

Publications

Contents

1. CARDIOMETABOLIC.....	2
1.1. Cardiology.....	2
1.2. Diabetes.....	3
1.3. Hepatology.....	7
1.4. Nephrology.....	8
2. NEUROLOGY	10
3. NUTRITION & LIFESTYLE	12
4. ONCOLOGY	17
5. OTHERS	20
5.1. Aging.....	20
5.2. Bioprocessing	21
5.3. Epidemiology	22
5.4. Gynecology and Fertility	23
5.5. Gastroenterology	25
5.6. Inflammation and Immunology.....	26
5.7. Microbiome	27
5.8. Pulmonology	28
5.9. Technology	28
6. PHARMA	30

1. Cardiometabolic

1.1. Cardiology

2016

- Chao de la Barca, Juan Manuel; Bakhta, Oussama; Kalakech, Hussein; Simard, Gilles; Tamarelle, 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.
- 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.ijcme.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: *Integr 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 Wrn 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/ijsem.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.

2013

- Asciutto, Giuseppe; Edsfeldt, Andreas; Dias, Nuno V.; Nilsson, Jan; Prehn, Cornelia; Adamski, Jerzy; Gonçalves, Isabel (2013): Treatment with beta-blockers is associated with lower levels of Lp-PLA2 and suPAR in carotid plaques. In: *Cardiovasc. Pathol.* 22 (6), S. 438–443. DOI: 10.1016/j.carpath.2013.04.005.
- Pichler Hefti, Jacqueline; Sonntag, Denise; Hefti, Urs; Risch, Lorenz; Schoch, Otto D.; Turk, Alexander J. et al. (2013): Oxidative stress in hypobaric hypoxia and influence on vessel-tone modifying mediators. In: *High Alt. Med. Biol.* 14 (3), S. 273–279. DOI: 10.1089/ham.2012.1110.
- Reimann, M.; Peitzsch, M.; Ziemssen, T.; Julius, U.; Eisenhofer, G. (2013): Metabolomic distinction of microvascular effects of lipoprotein apheresis--a pilot study. In: *Atheroscler Suppl* 14 (1), S. 143–149. DOI: 10.1016/j.atherosclerosissup.2012.10.008.
- Rudkowska, Iwona; Paradis, Ann-Marie; Thifault, Elisabeth; Julien, Pierre; Barbier, Olivier; Couture, Patrick et al. (2013): Differences in metabolomic and transcriptomic profiles between responders and non-responders to an n-3 polyunsaturated fatty acids (PUFAs) supplementation. In: *Genes Nutr* 8 (4), S. 411–423. DOI: 10.1007/s12263-012-0328-0.

1.2. Diabetes

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; Irmler, 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.
- 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.
- 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; Stückler, 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.
- 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.; Kriebel, 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.; 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.
- 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.

2013

- Binder, Elke; Bermúdez-Silva, Francisco J.; André, Caroline; Elie, Melissa; Romero-Zerbo, Silvana Y.; Leste-Lasserre, Thierry et al. (2013): Leucine supplementation protects from insulin resistance by regulating adiposity levels. In: *PLoS ONE* 8 (9), S. e74705. DOI: 10.1371/journal.pone.0074705.
- Ferrannini, Ele; Natali, Andrea; Camastra, Stefania; Nannipieri, Monica; Mari, Andrea; Adam, Klaus-Peter et al. (2013): Early metabolic markers of the development of dysglycemia and type 2 diabetes and their physiological significance. In: *Diabetes* 62 (5), S. 1730–1737. DOI: 10.2337/db12-0707.
- Floegel, A.; Ruesten, A. von; Drogan, D.; Schulze, M. B.; Prehn, C.; Adamski, J. et al. (2013): Variation of serum metabolites related to habitual diet: a targeted metabolomic approach in EPIC-Potsdam. In: *Eur J Clin Nutr* 67 (10), S. 1100–1108. DOI: 10.1038/ejcn.2013.147.
- Floegel, Anna; Stefan, Norbert; Yu, Zhonghao; Mühlenbruch, Kristin; Drogan, Dagmar; Joost, Hans-Georg et al. (2013): Identification of serum metabolites associated with risk of type 2 diabetes using a targeted metabolomic approach. In: *Diabetes* 62 (2), S. 639–648. DOI: 10.2337/db12-0495.
- Hummel, Sandra; Much, Daniela; Rossbauer, Michaela; Ziegler, Anette-G; Beyerlein, Andreas (2013): Postpartum outcomes in women with gestational diabetes and their offspring: POGO study design and first-year results. In: *The review of diabetic studies : RDS* 10 (1), S. 49–57. DOI: 10.1900/RDS.2013.10.49.
- Solberg, Anja; Robertson, Adam B.; Aronsen, Jan Magnus; Rognmo, Øivind; Sjaastad, Ivar; Wisløff, Ulrik; Klungland, Arne (2013): Deletion of mouse *Alkbh7* leads to obesity. In: *J Mol Cell Biol* 5 (3), S. 194–203. DOI: 10.1093/jmcb/mjt012.
- Then, Cornelia; Wahl, Simone; Kirchhofer, Anna; Grallert, Harald; Krug, Susanne; Kastenmüller, Gabi et al. (2013): Plasma metabolomics reveal alterations of sphingo- and glycerophospholipid levels in non-diabetic carriers of the transcription factor 7-like 2 polymorphism rs7903146. In: *PLoS ONE* 8 (10), S. e78430. DOI: 10.1371/journal.pone.0078430.

