List of MitoHealth Publications 31st January 2011

No	Publication	Partner
	Systemic Markers of Interferon-{gamma}-Mediated Immune Activation and Long-Term Prognosis in Patients With Stable Coronary Artery Disease. Pedersen ER, Midttun O, Ueland PM, Schartum-Hansen H, Seifert R, Igland J, Nordrehaug JE, Ebbing M, Svingen G, Bleie O, Berge R, Nygård O**.** *Arterioscler Thromb Vasc Biol. 2011* Mar;31(3):698-704. E	P1-UiB P6-UiB
	Tetradecylthioacetic acid increases hepatic mitochondrial β-oxidation and alters fatty acid composition in a mouse model of chronic inflammation. Burri L, Bjørndal B, Wergedahl H, Berge K, Bohov P, Svardal A, Berge RK. Lipids. 2011 Aug;46(8):679-89. Epub 2011 Apr 9. PMID: 21479675	P1-UiB
	Dietary supplementation of krill oil attenuates inflammation and oxidative stress in experimental ulcerative colitis in rats. Grimstad T, Bjørndal B, Cacabelos D, Aasprong OG, Janssen EA, Omdal R, Svardal A, Hausken T, Bohov P, Portero-Otin M, Pamplona R, Berge RK. *Scand J Gastroenterol*, in press	P1-UiB
	Differential effects of krill oil and fish oil on the hepatic transcriptome in mice. Burri L, Berge K, Wibrand K, Berge RK, Barger JL *Front Genet. 2011*;2:45.	P1-UiB
	Disruption of the acyl-CoA binding protein results in delayed hepatic adaptation to the metabolic changes at weaning. D. Neess*, M. Bloksgaard*, S. Bek, A.-B. Marcher, I.C. Elle, T. Helledie, M. Due, V. Pagmantidis, B. Finsen, J. Wilbertz, M. Kruhøffer, N. Færgeman, S. Mandrup (2011) *J. Biol. Chem. 286, 3460-3472.* (*equal contribution)	P3-SDU
	ChREBP mediates glucose-repression of PPARα expression in pancreatic β-cells. M. Børgesen*, L.L.C. Poulsen*, S. F. Schmidt, F. Frigerio, P. Maechler, S. Mandrup (2011) *J. Biol. Chem. 286, 13214-13225* (*equal contribution).	P3-SDU
	Molecular basis for gene-specific transactivation by nuclear receptors. M. M. Aagaard, R. Siersbæk, S. Mandrup (2011) *BBA-Molecular Basis of Disease 1812, 824-35.*	P3-SDU
	Cardioprotective effect of the PPAR ligand tetradecylthioacetic acid in type 2 diabetic mice. Khalid AM, Hafstad AD, Larsen TS, Severson DL, Boardman N, Hagve M, Berge RK ,Aasum E., *Am J Physiol Heart Circ Physiol. 2011* Jun;300(6):H2116-22	P1-UiB
	Dietary supplementation of herring roe and milt enhances hepatic fatty acid catabolism in female mice transgenic for hTNFα. Bjørndal B, Burri L, Wergedahl H, Svardal A, Bohov P, Berge RK *Eur J Nutr. 2011* Oct 11.	P1-UiB
	Different adipose depots: their role in the development of metabolic	P1-UiB

	syndrome and mitochondrial response to hypolipidemic agents. Bjørndal B, Burri L, Staalesen V, Skorve J, Berge RK. *J Obes. 2011;*2011:490650.	
