11 (7), S. e0159580. DOI: 10.1371/journal.pone.0159580.

Hayashi, Kiyonori; Tooyama, Hiroaki; Tanaka, Hirokazu; Aizawa, Hitoshi; Shimane, Tetsu; Kurashina, Kenji et al. (2016): Relationship between the quantity of oral *Candida* and immunological vigor. In: Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology. DOI: 10.1016/j.ajoms.2016.09.011.

Ho, Julie; Sharma, Atul; Mandal, Rupasri; Wishart, David S.; Wiebe, Chris; Storsley, Leroy et al. (2016): Detecting Renal Allograft Inflammation Using Quantitative Urine Metabolomics and CXCL10. In: Transplantation Direct; 2(6):e78. DOI: 10.1097/TXD.0000000000000589.

McIntosh, Keith; Reed, David E.; Schneider, Theresa; Dang, Frances; Keshteli, Ammar H.; Palma, Giada de et al. (2016): FODMAPs alter symptoms and the metabolome of patients with IBS: a randomised controlled trial. In: Gut; 66(7):1241-51. DOI: 10.1136/gutjnl-2015-311339.

Neugebauer S, Giamarellos-Bourboulis EJ, Pelekanou A, Marioli A, Baziaka F, Tsangaris I et al. (2016): Metabolite Profiles in Sepsis: Developing Prognostic Tools Based on the Type of Infection. Crit. Care Med.; 44(9):1649–62. DOI: 10.1097/CCM.0000000000001740.

Scarpelini, Bruno; Zanoni, Michelle; Sucupira, Maria Cecilia Araripe; Truong, Hong-Ha M.; Janini, Luiz Mario Ramos; Segurado, Ismael Dale Cotrin; Diaz, Ricardo Sobhie (2016): Plasma Metabolomics Biosignature According to HIV Stage of Infection, Pace of Disease Progression, Viremia Level and Immunological Response to Treatment. In: PLoS ONE 11 (12), S. e0161920. DOI: 10.1371/journal.pone.0161920.

2015

Aumailley, Lucie; Dubois, Marie Julie; Garand, Chantal; Marette, André; Lebel, Michel (2015): Impact of vitamin C on the cardiometabolic and inflammatory profiles of mice lacking a functional Werner syndrome protein helicase. In: Experimental gerontology 72, S. 192–203. DOI: 10.1016/j.exger.2015.10.012.

Harrison, Alistair; Dubois, Laura G.; St John-Williams, Lisa; Moseley, M. Arthur; Hardison, Rachael L.; Heimlich, Derek R. et al. (2015): Comprehensive proteomic and metabolomic signatures of nontypeable *Haemophilus influenzae*-induced acute otitis media reveal bacterial aerobic respiration in an immunosuppressed environment. In: Mol. Cell Proteomics. DOI: 10.1074/mcp.M115.052498.

Köberlin, Marielle S.; Snijder, Berend; Heinz, Leonhard X.; Baumann, Christoph L.; Fauster, Astrid; Vladimer, Gregory I. et al. (2015): A Conserved Circular Network of Coregulated Lipids Modulates Innate Immune Responses. In: Cell. DOI: 10.1016/j.cell.2015.05.051.

Richter, Martin E.; Neugebauer, Sophie; Engelmann, Falco; Hagel, Stefan; Ludewig, Katrin; La Rosée, Paul et al. (2015): Biomarker candidates for the detection of an infectious etiology of febrile neutropenia. In: Infection. DOI: 10.1007/s15010-015-0830-6.

Ruiz, Montserrat; Jove, Mariona; Schluter, Agatha; Casasnovas, Carlos; Villarroya, Francesc; Guilera, Cristina et al. (2015): Altered glycolipid and glycerophospholipid signaling drive inflammatory cascades in adrenomyeloneuropathy. In: Hum. Mol. Genet. DOI: 10.1093/hmg/ddv375.

2014

Blydt-Hansen, T. D.; Sharma, A.; Gibson, I. W.; Mandal, R.; Wishart, D. S. (2014): Urinary Metabolomics for Noninvasive Detection of Borderline and Acute T Cell-Mediated Rejection in Children After Kidney Transplantation. In: *Am. J. Transplant.* DOI: 10.1111/ajt.12837.