1.3. Hepatology

2016

- 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; Voskuil, Wier; 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 Wrn 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 lipodosis 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.

2013

- Lehmann, Rainer; Franken, Holger; Dammeier, Sascha; Rosenbaum, Lars; Kantartzis, Konstantinos; Peter, Andreas et al. (2013): Circulating lysophosphatidylcholines are markers of a metabolically benign nonalcoholic fatty liver. In: *Diabetes Care* 36 (8), S. 2331–2338. DOI: 10.2337/dc12-1760.
- Siegert, Sabine; Yu, Zhonghao; Wang-Sattler, Rui; Illig, Thomas; Adamski, Jerzy; Hampe, Jochen et al. (2013): Diagnosing fatty liver disease: a comparative evaluation of metabolic markers, phenotypes, genotypes and established biomarkers. In: *PLoS ONE* 8 (10), S. e76813. DOI: 10.1371/journal.pone.0076813.

1.4. Nephrology

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), S. 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.
- Tsuykov, Oleg; Chaykovska, Lyubov; Kretschmer, Axel; Stasch, Johannes-Peter; Pfab, Thiemo; 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; 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.
- 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.

2013

- Goek, Oemer-Necmi; Prehn, Cornelia; Sekula, Peggy; Römisch-Margl, Werner; Döring, Angela; Gieger, Christian et al. (2013): Metabolites associate with kidney function decline and incident chronic kidney disease in the general population. In: *Nephrol. Dial. Transplant.* 28 (8), S. 2131–2138. DOI: 10.1093/ndt/gft217.
- Haddad, George; Zhu, Lin Fu; Rayner, David C.; Murray, Allan G. (2013): Experimental glomerular endothelial injury in vivo. In: *PLoS ONE* 8 (10), S. e78244. DOI: 10.1371/journal.pone.0078244.

2. Neurology

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.
- 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.
- Mastrokolias, 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.
- 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.
- 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; Villarroja, 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.

2013

- Altmaier, Elisabeth; Emeny, Rebecca T.; Krumsiek, Jan; Lacruz, Maria E.; Lukaschek, Karoline; Häfner, Sibylle et al. (2013): Metabolomic profiles in individuals with negative affectivity and social inhibition: a population-based study of Type D personality. In: *Psychoneuroendocrinology* 38 (8), S. 1299–1309. DOI: 10.1016/j.psyneuen.2012.11.014.
- Goldberg, Johannes; Daniel, Moritz; van Heuvel, Yasemin; Victor, Marion; Beyer, Cordian; Clarner, Tim; Kipp, Markus (2013): Short-term cuprizone feeding induces selective amino acid deprivation with concomitant activation of an integrated stress response in oligodendrocytes. In: *Cell Mol Neurobiol. (Cellular and Molecular Neurobiology)* 33 (8), S. 1087–1098. DOI: 10.1007/s10571-013-9975-y.
- Reinke, Stacey N.; Walsh, Brian H.; Boylan, Geraldine B.; Sykes, Brian D.; Kenny, Louise C.; Murray, Deirdre M.; Broadhurst, David I. (2013): ¹H NMR derived metabolomic profile of neonatal asphyxia in umbilical cord serum: implications for hypoxic ischemic encephalopathy. In: *J. Proteome Res.* 12 (9), S. 4230–4239. DOI: 10.1021/pr400617m.

3. Nutrition & Lifestyle

2016

- 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.
- 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.
- 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.
- 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.

- 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.; 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.
- 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; Voskuilj, 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

- 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.

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.

