

## Susanne Mandrup - Curriculum Vitae

*Susanne Mandrup is Director of the Center of Excellence in Functional Genomics and Tissue Plasticity (<https://www.sdu.dk/en/atlas>) and the Center of Adipocyte Signaling ([www.sdu.dk/adiposign](http://www.sdu.dk/adiposign)) and heads the Functional Genomics and Metabolism Research Unit ([www.sdu.dk/bmb/functionalgenomics](http://www.sdu.dk/bmb/functionalgenomics)). Her group (<http://www.sdu.dk/mandrupgroup>) focuses on understanding the transcriptional networks regulating differentiation and function of adipocytes as well as the cellular plasticity of adipose tissue and the endocrine pancreas in obesity. The group has contributed significantly to the current understanding of the interplay between transcription factors, chromatin and metabolism in the regulation of adipocyte gene expression.*

### Personal information

Date of birth June 3, 1962  
 Nationality Danish  
 Family status Married. Two children born 1989 and 1992.  
 Address Præstevejen 8, Østrup, 5450 Otterup

### Education

1988 Master of Science in Molecular Biology, Odense University  
 1992 PhD in Biochemistry, Odense University

### Employments

1992-95 Post doc at Dept. Biochemistry and Dept. Molecular Biology, Odense University  
 1995-96 Post doc in Prof. M. Daniel Lane's lab, Johns Hopkins University, Baltimore, USA  
 1996-1999 Assistant Professor Dept. Molecular Biology, Odense University  
 1999-2008 Associate Professor Dept. Biochemistry and Molecular Biology, SDU  
 2008 - Professor Dept. Biochemistry and Molecular Biology, SDU

### Professional courses

2006-07 Course in research management, Copenhagen Business School

### Awards and honors

1994 The Simon Spiess Foundation's Natural Science Research Prize  
 2007 Marie Lønggaard's Award for excellence in research and teaching  
 2012 Niels Schwartz Sørensen Award for Diabetes Research  
 2012 Recipient of Sapere Aude Advanced Grant  
 2013 Member of AcademiaNet – Expert Database for Outstanding Female Scientists and Scholars  
 2014 Member of Academia Europaea  
 2015 Portrayed by Cell Metabolism as one of the leading female scientists in metabolism  
 2015 Recipient of the Advanced Grant from the Novo Nordisk Foundation  
 2016 Member of the Royal Danish Academy of Sciences and Letters  
 2016 Adjunct Professor, Molecular & Integrative Physiology, University of Michigan  
 2017 Novo Nordisk Foundation Lecture & Award  
 2017 Member of European Molecular Biology Organization (EMBO)  
 2017 Recipient of Danish National Research Foundation grant to establish *Center of Excellence*  
 2018 Recipient of Novo Nordisk Foundation grant to establish *Center for Adipocyte Signaling*  
 2019 Knight of the Order of Dannebrog  
 2022 Annual research outreach prize, Science Faculty, SDU

### Commissions of trust

2000 - 2005 Executive board of the Danish Society for Biochemistry and Molecular Biology  
 2003 - 2012 Co-founder and member of the executive board of the Danish PhD school of Metabolism  
 2005 - 2010 Danish Natural Science Research Council  
 2008 - 2016 National Bibliometric Group for Molecular Biology, Cell Biology and Biotechnology  
 2009 - 2016 Medical and Natural Science Committee, the Novo Nordisk Foundation  
 2012 - 2017 Member of the Council and the Research Committee of the Danish Diabetes Academy  
 2013 - 2014 ERC LS2 Starting Grant panel  
 2015 - 2017 Chair of ERC LS2 Consolidator Grant panel  
 2016 - Head of Functional Genomics and Metabolism Research Unit, SDU  
 2016 - Chair of Biochemistry and Molecular Biology, Danish Institute for Advanced Study

2017 - 2018	Chair of Committee on Bioscience and Basic Biomedicine, the Novo Nordisk Foundation
2017 - 2018	Committee on International Research Leader Grants, the Novo Nordisk Foundation
2018 - 2021	Committee on Young Investigator Grants, Villum Foundation
2019 - 2022	EMBO Membership Committee
2022-	Carlsberg Foundation board of directors
2022-	ERC panel member