Hotze, M.; Baurecht, H.; Rodríguez, E.; Chapman-Rothe, N.; Ollert, M.; Fölster-Holst, R. et al. (2014): Increased efficacy of omalizumab in atopic dermatitis patients with wild-type filaggrin status and higher serum levels of phosphatidylcholines. In: *Allergy* 69 (1), S. 132–135. DOI: 10.1111/all.12234.

Kalkhof, Stefan; Förster, Yvonne; Schmidt, Johannes; Schulz, Matthias C.; Baumann, Sven; Weißflog, Anne et al. (2014): Proteomics and Metabolomics for In Situ Monitoring of Wound Healing. In: *BioMed Research International* 2014 (3), S. 1–12. DOI: 10.1155/2014/934848.

Mihály, J.; Sonntag, D.; Krebiehl, G.; Szegedi, A.; Töröcsik, D.; Rühl, R. (2014): Steroid concentrations in atopic dermatitis patients: Reduced plasma DHEAS and increased cortisone levels. In: *Br. J. Dermatol.* DOI: 10.1111/bjd.13219.

Wallace, Martina; Morris, Ciara; O'Grada, Colm M.; Ryan, Miriam; Dillon, Eugene T.; Coleman, Eilish et al. (2014): Relationship between the lipidome, inflammatory markers and insulin resistance. In: *Mol Biosyst* 10 (6), S. 1586–1595. DOI: 10.1039/c3mb70529c.

Zhang, W.; Likhodii, S.; Zhang, Y.; Aref-Eshghi, E.; Harper, P. E.; Randell, E. et al. (2014): Classification of osteoarthritis phenotypes by metabolomics analysis. In: *BMJ Open* 4 (11), S. e006286. DOI: 10.1136/bmjopen-2014-006286.

6.7. Microbiome

2017

Fedirko V, Tran HQ, Gewirtz AT, Stepien M, Trichopoulou A, Aleksandrova K et al. (2017): Exposure to bacterial products lipopolysaccharide and flagellin and hepatocellular carcinoma: a nested case-control study. *BMC Med*; 15(1):72. DOI: 10.1186/s12916-017-0830-8.

Sung, Miranda M.; Kim, Ty T.; Denou, Emmanuel; Soltys, Carrie-Lynn M.; Hamza, Shereen M.; Byrne, Nikole J. et al. (2017): Improved Glucose Homeostasis in Obese Mice Treated With Resveratrol Is Associated With Alterations in the Gut Microbiome. In: *Diabetes*; 66(2):418-25. DOI: 10.2337/db16-0680.

Ryan, Paul M.; London, Lis E E; Bjorndahl, Trent C.; Mandal, Rupasri; Murphy, Kiera; Fitzgerald, Gerald F. et al. (2017): Microbiome and metabolome modifying effects of several cardiovascular disease interventions in apo-E(-/-) mice. In: *Microbiome* 5 (1), S. 30. DOI: 10.1186/s40168-017-0246-x.

2016

Semba, Richard D.; Gonzalez-Freire, Marta; Moaddel, Ruin; Trehan, Indi; Maleta, Kenneth M.; Khadeer, Mohammed et al. (2016): Environmental Enteric Dysfunction is Associated with Altered Bile Acid Metabolism. In: *Journal of pediatric gastroenterology and nutrition.* DOI: 10.1097/MPG.0000000000001313.

Turrone, Silvia; Fiori, Jessica; Rampelli, Simone; Schnorr, Stephanie L.; Consolandi, Clarissa; Barone, Monica et al. (2016): Fecal metabolome of the Hadza hunter-gatherers: a host-microbiome integrative view. In: *Scientific reports* 6, S. 32826. DOI: 10.1038/srep32826.

Zhang, Ling; Voskuil, Wieger; Mouzaki, Marialena; Groen, Albert K.; Alexander, Jennifer; Bourdon, Celine et al. (2016): Impaired Bile Acid Homeostasis in Children with Severe Acute Malnutrition. In: *PLoS ONE* 11 (5), S. e0155143. DOI: 10.1371/journal.pone.0155143.

2015

Antonissen, Gunther; Croubels, Siska; Pasmans, Frank; Ducatelle, Richard; Eeckhaut, Venessa; Devreese, Mathias et al. (2015): Fumonisin affect the intestinal microbial homeostasis in broiler chickens, predisposing to necrotic enteritis. In: *Veterinary research* 46 (1), S. 98. DOI: 10.1186/s13567-015-0234-8.