2013

- Binder, Elke; Bermúdez-Silva, Francisco J.; André, Caroline; Elie, Melissa; Romero-Zerbo, Silvana Y.; Leste-Lasserre, Thierry et al. (2013): Leucine supplementation protects from insulin resistance by regulating adiposity levels. In: *PLoS ONE* 8 (9), S. e74705. DOI: 10.1371/journal.pone.0074705.
- Bouchard-Mercier, Annie; Rudkowska, Iwona; Lemieux, Simone; Couture, Patrick; Vohl, Marie-Claude (2013): The metabolic signature associated with the Western dietary pattern: a cross-sectional study. In: *Nutr J* 12, S. 158. DOI: 10.1186/1475-2891-12-158.
- Collino, Sebastiano; Martin, François-Pierre J.; Montoliu, Ivan; Barger, Jamie L.; Da Silva, Laeticia; Prolla, Tomas A. et al. (2013): Transcriptomics and Metabonomics Identify Essential Metabolic Signatures in Calorie Restriction (CR) Regulation across Multiple Mouse Strains. In: *Metabolites* 3 (4), S. 881–911. DOI: 10.3390/metabo3040881.
- Floegel, A.; Ruesten, A. von; Drogan, D.; Schulze, M. B.; Prehn, C.; Adamski, J. et al. (2013): Variation of serum metabolites related to habitual diet: a targeted metabolomic approach in EPIC-Potsdam. In: *Eur J Clin Nutr* 67 (10), S. 1100–1108. DOI: 10.1038/ejcn.2013.147.

- Floegel, Anna; Stefan, Norbert; Yu, Zhonghao; Mühlenbruch, Kristin; Drogan, Dagmar; Joost, Hans-Georg et al. (2013): Identification of serum metabolites associated with risk of type 2 diabetes using a targeted metabolomic approach. In: *Diabetes* 62 (2), S. 639–648. DOI: 10.2337/db12-0495.
- Gruber, Lisa; Kisling, Sigrid; Lichti, Pia; Martin, François-Pierre; May, Stephanie; Klingenspor, Martin et al. (2013): High fat diet accelerates pathogenesis of murine Crohn's disease-like ileitis independently of obesity. In: *PLoS ONE* 8 (8), S. e71661. DOI: 10.1371/journal.pone.0071661.
- Jaremek, M.; Yu, Z.; Mangino, M.; Mittelstrass, K.; Prehn, C.; Singmann, P. et al. (2013): Alcohol-induced metabolomic differences in humans. In: *Transl Psychiatry* 3, S. e276. DOI: 10.1038/tp.2013.55.
- Menni, Cristina; Zhai, Guangju; Macgregor, Alexander; Prehn, Cornelia; Römisch-Margl, Werner; Suhre, Karsten et al. (2013): Targeted metabolomics profiles are strongly correlated with nutritional patterns in women. In: *Metabolomics* 9 (2), S. 506–514. DOI: 10.1007/s11306-012-0469-6.
- Reichardt, François; Baudry, Charlotte; Gruber, Lisa; Mazzuoli, Gemma; Moriez, Raphaël; Scherling, Christian et al. (2013): Properties of myenteric neurones and mucosal functions in the distal colon of diet-induced obese mice. In: *The Journal of physiology* 591 (Pt 20), S. 5125–5139. DOI: 10.1113/jphysiol.2013.262733.
- Rudkowska, Iwona; Paradis, Ann-Marie; Thifault, Elisabeth; Julien, Pierre; Barbier, Olivier; Couture, Patrick et al. (2013): Differences in metabolomic and transcriptomic profiles between responders and non-responders to an n-3 polyunsaturated fatty acids (PUFAs) supplementation. In: *Genes Nutr* 8 (4), S. 411–423. DOI: 10.1007/s12263-012-0328-0.
- Sossdorf, Maik; Fischer, Jacqueline; Meyer, Stefan; Dahlke, Katja; Wissuwa, Bianka; Seidel, Carolin et al. (2013): Physical exercise induces specific adaptations resulting in reduced organ injury and mortality during severe polymicrobial sepsis. In: *Crit. Care Med.* 41 (10), S. e246-55. DOI: 10.1097/CCM.0b013e31828a2ae3.
- Tonevitsky, Alexander G.; Maltseva, Diana V.; Abbasi, Asghar; Samatov, Timur R.; Sakharov, Dmitry A.; Shkurnikov, Maxim U. et al. (2013): Dynamically regulated miRNA-mRNA networks revealed by exercise. In: *BMC Physiol.* 13, S. 9. DOI: 10.1186/1472-6793-13-9.
- Wahl, Simone; Holzapfel, Christina; Yu, Zhonghao; Breier, Michaela; Kondofersky, Ivan; Fuchs, Christiane et al. (2013): Metabolomics reveals determinants of weight loss during lifestyle intervention in obese children. In: *Metabolomics* 9 (6), S. 1157–1167. DOI: 10.1007/s11306-013-0550-9.
- Xu, Tao; Holzapfel, Christina; Dong, Xiao; Bader, Erik; Yu, Zhonghao; Prehn, Cornelia et al. (2013): Effects of smoking and smoking cessation on human serum metabolite profile: results from the KORA cohort study. In: *BMC Med* 11, S. 60. DOI: 10.1186/1741-7015-11-60.