	Salmon diet in patients with active ulcerative colitis reduced the simple clinical colitis activity index and increased the anti-inflammatory fatty acid index--a pilot study. Grimstad T, Berge RK, Bohov P, Skorve J, Gøransson L, Omdal R, Aasprong OG, Haugen M, Meltzer HM, Hausken T. *Scand J Clin Lab Invest. 2011* Feb;71(1):68-73	P1-UiB
	Fatty acid composition in chronic heart failure: low circulating levels of eicosatetraenoic acid and high levels of vaccenic acid are associated with disease severity and mortality. Øie E, Ueland T, Dahl CP, Bohov P, Berge C, Yndestad A, Gullestad L, Aukrust P, Berge RK. *J Intern Med. 2011* Sep;270(3):263-72. doi: 10.1111/j.1365-2796.2011.02384.x.	P1-UiB
	Krill oil attenuates left ventricular dilatation after myocardial infarction in rats. Fosshaug LE, Berge RK, Beitnes JO, Berge K, Vik H, Aukrust P, Gullestad L, Vinge LE, Oie E ***Lipids Health Dis. 2011*** Dec 29;10(1):245.	P1-UiB
	Extensive chromatin remodeling and establishment of transcription factor 'hotspots' during early adipogenesis. R. Siersbæk, R. Nielsen, S. John, M.-H. Sung, S. Baek, A. Loft, G. L. Hager¤, S. Mandrup¤ (2011)***EMBO J 30,*** *1459-72*	P3-SDU
	Mice with targeted disruption of the Acyl-CoA-binding protein display impaired urine concentrating ability and diminished renal aquaporin 3 abundance. S. Langaa, M. Bloksgaard, S. Bek, D. Neess, P. R. Nørregaard, P.B.L. Hansen1, A.-B. Marcher, J. Frøkjær**, S. Mandrup¤**, B. L Jensen. *Am. J. Physiol. Renal Physiol.**, in press.* (¤ corresponding author)	P3-SDU
	Peroxisomal multifunctional enzyme type 2 from fruit fly: dehydrogenase and hydratase act as separate entities as revealed by structure and kinetics. Haataja, T.J.K., Koski, M.K., Hiltunen, J.K. & Glumoff, T. (2011) Biochem J. 435, 771-781	P4-Oulu
	Apicoplast and endoplastic reticulum cooperate infatty acid biosynthesis in teh apicocomplexan parasite *Toxoplasma gondii*. Ramakrishnan, S., Docampo, M.D., MacRae, J.I., Pujol, F.M., Brooks, C.F., vanDooren, G.G., Hiltunen, J.K., Kastaniotis,A.J., McConville, M. & Striepen, B (2011) J. Biol. Chem. doi:10.1074/jbc. M111. 310144	P4-Oulu
	Protein phosphorylation – a study on fermentative and respiratory growth of *Saccharomyces cerevisiae*. Ohlmeier, S., Hiltunen, J.K. & Bergmann, U. (2010) Electrophoresis. 31, 2869-2881	P4-Oulu
	Mitochondrial fatty acid synthesis and respiration Hiltunen, J. K., Autio, K. J., Schonauer, M. S., Kursu, V. A. S., Dieckmann. C. L., & Kastaniotis, A.J. (2010) . BBA-Bioenergetics, 1797, 1195-1202	P4-Oulu
	Mitochondrial fatty acid synthesis –an adopted set of enzymes making a pathway of major importance for cellular metabolism.	P4-Oulu

	Hiltunen, J.K., Chen, Z., Haapalainen, A.M., Wierenga, R.K. & Kastaniotis, A.J. (2010) Prog. Lipid Res. 49, 27-45	
	PPARδ is a fatty acid sensor, which activates mitochondrial oxidation and protects insulin secreting cells against lipotoxicity. K. Ravnskjaer, F. Frigerio*, M. Børgesen*, T. Nielsen, P. Maechler, S. Mandrup (2010) J. Lipid Res. 51, 1370–1379. (* equal contribution)	P3-SDU
	A novel intronic peroxisome proliferator-activated receptor enhancer in the uncoupling protein (UCP) 3 gene as a regulator of both UCP2 and -3 expression in adipocytes. A. Bugge*, M. Siersbæk*, M. S. Madsen, A. Göndör, C. Rougier, S.Mandrup (2010) J. Biol. Chem. 285, 17310-17317. (*equal contribution)	P3-SDU