Geurts, Lucie; Everard, Amandine; van Hul, Matthias; Essaghir, Ahmed; Duparc, Thibaut; Matamoros, Sébastien et al. (2015): Adipose tissue NAPE-PLD controls fat mass development by altering the browning process and gut microbiota. In: *Nat Commun* 6, S. 6495. DOI: 10.1038/ncomms7495.

2014

Antje Damms-Machado (2014): Effects of Surgical and Dietary Weight Loss Therapy for Obesity on Gut Microbiota Composition and Nutrient Absorption. In: *BioMed Research International*. DOI: 10.1155/2015/806248.

Belcheva, Antoaneta; Irrazabal, Thergiorjy; Robertson, Susan J.; Streutker, Catherine; Maughan, Heather; Rubino, Stephen et al. (2014): Gut microbial metabolism drives transformation of MSH2-deficient colon epithelial cells. In: *Cell* 158 (2), S. 288–299. DOI: 10.1016/j.cell.2014.04.051.

6.8. Pulmonology

2017

Meier, Marc A.; Ottiger, Manuel; Vögeli, Alaadin; Steuer, Christian; Bernasconi, Luca; Thomann, Robert et al. (2017): Activation of the Serotonin Pathway is Associated with Poor Outcome in COPD Exacerbation: Results of a Long-Term Cohort Study. In: *Lung*; 195(3):303-11. DOI: 10.1007/s00408-017-0004-7.

Meier, Marc A.; Ottiger, Manuel; Vogeli, Alaadin; Steuer, Christian; Bernasconi, Luca; Thomann, Robert et al. (2017): Activation of the tryptophan/serotonin pathway is associated with severity and predicts outcomes in pneumonia: results of a long-term cohort study. In: *Clinical chemistry and laboratory medicine*; 55(7):1060-9. DOI: 10.1515/cclm-2016-0912.

Naz S, Kolmert J, Yang M, Reinke SN, Kamleh MA, Snowden S et al. (2017): Metabolomics analysis identifies sex-associated metabolotypes of oxidative stress and the autotaxin-lysoPA axis in COPD. In: *The European respiratory journal*; 49(6). DOI: 10.1183/13993003.02322-2016.

Vögeli A, Ottiger M, Meier MA, Steuer C, Bernasconi L, Huber A et al. (2017): Asymmetric Dimethylarginine Predicts Long-Term Outcome in Patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease. In: *Lung*; 195(6):717–27. DOI: 10.1007/s00408-017-0047-9.

Vögeli, Alaadin; Ottiger, Manuel; Meier, Marc A.; Steuer, Christian; Bernasconi, Luca; Kulkarni, Prasad et al. (2017): Admission levels of asymmetric and symmetric dimethylarginine predict long-term outcome in patients with community-acquired pneumonia. In: *Respiratory research*; 18(1):25. DOI: 10.1186/s12931-017-0502-4.

2015

Conlon, Thomas M.; Bartel, Jörg; Ballweg, Korbinian; Günter, Stefanie; Prehn, Cornelia; Krumsiek, Jan et al. (2015): Metabolomics screening identifies reduced L-carnitine to be associated with progressive emphysema. In: *Clinical science (London, England: 1979)*. DOI: 10.1042/CS20150438.

Herberth, Gunda; Offenberg, Kirsten; Rolle-Kampczyk, Ulrike; Bauer, Mario; Otto, Wolfgang; Röder, Stefan et al. (2015): Endogenous metabolites and inflammasome activity in early childhood and links to respiratory diseases. In: *The Journal of allergy and clinical immunology*. DOI: 10.1016/j.jaci.2015.01.022.

Holz, Olaf; Roepcke, Stefan; Watz, Henrik; Tegtbur, Uwe; Lahu, Gezim; Hohlfeld, Jens M. (2015): Constant-load exercise decreases the serum concentration of myeloperoxidase in healthy smokers and smokers with COPD. In: *Int J Chron Obstruct Pulmon Dis*. 10, S. 1393–1402. DOI: 10.2147/COPD.S83269.