2012

- Desmarchelier, Charles; Dahlhoff, Christoph; Keller, Sylvia; Sailer, Manuela; Jahreis, Gerhard; Daniel, Hannelore (2012): C57Bl/6 N mice on a western diet display reduced intestinal and hepatic cholesterol levels despite a plasma hypercholesterolemia. In: *BMC Genomics* 13, S. 84. DOI: 10.1186/1471-2164-13-84.
- Föcker, M.; Timmesfeld, N.; Scherag, S.; Knoll, N.; Singmann, P.; Wang-Sattler, R. et al. (2012): Comparison of metabolic profiles of acutely ill and short-term weight recovered patients with anorexia nervosa reveals alterations of 33 out of 163 metabolites. In: *J Psychiatr Res* 46 (12), S. 1600–1609. DOI: 10.1016/j.jpsychires.2012.08.015.
- Krug, Susanne; Kastenmüller, Gabi; Stückler, Ferdinand; Rist, Manuela J.; Skurk, Thomas; Sailer, Manuela et al. (2012): The dynamic range of the human metabolome revealed by challenges. In: *FASEB J.* 26 (6), S. 2607–2619. DOI: 10.1096/fj.11-198093.
- Martin, Francois-Pierre J.; Montoliu, Ivan; Nagy, Kornél; Moco, Sofia; Collino, Sebastiano; Guy, Philippe et al. (2012): Specific dietary preferences are linked to differing gut microbial metabolic activity in response to dark chocolate intake. In: *J. Proteome Res.* 11 (12), S. 6252–6263. DOI: 10.1021/pr300915z.
- Saleem, F.; Ametaj, B. N.; Bouatra, S.; Mandal, R.; Zebeli, Q.; Dunn, S. M.; Wishart, D. S. (2012): A metabolomics approach to uncover the effects of grain diets on rumen health in dairy cows. In: *J. Dairy Sci.* 95 (11), S. 6606–6623. DOI: 10.3168/jds.2012-5403.
- Stretch, Cynthia; Eastman, Thomas; Mandal, Rupasri; Eisner, Roman; Wishart, David S.; Mourtzakis, Marina et al. (2012): Prediction of skeletal muscle and fat mass in patients with advanced cancer using a metabolomic approach. In: *J. Nutr.* 142 (1), S. 14–21. DOI: 10.3945/jn.111.147751.

2011

- Altmaier, Elisabeth; Kastenmüller, Gabi; Römisch-Margl, Werner; Thorand, Barbara; Weinberger, Klaus M.; Illig, Thomas et al. (2011): Questionnaire-based self-reported nutrition habits associate with serum metabolites as revealed by quantitative targeted metabolomics. In: *Eur. J. Epidemiol.* 26 (2), S. 145–156. DOI: 10.1007/s10654-010-9524-7.
- Grimm, Marcus O W; Grösgen, Sven; Riemenschneider, Matthias; Tanila, Heikki; Grimm, Heike S.; Hartmann, Tobias (2011): From brain to food: analysis of phosphatidylcholins, lyso-phosphatidylcholins and phosphatidylcholin-plasmalogens derivatives in Alzheimer's disease human post mortem brains and mice model via mass spectrometry. In: *J Chromatogr A* 1218 (42), S. 7713–7722. DOI: 10.1016/j.chroma.2011.07.073.
- Rubio-Aliaga, Isabel; Roos, Baukje; Duthie, Susan J.; Crosley, L. Katie; Mayer, Claus; Horgan, Graham et al. (2011): Metabolomics of prolonged fasting in humans reveals new catabolic markers. In: *Metabolomics* 7 (3), S. 375–387. DOI: 10.1007/s11306-010-0255-2.
- Skurk, Thomas; Rubio-Aliaga, Isabel; Stamford, Ademar; Hauner, Hans; Daniel, Hannelore (2011): New metabolic interdependencies revealed by plasma metabolite profiling after two dietary challenges. In: *Metabolomics* 7 (3), S. 388–399. DOI: 10.1007/s11306-010-0258-z.

2010

- Borchers, Annette; Pieler, Tomas (2010): Programming pluripotent precursor cells derived from *Xenopus* embryos to generate specific tissues and organs. In: *Genes* 1 (3), S. 413–426. DOI: 10.3390/genes1030413.