#### Major local academic committees

2004 - 2010	Chairman of the PhD Study Committee at Dept. of Biochemistry and Molecular Biology
2004 - 2010	PhD Study Board of Natural Science.
2009 - 2012	Academic Council, Faculty of Natural Science.
2018 - 2020	Management Group of Danish Institute of Advanced Studies
2018 -	Management Group, Dept. Biochemistry and Molecular Biology

#### Current Editorial and Advisory Boards

2011-	Editorial Board Trends in Endocrinology and Metabolism
2011-	Editorial Board Cell Reports
2013-	Editorial Board Molecular and Cellular Biology
2019-	Editorial Board Diabetes
2019-	Editorial Board PLOS Biology
2022-	Editorial Advisory Board Molecular Systems Biology
2019-	Scientific Advisory Committee Department of Biosciences, University of Oslo

#### Ad hoc international evaluation tasks and referee work

- Expert scientific evaluator for ERC, EC FP6, FP7 and H2020 programs, European Foundation for the Study of Diabetes, National Institute of Health, numerous international research foundations
- Member of >45 PhD and faculty position evaluation committees in Denmark, Norway, Sweden, France, the Netherlands, UK and US.
- Referee work for several journals including Nature, Nature Med., Science, Cell, Molecular Cell, Cell Metabolism, PNAS, Genes & Dev., Genome Res., J. Clin. Invest., Diabetes, Mol Syst. Biol. etc

#### Major international and national research consortia

- **X-TRA-NET** an EU FP6 STREP (2005-2009), role: coordinator.
- **MitoHealth** a Nordic Center of Excellence (2007-2013), role: member of executive board
- **AtheroRemo**, an EU FP7 large-scale project (2008-2013), role: partner
- **PATHWAY-27** (<http://www.pathway27.eu/>), EU FP7 large-scale project (2013-2018), role: partner
- **The Danish Diabetes Academy** (<http://www.danishdiabetesacademy.dk/>) supported by the Novo Nordisk Foundation (2012-2017), role: member of the Council and the Research Committee.
- **Villum Center for Bioanalytical Sciences**. Major instrumentation center at SDU, role: partner
- **Center of Excellence in Functional Genomics and Tissue Plasticity (ATLAS)**(2017-2023), role: director
- **Center for Adipocyte Signaling (ADIPOSIGN)** (2019-2025), role: director
- **ENHPATHY H2020 ITN** (2019-2023), role: WP leader
- **Human Cell Atlas** (2020-), role: coordinator of the Adipose Network
- **Novo Nordisk Foundation Center for Genomic Mechanisms of Disease at Broad Institute** (2021-2026)
- **The Danish Single Cell Examination Platform (CellX)** (2022-2031) role: management group

#### Adjunct/visiting professors hosted by group

- Gordon Hager, Center Director, NCI, NIH, Bethesda, MD, US (H.C. Andersen Visiting Professor 2014-17)
- Ormond MacDougald, University of Michigan, Ann Arbor, US (Adjunct Professor 2016-)
- James G. Granneman, Wayne State University, Detroit, US (Visiting Professor 2017)
- M. Madan Babu, MRC Laboratory for Molecular Biology, Cambridge, UK (Adjunct Professor 2018- )

#### International meetings

- > 190 invited lectures in Europe, Asia, and USA, including >90 major international meetings (Keystone, CSHL, EMBO etc) in the field of transcriptional regulation, metabolism and adipocyte differentiation.
- Organizer of 20 major international meetings (EMBO, Cold Spring Harbor, Cell Symposia) since 2010

#### Supervision

Principal supervisor since 1999 of: 26 post docs, 39 PhD, 62 master and 101 bachelor students.