6.9. Technology

2017

Haid M, Muschet C, Wahl S, Römisch-Margl W, Prehn C, Möller G et al. (2017): Long-term stability of human plasma metabolites during storage at -80 °C. In: *J. Proteome Res*. DOI: 10.1021/acs.jproteome.7b00518.

Leuthold, Patrick; Schaeffeler, Elke; Winter, Stefan; Büttner, Florian; Hofmann, Ute; Mürdter, Thomas E. et al. (2017): Comprehensive Metabolomic and Lipidomic Profiling of Human Kidney Tissue: A Platform Comparison. In: *J. Proteome Res.* DOI: 10.1021/acs.jproteome.6b00875.

Molnos S, Baumbach C, Wahl S, Müller-Nurasyid M, Strauch K, Wang-Sattler R et al. (2017): pulver: an R package for parallel ultra-rapid p-value computation for linear regression interaction terms. In: *BMC Bioinformatics*; 18(1):429. DOI: 10.1186/s12859-017-1838-y.

Rotter, Markus; Brandmaier, Stefan; Prehn, Cornelia; Adam, Jonathan; Rabstein, Sylvia; Gawrych, Katarzyna et al. (2017): Stability of targeted metabolite profiles of urine samples under different storage conditions. In: *Metabolomics* 13 (1), S. 4. DOI: 10.1007/s11306-016-1137-z.

Siskos, Alexandros P.; Jain, Pooja; Römisch-Margl, Werner; Bennett, Mark; Achaintre, David; Asad, Yasmin et al. (2017): Interlaboratory Reproducibility of a Targeted Metabolomics Platform for Analysis of Human Serum and Plasma. In: *Anal. Chem.*; 89(1):656-65. DOI: 10.1021/acs.analchem.6b02930.

Steininger, P. A.; Strasser, E. F.; Ziehe, B.; Eckstein, R.; Rauh, M. (2017): Change of the metabolomic profile during short-term mononuclear cell storage. In: *Vox sanguinis*; 112(12):163-72. DOI: 10.1111/vox.12482.

Suarez-Diez M, Adam J, Adamski J, Chasapi SA, Luchinat C, Peters A et al. (2017): Plasma and serum metabolite association networks: comparability within and between studies using NMR and MS profiling. In: *J. Proteome Res.*; 16(7):2547-59. DOI: 10.1021/acs.jproteome.7b00106.

Trabado, Séverine; Al-Salameh, Abdallah; Croixmarie, Vincent; Masson, Perrine; Corruble, Emmanuelle; Fève, Bruno et al. (2017): The human plasma-metabolome: Reference values in 800 French healthy volunteers; impact of cholesterol, gender and age. In: *PLoS ONE*; 12(3):e0173615. DOI: 10.1371/journal.pone.0173615.

2016

Athersuch, Toby (2016): Metabolome analyses in exposome studies: Profiling methods for a vast chemical space. In: *Archives of biochemistry and biophysics* 589, S. 177–186. DOI: 10.1016/j.abb.2015.10.007.

Bartel, Jörg (2016): Embedding metabolism into the omics landscape: Integrated analysis of metabolomics, transcriptomics and proteomics data from cellular to organ level. In: *Dissertation*.

Dietrich, Stefan; Floegel, Anna; Troll, Martina; Kühn, Tilman; Rathmann, Wolfgang; Peters, Anette et al. (2016): Random Survival Forest in practice: a method for modelling complex metabolomics data in time to event analysis. In: *Int J Epidemiol.* DOI: 10.1093/ije/dyw145.

Gervasoni, Jacopo; Schiattarella, Arcangelo; Primiano, Aniello; D'Addurno, Ilaria; Cocci, Andrea; Zuppi, Cecilia; Persichilli, Silvia (2016): Simultaneous quantification of 17-hydroxyprogesterone, androstenedione, testosterone and cortisol in human serum by LC-MS/MS using TurboFlow online sample extraction. In: *Clinical biochemistry*. DOI: 10.1016/j.clinbiochem.2016.05.012.

Greaves, Ronda F.; Jolly, Lisa; Hartmann, Michaela F.; Ho, Chung Shun; Kam, Richard K T; Joseph, John et al. (2016): Harmonisation of serum dihydrotestosterone analysis: establishment of an external quality assurance program. In: *Clinical chemistry and laboratory medicine*. DOI: 10.1515/cclm-2016-0394.