2009

- Altmaier, Elisabeth; Kastenmüller, Gabi; Römisch-Margl, Werner; Thorand, Barbara; Weinberger, Klaus M.; Adamski, Jerzy et al. (2009): Variation in the human lipidome associated with coffee consumption as revealed by quantitative targeted metabolomics. In: *Mol Nutr Food Res* 53 (11), S. 1357–1365. DOI: 10.1002/mnfr.200900116.

2008

- Wang-Sattler, Rui; Yu, Yao; Mittelstrass, Kirstin; Lattka, Eva; Altmaier, Elisabeth; Gieger, Christian et al. (2008): Metabolic profiling reveals distinct variations linked to nicotine consumption in humans--first results from the KORA study. In: *PLoS ONE* 3 (12), S. e3863. DOI: 10.1371/journal.pone.0003863.

4. Oncology

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.
- 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): 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.
- 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

- Boroughs, Lindsey K.; DeBerardinis, Ralph J. (2015): Metabolic pathways promoting cancer cell survival and growth. In: *Nature cell biology* 17 (4), S. 351–359. DOI: 10.1038/ncb3124.
- 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 consensusbased 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

- Bathe, Oliver F.; Farshidfar, Farshad (2014): From genotype to functional phenotype: unraveling the metabolomic features of colorectal cancer. In: *Genes* 5 (3), S. 536–560. DOI: 10.3390/genes5030536.

- 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, Saamyadip; 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.

2013

- Liesenfeld, David B.; Habermann, Nina; Owen, Robert W.; Scalbert, Augustin; Ulrich, Cornelia M. (2013): Review of mass spectrometry-based metabolomics in cancer research. In: *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology* 22 (12), S. 2182–2201. DOI: 10.1158/1055-9965.EPI-13-0584.
- Qiu, Yunping; Zhou, Bingsen; Su, Mingming; Baxter, Sarah; Zheng, Xiaojiao; Zhao, Xueqing et al. (2013): Mass spectrometry-based quantitative metabolomics revealed a distinct lipid profile in breast cancer patients. In: *Int J Mol Sci* 14 (4), S. 8047–8061. DOI: 10.3390/ijms14048047.

2012

- Stretch, Cynthia; Eastman, Thomas; Mandal, Rupasri; Eisner, Roman; Wishart, David S.; Mourtzakis, Marina et al. (2012): Prediction of skeletal muscle and fat mass in patients with advanced cancer using a metabolomic approach. In: *J. Nutr.* 142 (1), S. 14–21. DOI: 10.3945/jn.111.147751.

2011

- Jäger, Walter; Gruber, Alexandra; Giessrigl, Benedikt; Krupitza, Georg; Szekeres, Thomas; Sonntag, Denise (2011): Metabolomic analysis of resveratrol-induced effects in the human breast cancer cell lines MCF-7 and MDA-MB-231. In: *OMICS* 15 (1-2), S. 9–14. DOI: 10.1089/omi.2010.0114.

2008

- Osl, Melanie; Dreiseitl, Stephan; Pfeifer, Bernhard; Weinberger, Klaus; Klocker, Helmut; Bartsch, Georg et al. (2008): A new rule-based algorithm for identifying metabolic markers in prostate cancer using tandem mass spectrometry. In: *Bioinformatics* 24 (24), S. 2908–2914. DOI: 10.1093/bioinformatics/btn506.

5. Others

2016

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

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 benzyloquinoline 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.

2013

Widmann, Philipp; Reverter, Antonio; Fortes, Marina R. S.; Weikard, Rosemarie; Suhre, Karsten; Hammon, Harald et al. (2013): A systems biology approach using metabolomic data reveals genes and pathways interacting to modulate divergent growth in cattle. In: *BMC Genomics* 14, S. 798. DOI: 10.1186/1471-2164-14-798.

5.1. Aging

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*.

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; 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 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 geromics. 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.

2013

- Collino, Sebastiano; Montoliu, Ivan; Martin, François-Pierre J.; Scherer, Max; Mari, Daniela; Salvioli, Stefano et al. (2013): Metabolic signatures of extreme longevity in northern Italian centenarians reveal a complex remodeling of lipids, amino acids, and gut microbiota metabolism. In: *PLoS ONE* 8 (3), S. e56564. DOI: 10.1371/journal.pone.0056564.
- Moayeri, Alireza; Hammond, Christopher J.; Valdes, Ana M.; Spector, Timothy D. (2013): Cohort Profile: TwinsUK and healthy ageing twin study. In: *Int J Epidemiol* 42 (1), S. 76–85. DOI: 10.1093/ije/dyr207.