## List of peer reviewed publications

ORCID: 0000-0002-0961-5787

1. **S. Mandrup**, P. Højrup, K. Kristiansen & J. Knudsen (1991). Gene synthesis, expression in *Escherichia coli*, purification and characterization of the recombinant bovine acyl-CoA-binding protein. *Biochem. J.* **276**, 817-823.
2. K. V. Andersen, S. Ludvigsen, **S. Mandrup**, J. Knudsen, & F. M. Poulsen (1991). The Secondary Structure in Solution of Acyl-Coenzyme A Binding Protein from Bovine Liver Using <sup>1</sup>H Nuclear Magnetic Resonance Spectroscopy. *Biochemistry* **30**, 10654 - 10663.
3. H. O. Hansen, P. H. Andreasen, **S. Mandrup**, K. Kristiansen & J. Knudsen. (1991). Induction of acyl-CoA-binding protein and its mRNA in 3T3-L1 cells by insulin during preadipocyte-to-adipocyte differentiation. *Biochem. J.* **277**, 341-344.
4. **S. Mandrup**, R. Hummel, S. Ravn, G. Jensen, P.H. Andreasen, N. Gregersen, J. Knudsen & K. Kristiansen (1992). Acyl-CoA-binding Protein/Diazepam-binding Inhibitor Gene and Pseudogenes. A Typical Housekeeping Gene Family. *J. Mol. Biol.* **228**, 1011-1022.
5. **S. Mandrup**, R. Jepsen, H. Skøtt, J. Rosendal, P. Højrup, K. Kristiansen & J. Knudsen (1993). Effect of heterologous expression of acyl-CoA-binding protein on acyl-CoA level and composition in yeast. *Biochem. J.* **290**, 369-374.
6. **S. Mandrup**, P. H. Andreasen, J. Knudsen & K. Kristiansen (1993). Genome organization and expression of the rat ACBP gene family. *Mol. and Cell. Biochem.* **123**, 55-61.
7. J. Knudsen, **S. Mandrup**, J.T. Rasmussen, P.H. Andreasen, F. Poulsen & K. Kristiansen (1993). The function of acyl-CoA-binding protein (ACBP)/Diazepam binding inhibitor (DBI). *Mol. and Cell. Biochem.* **123**, 129-138.
8. M. Elholm, G. Bjerking, J. Knudsen, K. Kristiansen & **S. Mandrup** (1996). Regulatory elements in the promoter region of the rat gene encoding the acyl-CoA-binding protein. *Gene* **17**, 233-238.
9. J. B. Krøll, J. Nøhr, N. Gregersen, K. Kristiansen and **S. Mandrup** (1996). Structure of the rat gene encoding the multifunctional acyl-CoA-binding protein: Conservation of intron 1 sequences in rodents and man. *Gene* **173**, 239-240.
10. C.-S. Hwang, **S. Mandrup**, O. A. MacDougald, D. Geiman and M. D. Lane (1996). Transcriptional activation of the mouse obese (ob) gene by CCAAT/enhancer binding protein  $\alpha$ . *Proc. Natl. Acad. Sci. USA* **93**, 873-877.
11. **S. Mandrup**, T. M. Loftus, O. A. Macdougald, F. P. Kuhajda and M. D. Lane (1997). The *obese* gene is expressed at *in vivo* levels in implanted 3T3-F442A cells. *Proc. Natl. Acad. Sci. USA.* **94**, 4300-4305.
12. **S. Mandrup** and M. Daniel Lane (1997). Regulating adipogenesis. *J. Biol. Chem.* **272**, 5367-5370.
13. C.-S. Hwang, T.M. Loftus, **S. Mandrup** and M.D. Lane (1997). Adipocyte differentiation and leptin expression. *Ann. Rev. Cell Biol. & Dev.* **13**, 231-259.
14. **S. Mandrup**, R. V. Sørensen, T. Helledie, J. Nøhr, T. Baldursson, C. Gram, J. Knudsen and K. Kristiansen (1998). Inhibition of 3T3-L1 adipocyte differentiation by expression of acyl-CoA binding protein antisense RNA. *J. Biol. Chem.* **273**, 23897-23903.
15. S. Kussmann-Gerber, I. Kratchmarova, **S. Mandrup** and K. Kristiansen (1999). A micro-column-based procedure for analysis of protein-protein interaction. *Analytical Biochemistry* **271**, 102-105.
16. T. Helledie, M. Antonius, R. V. Sørensen, D. A. Bernlohr, S. Kølvråa, K. Kristiansen and **S. Mandrup** (2000). Lipid-binding proteins modulate ligand-dependent trans-activation by peroxisome proliferator-activated receptors and localize to the nucleus as well as the cytoplasm. *J.Lipid Res.* **41**, 1740-1751.
17. M. Elholm, I. Dam, C. Jørgensen, A. Krogsdam, D. Holst, I. Kratchmarova, M. Göttlicher, J.-Å. Gustafsson, R. K. Berge, T. Flatmark, J. Knudsen, **S. Mandrup**, and K. Kristiansen (2001). Acyl-CoA esters antagonize the effects of ligands on PPAR $\alpha$  conformation, DNA binding and interaction with co-factors. *J. Biol. Chem.* **276**, 21410-21416.