Isherwood, Cheryl; Johnston, Jonathan D.; Skene, Debra J. (2016): The effect of obesity and type 2 diabetes (T2DM) on human metabolite rhythms. In: *Proc. Nutr. Soc.* 75 (OCE1). DOI: 10.1017/S0029665115004632.

Kühn, Tilman; Sookthai, Disorn; Rolle-Kampczyk, Ulrike; Otto, Wolfgang; Bergen, Martin von; Kaaks, Rudolf; Johnson, Theron (2016): Mid- and long-term correlations of plasma metabolite concentrations measured by a targeted metabolomics approach. In: *Metabolomics* 12 (12). DOI: 10.1007/s11306-016-1133-3.

Muschet, Caroline; Möller, Gabriele; Prehn, Cornelia; de Angelis, Martin Hrabě; Adamski, Jerzy; Tokarz, Janina (2016): Removing the bottlenecks of cell culture metabolomics: fast normalization procedure, correlation of metabolites to cell number, and impact of the cell harvesting method. In: *Metabolomics* 12 (10). DOI: 10.1007/s11306-016-1104-8.

Potratz, Sarah; Tarnow, Patrick; Jungnickel, Harald; Baumann, Sven; Bergen, Martin von; Tralau, Tewes; Luch, Andreas (2016): Combination of Metabolomics with Cellular Assays Reveals New Biomarkers and Mechanistic Insights on Xenoestrogenic Exposures in MCF-7 Cells. In: *Chemical research in toxicology*. DOI: 10.1021/acs.chemrestox.6b00106.

Rocca-Serra, Philippe; Salek, Reza M.; Arita, Masanori; Correa, Elon; Dayalan, Saravanan; Gonzalez-Beltran, Alejandra et al. (2016): Data standards can boost metabolomics research, and if there is a will, there is a way. In: *Metabolomics* 12 (1), S. 14. DOI: 10.1007/s11306-015-0879-3.

Siddiqui, Nazema Y.; Dubois, Laura G. (2016): Optimizing Urine Processing Protocols for Protein and Metabolite Detection. In: *J Proteomics Bioinform* s14. DOI: 10.4172/jpb.S14-003.

Travers, Simon; Martinerie, Laetitia; Bouvattier, Claire; Boileau, Pascal; Lombès, Marc; Pussard, Eric (2016): Multiplexed steroid profiling of gluco- and mineralocorticoids pathways using a liquid chromatography tandem mass spectrometry method. In: *J. Steroid Biochem. Mol. Biol.* DOI: 10.1016/j.jsbmb.2016.06.005.

2015

Abuja, Peter M.; Ehrhart, Friederike; Schoen, Uwe; Schmidt, Tomm; Stracke, Frank; Dallmann, Guido et al. (2015): Alterations in Human Liver Metabolome during Prolonged Cryostorage. In: *J. Proteome Res.* 14 (7), S. 2758–2768. DOI: 10.1021/acs.jproteome.5b00025.

Anton, Gabriele; Wilson, Rory; Yu, Zhong-Hao; Prehn, Cornelia; Zukunft, Sven; Adamski, Jerzy et al. (2015): Pre-analytical sample quality: metabolite ratios as an intrinsic marker for prolonged room temperature exposure of serum samples. In: *PLoS ONE* 10 (3), S. e0121495. DOI: 10.1371/journal.pone.0121495.

Buttler, Rahel M.; Martens, Frans; Fanelli, Flaminia; Pham, Hai T.; Kushnir, Mark M.; Janssen, Marcel J W et al. (2015): Comparison of 7 Published LC-MS/MS Methods for the Simultaneous Measurement of Testosterone, Androstenedione, and Dehydroepiandrosterone in Serum. In: *Clinical chemistry.* DOI: 10.1373/clinchem.2015.242859.

Cajka, Tomas; Fiehn, Oliver (2015): Towards merging untargeted and targeted methods in mass spectrometry-based metabolomics and lipidomics. In: *Anal. Chem.* DOI: 10.1021/acs.analchem.5b04491.

Dame, Zerihun T.; Aziat, Farid; Mandal, Rupasri; Krishnamurthy, Ram; Bouatra, Souhaila; Borzouie, Shima et al. (2015): The human saliva metabolome. In: *Metabolomics* 11 (6), S. 1864–1883. DOI: 10.1007/s11306-015-0840-5.