	Disruption of the acyl-CoA binding protein results in delayed hepatic adaptation to the metabolic changes at weaning. D. Neess*, M. Bloksgaard*, S. Bek, A.-B. Marcher, I.C. Elle, T. Helledie, M. Due, V. Pagmantidis, B. Finsen, J. Wilbertz, M. Kruhøffer, N. Færgeman, S. Mandrup (2011) J. Biol. Chem., in press (*equal contribution)	P3-SDU
9	**Proteomics and the dynamic plasma membrane: Quo Vadis?** Sprenger RR, Jensen ON. Proteomics. 2010 Nov;10(22):3997-4011. doi: 10.1002/pmic.201000312.	P7-SDU
7	**Phosphoproteome analysis of functional mitochondria isolated from resting human muscle reveals extensive phosphorylation of inner membrane protein complexes and enzymes.** Zhao X, Leon IR, Bak S, Mogensen M, Wrzesinski K, Hojlund K, Jensen ON. Mol Cell Proteomics. 2010 Sep 10.	P7-SDU
	Optimized IMAC-IMAC protocol for phosphopeptide recovery from complex biological samples. Ye J, Zhang X, Young C, Zhao X, Hao Q, Cheng L, Jensen ON. J Proteome Res. 2010 Jul 2;9(7):3561-73.	P7-SDU
	Repression of the PPARα promoter by glucose in pancreatic β-cells is mediated by ChREBP. M. Børgesen*, L.L.C. Poulsen*, S. F. Schmidt, F. Frigerio, P. Maechler, S. Mandrup. Resubmitted to J. Biol. Chem. following revision (*equal contribution)	P3-SDU
	The acyl coenzyme A binding protein is required for epidermal barrier function in mice. M. Bloksgaard, S. Bek, D. Neess, H. K. Hannibal-Bach, J. Brewer, C. Ejsing, J. Chemnitz, M. Murholm, M. Due, C. Fenger, T. Helledie, A. Clemmensen, K. E. Andersen, B. Finsen, J. Wilbertz, H. Saxtorph, J. Knudsen, L. Bagatolli, S. Mandrup. Submitted to J. Lipid Res.	P3-SDU
	The Role of PPARα Activation in Liver and Muscle. PPAR Res. 2010; Burri L, Thoresen GH, Berge RK. 2010. pii: 542359.	P1-UiB
	Different Adipose Depots: Their Role in the Development of Metabolic Syndrome and Mitochondrial Response to Hypolipidemic Agents. B.Bjørndal, L.Burri, V.Staalesen, J.Skorve and R K. Berge; Journal of Obesity, 2011,	P1-UiB
	Tetradecylthioacetic acid alters lipid metabolism and fatty acid composition in a mouse model for chronic inflammation.	P1-UiB

	L. Burri, B.Bjørndal, H. Wergedahl, K.Berge, A. Svardal, and RK. Berge. Lipids,2011	
	Systemic Markers of Interferon-{gamma}-Mediated Immune Activation and Long-Term Prognosis in Patients With Stable Coronary Artery Disease. Pedersen ER, Midttun O, Ueland PM, Schartum-Hansen H, Seifert R, Igland J, Nordrehaug JE, Ebbing M, Svingen G, Bleie O, Berge R, Nygård O. Arterioscler Thromb Vasc Biol. 2010 Dec 23. [Epub ahead of print]. PMID: 21183733.	P6-UiB P1-UiB
	The effect of omega-3 intake on mortality and cardiovascular events in patients after coronary angiography. A WENBIT sub-study. Manger M, Elin Strand, Grethe S Tell, Christian Drevon, Ebbing M, Bleie Ø, Ueland PM, Nordrehaug JE, Nilsen D, Vollset SE, W Refsum H, Pedersen ER, and Nygård, O. Am J Clin Nutr 2010 Jul;92(1):244-51.	P6-Ui B
	Combination of fish oil and fish protein hydrolysate reduces the plasma cholesterol level with a concurrent increase in hepatic cholesterol level in high-fat-fed Wistar rats. H. Wergedahl, O.A. Gudbrandsen, T.H. Røst & R.K. Berge (2009) Nutrition 25, 98-104	P1-UiB
	Fatty acid incubation of myotubes from humans with type 2 diabetes leads to enhanced release of beta-oxidation products because of impaired fatty acid oxidation: effects of tetradecylthioacetic acid and eicosapentaenoic acid. A.J. Wensaas, A.C. Rustan, M. Just, R.K. Berge, C.A. Drevon & M. Gaster (2009) Diabetes. 58,527-535	P1-UiB
	Peroxisome proliferator activated receptor alpha is a functional target of p63 in adult human keratinocytes. S. Pozzi, M. Børgesen, Satrajit Sinha, S. Mandrup & R. Mantovani (2009) J. Invest. Dermatology, 129, 2376-2385	P3-SDU