18. O. A. Macdougald and **S. Mandrup** (2002) Adipogenesis: The forces that tip the scales. *Trends Endocrinol. Metab.* **13**, 5-11.
19. A.M. Krogsdam, C.A.F. Nielsen, T. Helledie, S. Neve, B. Thomsen, C. Bendixen **S. Mandrup** & K. Kristiansen (2002) N-CoR dependent repression of PPAR $\delta$ -mediated transactivation. *Biochem. J.* **363**, 157-165.
20. L. Madsen, M. Guerre-Millo, K. Berge, E. Bergene, E. N. Flindt, E. Sebkova, A. C. Rustan, J. Jensen, **S. Mandrup**, K. Kristiansen, I. Klimers, B. Staels and R. K. Berge (2002). Tetradecylthioacetic acid induces expression of PPAR $\alpha$  target genes, improves insulin sensitivity and reduces adiposity in two animal model models of insulin resistance. *J. Lipid. Res.* **43**, 742-750.
21. C. Jørgensen, A.-M. Krogsdam, I. Kratchmarova, T. M. Willson, J. Knudsen, **S. Mandrup** & K. Kristiansen (2002) Opposing effects of fatty acids and acyl-CoA esters on conformation and cofactor recruitment of peroxisome proliferator-activated receptors. *Ann. N. Y. Acad. Sci.* **967**, 431-39.
22. T. Helledie, L. Grøntved, S. S. Jensen, P. Kiilerich, L. Rietveld, T. Albrektsen, M. S. Boysen, J. Nøhr, L. K. Larsen, J. Fleckner, H. G. Stunnenberg, K. Kristiansen and **S. Mandrup** (2002). The gene encoding the acyl-CoA binding protein is activated by peroxisome proliferator activated receptor  $\gamma$  through an intronic response element functionally conserved between man and rodents. *J. Biol. Chem.* **277**, 26821-30, 2002.
23. L. K. Larsen, E.-Z. Amri, **S. Mandrup**, C. Pacotm and K. Kristiansen (2002) Genomic organization of the mouse PPAR $\delta$  gene. Alternative promoter usage and splicing yield transcripts exhibiting differential translational efficiency. *Biochem. J.* **366**, 767-775.
24. T. Helledie, C. Jørgensen, M. Antonius, A.-M. Krogsdam, I. Kratchmarova, K. Kristiansen and **S. Mandrup** (2002) Role of FABPs and of the acyl-CoA binding protein (ACBP) in PPAR-mediated transactivation. *Mol. Cell. Biochem.* **239**, 157-164.
25. **S. Mandrup**, N. J. Færgemann and J. Knudsen (2003) Structure, function and phylogeny of acyl-CoA binding protein. In *Cellular proteins and their fatty acids in health and disease*, ed. A.K. Dutta-Roy and F. Spener, Wiley-VCH, Weinheim, p. 151-171.
26. H. Zhang, J. Nøhr, C.H. Jensen, R.K. Petersen, E. Bachmann, B. Teisner, L.K. Larsen, **S. Mandrup**, & K. Kristiansen (2003) IGF-1/insulin bypasses pref-1/FA1-mediated inhibition of adipocyte differentiation. *J. Biol. Chem.* **278**, 20906-20914.
27. J.M. Brown, M.S. Boysen, S.S. Jensen, R.F. Morrison, J. Storkson, R.L. Currie, M. Pariza, **S. Mandrup** & M.K. McIntosh (2003) Trans-10, cis-12 conjugated linoleic acid decreases glucose and fatty acid uptake and oxidation and inhibits PPAR $\gamma$ -dependent gene expression in human preadipocytes. *J. Lipid Res.* **44**, 1287-1300.
28. C. Fontaine, G. Dubois, Y. Duguay, T. Helledie, Ngoc Vu-Dac, P. Gervois, F. Soncin, **S. Mandrup**, J.-C. Fruchart, J. Fruchart-Najib & B. Staels (2003) The orphan nuclear receptor Rev-Erb $\alpha$  is a peroxisome proliferator-activated receptor (PPAR)  $\gamma$  target gene and promotes PPAR $\gamma$ -induced adipocyte differentiation. *J. Biol. Chem.* **278**, 37672-37680.
29. M.S. Winzell, H. Svensson, S. Enerbäck, K. Ravnskjer, **S. Mandrup**, Victoria Esser, P. Arner, M.-C. Alves-Guerra, B. Miroux, F. Sundler, B. Ahren & C. Holm (2003) Pancreatic  $\beta$ -cell lipotoxicity induced by overexpression of hormone-sensitive lipase. *Diabetes* **52**, 2057-2065.
30. V. Rishi, J. Gal, D. Krylov, J. Fridriksson, M.S. Boysen, **S. Mandrup** & C. Vinson (2004) SREBP-1 dimerization specificity maps to both the HLH and leucine zipper domains: use of a dominant negative. *J. Biol. Chem.* **279**, 11863 - 11874.
31. J.M. Brown, M.S. Boysen, S. Chung, O. Fabiyi, R.F. Morrison, **S. Mandrup** & M. McIntosh (2004) Conjugated linoleic acid (CLA) induces human adipocyte delipidation: autocrine/paracrine regulation of MEK/ERK signaling by adipocytokines. *J. Biol. Chem.* **279**, 26735-26747.
32. E. M. Lindgren, R. Nielsen, N. Petrovic, A. Jacobsen, **S. Mandrup**, B. Cannon & J. Nedergaard (2004) Norepinephrine represses PPAR (peroxisome-proliferator-activated receptor)  $\gamma$ 2 gene expression in brown adipocytes: intracellular signalling and effects on PPAR $\gamma$ 2 and PPAR $\gamma$ 1 protein levels. *Biochem. J.* **382**, 597-606.