5.2. Bioprocessing

2016

- 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.

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.
- Jung Andreas, 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.

2013

- Delic, Marizela; Valli, Minoska; Graf, Alexandra B.; Pfeffer, Martin; Mattanovich, Diethard; Gasser, Brigitte (2013): The secretory pathway: exploring yeast diversity. In: *FEMS Microbiol. Rev.* 37 (6), S. 872–914. DOI: 10.1111/1574-6976.12020.
- Klavins, Kristaps; Neubauer, Stefan; Al Chalabi, Ali; Sonntag, Denise; Haberhauer-Troyer, Christina; Russmayer, Hannes et al. (2013): Interlaboratory comparison for quantitative primary metabolite profiling in *Pichia pastoris*. In: *Anal Bioanal Chem* 405 (15), S. 5159–5169. DOI: 10.1007/s00216-013-6964-4.

5.3. Epidemiology

2016

- 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.

2013

- Adamski, Jerzy; Suhre, Karsten (2013): Metabolomics platforms for genome wide association studies--linking the genome to the metabolome. In: *Curr. Opin. Biotechnol.* 24 (1), S. 39–47. DOI: 10.1016/j.copbio.2012.10.003.
- Draisma, Harmen H M; Beekman, Marian; Pool, René; van Ommen, Gert-Jan B; Adamski, Jerzy; Prehn, Cornelia et al. (2013): Familial resemblance for serum metabolite concentrations. In: *Twin Res Hum Genet* 16 (5), S. 948–961. DOI: 10.1017/thg.2013.59.
- Martin, Francois-Pierre J.; Montoliu, Ivan; Collino, Sebastiano; Scherer, Max; Guy, Philippe; Tavazzi, Isabelle et al. (2013): Topographical body fat distribution links to amino acid and lipid metabolism in healthy non-obese women. In: *PLoS ONE* 8 (9), S. e73445. DOI: 10.1371/journal.pone.0073445.
- Moayyeri, Alireza; Hammond, Christopher J.; Hart, Deborah J.; Spector, Timothy D. (2013): The UK Adult Twin Registry (TwinsUK Resource). In: *Twin Res Hum Genet. (Twin Research and Human Genetics)* 16 (1), S. 144–149. DOI: 10.1017/thg.2012.89.
- Moayyeri, Alireza; Hammond, Christopher J.; Valdes, Ana M.; Spector, Timothy D. (2013): Cohort Profile: TwinsUK and healthy ageing twin study. In: *Int J Epidemiol* 42 (1), S. 76–85. DOI: 10.1093/ije/dyr207.
- Sampson, Joshua N.; Boca, Simina M.; Shu, Xiao Ou; Stolzenberg-Solomon, Rachael Z.; Matthews, Charles E.; Hsing, Ann W. et al. (2013): Metabolomics in epidemiology: sources of variability in metabolite measurements and implications. In: *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology* 22 (4), S. 631–640. DOI: 10.1158/1055-9965.EPI-12-1109.
- Willemsen, Gonneke; Vink, Jacqueline M.; Abdellaoui, Abdel; den Braber, Anouk; van Beek, Jenny H D A; Draisma, Harmen H M et al. (2013): The Adult Netherlands Twin Register: twenty-five years of survey and biological data collection. In: *Twin Res Hum Genet* 16 (1), S. 271–281. DOI: 10.1017/thg.2012.140.
- Xu, Tao; Holzapfel, Christina; Dong, Xiao; Bader, Erik; Yu, Zhonghao; Prehn, Cornelia et al. (2013): Effects of smoking and smoking cessation on human serum metabolite profile: results from the KORA cohort study. In: *BMC Med* 11, S. 60. DOI: 10.1186/1741-7015-11-60.

5.4. Gynecology and Fertility

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.
- 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; Reichetzedler, Christoph; Kalk, Philipp; Kleuser, Burkhard; Adamski, Jerzy; Hoher, 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; Stückler, 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.
- Fattuoni, Claudia; Palmas, Francesco; Noto, Antonio; Fanos, Vassilios; Barberini, Luigi (2015): Perinatal Asphyxia: A Review from a Metabolomics Perspective. In: *Molecules (Basel, Switzerland)* 20 (4), S. 7000–7016. DOI: 10.3390/molecules20047000.
- 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.; Kriebel, 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.

2013

- Hummel, Sandra; Much, Daniela; Rossbauer, Michaela; Ziegler, Anette-G; Beyerlein, Andreas (2013): Postpartum outcomes in women with gestational diabetes and their offspring: POGO study design and first-year results. In: *The review of diabetic studies : RDS* 10 (1), S. 49–57. DOI: 10.1900/RDS.2013.10.49.