	Gaucher disease: a model disorder for biomarker discovery' R.G. Boot, M.J. van Breemen, W. Wegdam, R.R. Sprenger, S. de Jong, D. Speijer, C.E. Hollak, L. van Dussen, H.C., Hoefsloot A.K. Smilde, C.G. de Koster, J.P. Vissers & J.M.Aerts (2009) Expert Rev. Proteomics 6, 411-419	P7-SDU
	Mitochondrial FAS type II – more than just fatty acids. J.K. Hiltunen, M, Schonauer, K. J. Autio, T.M. Mittelmeier, A J. Kastaniotis & C. L.Dieckmann, (2009) J. Biol. Chem, 284, 9011-9015	P4-Oulu
	Mitochondrial fatty acid synthesis –an adopted set of enzymes making a pathway of major importance for cellular metabolism. J.K. Hiltunen, Z. Chen, A.M. Haapalainen, R.K. Wierenga, & A.J. Kastaniotis (2009) Prog. Lipid Res. doi:10.1016/j.plipres.2009.08.001	P4-Oulu
	Mitochondrial 2,4-dienoyl-CoA reductase-deficiency in mice results in severe hypoglycaemia with stress intolerance and unimpaired ketogenesis. I.J. Miinalainen, W. Schmitz,. R. Soininen, K.J. Autio, A. Huotari, E. Ver Loren van Themaat, M. Baes, K.-H. Herzig,. E. Conzelmann & J.K. Hiltunen (2009) Plos Genetics, 5, e1000543	P4-Oulu
	Overexpression of 2-enoyl thioester reductase of mitochondrial FAS II in	P4-Oulu

	myocardial leads to cardiac dysfunction in mouse. Z.-J. Chen, H. Leskinen, E. Liimatta, R.T. Sormunen, I. J. Miinalainen, I. E. Hassinen, & J.K. Hiltunen (2009) Plos One, 4, e5589	
	Heteromeric (17β-HSD8)2(CBR4)2 is the ketoacyl reductase (KAR) of mitochondrial FAS in human. Z.-J. Chen, A. J. Kastaniotis, I. J. Miinalainen, V. Rajaram, R. K. Wierenga, & J. K., Hiltunen (2009) FASEB J, 23, 3682-3691	P4-Oulu
	Crystal structure of 2-enoyl thiester reductase of human FAS II: new insight into substrate binding and catalysis. Z.-J. Chen, R. Pudas, S. Sharma, O.S Smart, A.H. Juffer, J.K Hiltunen, R.K. Wierenga, & A.M. Haapalainen, (2008) J. Mol. Biol, 379, 830-844	P4-Oulu
	An ancient genetic link between vertebrate mitochondrial fatty acid synthesis and RNA processing. K.J. Autio, A.J. Kastaniotis, H. Pospiech,. I.J. Miinalainen, M.S. Schonauer, C.L. Dieckmannn & J.K. Hiltunen (2008) FASEB J, 22, 569-578	P4-Oulu
	Chronic dynamic exercise increases apolipoprotein a-i expression in rabbit renal cortex as determined by proteomic technology. R. de Moraes, R.H. Valente, I.R. León, M.R.O. Trugilho, A.C.L. Nóbrega, J. Perales & E.Tibiriçá. (2008) British Journal of Sport Medicine; 42(5):386-8.	P7-SDU
	Assessing CMT Cell Line Stability by Two Dimensional Polyacrylamide Gel Electrophoresis and Mass Spectrometry Based Proteome Analysi K. Zhang, K. Wrzesinski, S. J. Fey, P. Mose Larsen, X. Zhang, P. Roepstorff. (2008) J.Proteomics. 21; 71(2):160-167.	P7-SDU
	The Nudix hydrolase 7 is an acyl-CoA diphosphatase involved in regulating peroxisomal coenzyme A homeostasis. S.-J. Reilly, V. Tillander, R. Ofman, S.E.H. Alexson & M.C. Hunt (2008) J. Biochem. 144:655-663.	P5-KI
	Dietary single cell protein reduces fatty liver in obese Zucker rats. O.A. Gudbrandsen, H. Wergedahl, B. Liaset, M. Espe, S. Mørk & R.K. Berge (2008) Br. J. Nutr. 100.776-785	P1-UIB
	Intersection of RNA Processing and the Type II Fatty Acid Synthesis Pathway in Yeast Mitochondria. M. S. Schonauer, A.J. Kastaniotis, J.K. Hiltunen & Dieckmann, C. L. (2008) Mol. Cell. Biol. 28, 6646-6657	P4-Oulu
	3- Hydroxyacyl-ACP dehydratase of mitochondrial fatty acid synthesis in Trypanosoma brucei. K.J. Autio, J.L Guler, A.J. Kastaniotis, P.T. Englund & J.K. Hiltunen (2008) FEBS Lett, 582, 729-733	P4-Oulu