Denihan, N. M.; Walsh, B. H.; Reinke, S. N.; Sykes, B. D.; Mandal, R.; Wishart, D. S. et al. (2015): The effect of haemolysis on the metabolomic profile of umbilical cord blood. In: *Clinical biochemistry.* DOI: 10.1016/j.clinbiochem.2015.02.004.

Greaves, Ronda F.; Pitkin, Janne; Ho, Chung Shun; Baglin, James; Hunt, Rodney W.; Zacharin, Margaret R. (2015): Hormone Modelling in Preterm Neonates: Establishment of Pituitary and Steroid Hormone Reference Intervals. In: *The Journal of clinical endocrinology and metabolism*, S. jc20143681. DOI: 10.1210/jc.2014-3681.

Hounoum, Blandine Madji; Blasco, Hélène; Emond, Patrick; Mavel, Sylvie (2015): Liquid chromatography-high resolution mass spectrometry-based cell metabolomics. Experimental design, recommendations and applications. In: *TrAC Trends in Analytical Chemistry.* DOI: 10.1016/j.trac.2015.08.003.

Jeanneret, Fabienne; Tonoli, David; Rossier, Michel F.; Saugy, Martial; Boccard, Julien; Rudaz, Serge (2015): Evaluation of steroidomics by liquid chromatography hyphenated to mass spectrometry as a powerful analytical strategy for measuring human steroid perturbations. In: *J Chromatogr A.* DOI: 10.1016/j.chroma.2015.07.008.

Puxbaum, Verena; Mattanovich, Diethard; Gasser, Brigitte (2015): Quo vadis? The challenges of recombinant protein folding and secretion in *Pichia pastoris*. In: *Applied microbiology and biotechnology* 99 (7), S. 2925–2938. DOI: 10.1007/s00253-015-6470-z.

Salek, Reza M.; Arita, Masanori; Dayalan, Saravanan; Ebbels, Timothy; Jones, Andrew R.; Neumann, Steffen et al. (2015): Embedding standards in metabolomics. The Metabolomics Society data standards task group. In: *Metabolomics* 11 (4), S. 782–783. DOI: 10.1007/s11306-015-0821-8.

Tsepilov, Yakov A.; Shin, So-Youn; Soranzo, Nicole; Spector, Tim D.; Prehn, Cornelia; Adamski, Jerzy et al. (2015): Non-Additive Effects of Genes in Human Metabolomics. In: *Genetics.* DOI: 10.1534/genetics.115.175760.

2014

Breier, Michaela; Wahl, Simone; Prehn, Cornelia; Fugmann, Marina; Ferrari, Uta; Weise, Michaela et al. (2014): Targeted metabolomics identifies reliable and stable metabolites in human serum and plasma samples. In: *PLoS ONE* 9 (2), S. e89728. DOI: 10.1371/journal.pone.0089728.

Clark, Merritt; Murray, James D.; Maga, Elizabeth A. (2014): Assessing unintended effects of a mammary-specific transgene at the whole animal level in host and non-target animals. In: *Transgenic Res.* 23 (2), S. 245–256. DOI: 10.1007/s11248-013-9768-6.

Dane, A. D.; Hendriks, M M W B; Reijmers, T. H.; Harms, A. C.; Troost, J.; Vreeken, R. J. et al. (2014): Integrating metabolomics profiling measurements across multiple biobanks. In: *Anal. Chem.* 86 (9), S. 4110–4114. DOI: 10.1021/ac404191a.

Petersen, Ann-Kristin; Zeilinger, Sonja; Kastenmüller, Gabi; Römisch-Margl, Werner; Brugger, Markus; Peters, Annette et al. (2014): Epigenetics meets metabolomics: an epigenome-wide association study with blood serum metabolic traits. In: *Hum. Mol. Genet.* 23 (2), S. 534–545. DOI: 10.1093/hmg/ddt430.

S. Medina, R. Domínguez-Perles, J.I. Gil, F. Ferreres, A. Gil-Izquierdo (2014): Metabolomics and the Diagnosis of Human Diseases - A guide to the markers and pathophysiological Pathways Affected. In: *Current Medicinal Chemistry* (21), S. 823–848, zuletzt geprüft am 15.01.2015.