5.5. Gastroenterology

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.; 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.

2013

- Gruber, Lisa; Kislign, Sigrid; Lichti, Pia; Martin, François-Pierre; May, Stephanie; Klingenspor, Martin et al. (2013): High fat diet accelerates pathogenesis of murine Crohn's disease-like ileitis independently of obesity. In: *PLoS ONE* 8 (8), S. e71661. DOI: 10.1371/journal.pone.0071661.

5.6. Inflammation and Immunology

2016

- Ferrario, Manuela; Cambiagli, 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.
- 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.

2015

- 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.; Kriebel, 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.

2013

- Markle, Janet G M; Frank, Daniel N.; Mortin-Toth, Steven; Robertson, Charles E.; Feazel, Leah M.; Rolle-Kampczyk, Ulrike et al. (2013): Sex differences in the gut microbiome drive hormone-dependent regulation of autoimmunity. In: *Science* 339 (6123), S. 1084–1088. DOI: 10.1126/science.1233521.
- Ried, J. S.; Baurecht, H.; Stücker, F.; Krumsiek, J.; Gieger, C.; Heinrich, J. et al. (2013): Integrative genetic and metabolite profiling analysis suggests altered phosphatidylcholine metabolism in asthma. In: *Allergy* 68 (5), S. 629–636. DOI: 10.1111/all.12110.
- Sossdorf, Maik; Fischer, Jacqueline; Meyer, Stefan; Dahlke, Katja; Wissuwa, Bianca; Seidel, Carolin et al. (2013): Physical exercise induces specific adaptations resulting in reduced organ injury and mortality during severe polymicrobial sepsis. In: *Crit. Care Med.* 41 (10), S. e246-55. DOI: 10.1097/CCM.0b013e31828a2ae3.
- Wheelock, Craig E.; Goss, Victoria M.; Balgoma, David; Nicholas, Ben; Brandsma, Joost; Skipp, Paul J. et al. (2013): Application of 'omics technologies to biomarker discovery in inflammatory lung diseases. In: *The European respiratory journal* 42 (3), S. 802–825. DOI: 10.1183/09031936.00078812.

5.7. Microbiome

2016

- 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, Thergior; 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.

2013

- Markle, Janet G M; Frank, Daniel N.; Mortin-Toth, Steven; Robertson, Charles E.; Feazel, Leah M.; Rolle-Kampczyk, Ulrike et al. (2013): Sex differences in the gut microbiome drive hormone-dependent regulation of autoimmunity. In: *Science* 339 (6123), S. 1084–1088. DOI: 10.1126/science.1233521.

5.8. Pulmonology

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.

5.9. Technology

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.
- 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.
- 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-Youun; 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.

2013

- Booth, Sean C.; Weljie, Aalim M.; Turner, Raymond J. (2013): Computational Tools for the Secondary Analysis of Metabolomics Experiments. In: *Comput Struct Biotechnol J* 4, S. e201301003. DOI: 10.5936/csbj.201301003.
- Bouatra, Souhaila; Aziat, Farid; Mandal, Rupasri; Guo, An Chi; Wilson, Michael R.; Knox, Craig et al. (2013): The human urine metabolome. In: *PLoS ONE* 8 (9), S. e73076. DOI: 10.1371/journal.pone.0073076.
- Dharuri, Harish; Henneman, Peter; Demirkan, Ayse; van Klinken, Jan Bert; Mook-Kanamori, Dennis Owen; Wang-Sattler, Rui et al. (2013): Automated workflow-based exploitation of pathway databases provides new insights into genetic associations of metabolite profiles. In: *BMC Genomics* 14, S. 865. DOI: 10.1186/1471-2164-14-865.

- Dutton, Gail (2013): Metabolomics–Young Field, Bright Future. In: *Genetic Engineering & Biotechnology News* 33 (13), S. 14–15. DOI: 10.1089/gen.33.13.05.
- Raffler, Johannes; Römisch-Margl, Werner; Petersen, Ann-Kristin; Pagel, Philipp; Blöchl, Florian; Hengstenberg, Christian et al. (2013): Identification and MS-assisted interpretation of genetically influenced NMR signals in human plasma. In: *Genome Med* 5 (2), S. 13. DOI: 10.1186/gm417.
- Saleem, Fozia; Bouatra, Souhaila; Guo, An Chi; Psychogios, Nikolaos; Mandal, Rupasri; Dunn, Suzanna M. et al. (2013): The Bovine Ruminal Fluid Metabolome. In: *Metabolomics* 9 (2), S. 360–378. DOI: 10.1007/s11306-012-0458-9.
- Zhang, Xiaoli; Xu, Luan; Shen, Jianmin; Cao, Bei; Cheng, Ting; Zhao, Tong et al. (2013): Metabolic signatures of esophageal cancer: NMR-based metabolomics and UHPLC-based focused metabolomics of blood serum. In: *Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease* 1832 (8), S. 1207–1216. DOI: 10.1016/j.bbadis.2013.03.009.

6. Pharma

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.
- 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.
- 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): 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.
- 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.
- 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.
- Wishart, David S. (2016): Emerging applications of metabolomics in drug discovery and precision medicine. In: *Nature reviews. Drug discovery*. DOI: 10.1038/nrd.2016.32.

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, 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

- 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.

2013

- Asciutto, Giuseppe; Edsfeldt, Andreas; Dias, Nuno V.; Nilsson, Jan; Prehn, Cornelia; Adamski, Jerzy; Gonçalves, Isabel (2013): Treatment with beta-blockers is associated with lower levels of Lp-PLA2 and suPAR in carotid plaques. In: *Cardiovasc. Pathol.* 22 (6), S. 438–443. DOI: 10.1016/j.carpath.2013.04.005.
- Goldberg, Johannes; Daniel, Moritz; van Heuvel, Yasemin; Victor, Marion; Beyer, Cordian; Clarner, Tim; Kipp, Markus (2013): Short-term cuprizone feeding induces selective amino acid deprivation with concomitant activation of an integrated stress response in oligodendrocytes. In: *Cell Mol Neurobiol. (Cellular and Molecular Neurobiology)* 33 (8), S. 1087–1098. DOI: 10.1007/s10571-013-9975-y.
- Siegel, David; Permentier, Hjalmar; Reijngoud, Dirk-Jan; Bischoff, Rainer (2013): Chemical and technical challenges in the analysis of central carbon metabolites by liquid-chromatography mass spectrometry. In: *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* DOI: 10.1016/j.jchromb.2013.11.022.

2012

- Horakova, Olga; Medrikova, Dasa; van Schothorst, Evert M; Bunschoten, Annelies; Flachs, Pavel; Kus, Vladimir et al. (2012): Preservation of metabolic flexibility in skeletal muscle by a combined use of n-3 PUFA and rosiglitazone in dietary obese mice. In: *PLoS ONE* 7 (8), S. e43764. DOI: 10.1371/journal.pone.0043764.

- Kotarsky, Heike; Keller, Matthias; Davoudi, Mina; Levéen, Per; Karikoski, Riitta; Enot, David P.; Fellman, Vineta (2012): Metabolite profiles reveal energy failure and impaired beta-oxidation in liver of mice with complex III deficiency due to a BCS1L mutation. In: *PLoS ONE* 7 (7), S. e41156. DOI: 10.1371/journal.pone.0041156.
- Machicao, Fausto; Muresanu, Dafin Fior; Hundtberger, Harald; Pflüger, Maren; Guekht, Alla (2012): Pleiotropic neuroprotective and metabolic effects of Actovegin's mode of action. In: *J. Neurol. Sci.* 322 (1-2), S. 222–227. DOI: 10.1016/j.jns.2012.07.069.
- Robertson, Donald G.; Reily, Michael D. (2012): The Current Status of Metabolomics in Drug Discovery and Development. In: *Drug Dev. Res.* 73 (8), S. 535–546. DOI: 10.1002/ddr.21047.

2011

- Jäger, Walter; Gruber, Alexandra; Giessrigl, Benedikt; Krupitza, Georg; Szekeres, Thomas; Sonntag, Denise (2011): Metabolomic analysis of resveratrol-induced effects in the human breast cancer cell lines MCF-7 and MDA-MB-231. In: *OMICS* 15 (1-2), S. 9–14. DOI: 10.1089/omi.2010.0114.
- Kus, Vladimir; Flachs, Pavel; Kuda, Ondrej; Bardova, Kristina; Janovska, Petra; Svobodova, Michaela et al. (2011): Unmasking differential effects of rosiglitazone and pioglitazone in the combination treatment with n-3 fatty acids in mice fed a high-fat diet. In: *PLoS ONE* 6 (11), S. e27126. DOI: 10.1371/journal.pone.0027126.
- Suhre, Karsten; Römisch-Margl, Werner; de Angelis, Martin Hrabé; Adamski, Jerzy; Luippold, Gerd; Augustin, Robert (2011): Identification of a potential biomarker for FABP4 inhibition: the power of lipidomics in preclinical drug testing. In: *J Biomol Screen* 16 (5), S. 467–475. DOI: 10.1177/1087057111402200.