33. M.B. Sandberg, M. Bloksgaard, D. Duran-Sandoval, C. Duval, B. Staels & **S. Mandrup** (2005) The gene encoding the acyl-CoA binding protein is subject to metabolic regulation by both SREBP and PPAR $\alpha$  in hepatocytes. *J. Biol. Chem.* 280, 5258-5266.
34. K. Ravnskjaer, M. Boergesen, B. Rubi, J.K. Larsen, Tina Nielsen, J. Fridriksson, P. Maechler & **S. Mandrup** (2005) PPAR $\alpha$  potentiates whereas PPAR $\gamma$  attenuates glucose-stimulated insulin secretion in pancreatic  $\beta$ -cells. *Endocrinology* 146, 3266-76.
35. M.B. Sandberg, J. Fridriksson, L. Madsen, V. Rishi, C. Vinson, H. Holmsen, R.K. Berge & **S. Mandrup** (2005) Glucose-induced lipogenesis in pancreatic  $\beta$ -cells is dependent on SREBP-1. *Mol. Cell. Endocrinol.* 240, 94-106.
36. K. Ravnskjaer, M. Boergesen, L. T. Dalgaard & **S. Mandrup** (2006) Glucose-induced repression of PPAR $\alpha$  gene expression in pancreatic  $\beta$ -cells involves PP2A activation and AMPK inactivation. *J. Mol. Endocrinology* 36, 289-299.
37. D. Neess, P. Kiilerich, M. B. Sandberg, T. Helledie, R. Nielsen, **S. Mandrup** (2006) ACBP – a PPAR and SREBP modulated housekeeping gene. *Mol Cell. Biochem.* 284, 149-57.
38. R. Nielsen, L. Grøntved, H. Stunnenberg, **S. Mandrup** (2006) PPAR subtype and cell type specific activation of genomic target genes upon adenoviral transgene delivery. *Mol. Cell. Biol.* 26, 5698-5714.
39. T.Å. Pedersen, O. Bereshchenko, S. Garcia-Silva, O. Ermakova, E. Kurz, **S. Mandrup**, B.T. Porse and C. Nerlov (2007) Distinct C/EBP $\alpha$  motifs regulate lipogenic and gluconeogenic gene expression *in vivo*. *EMBO J* 26, 1081-1093.
40. W. Qiu, T. E. Andersen, J. Bollerslev, **S. Mandrup**, B. M. Abdallah, M. Kassem. (2007) Patients with High Bone Mass Phenotype Exhibit Enhanced Osteoblast Differentiation and Inhibition of Adipogenesis of Human Mesenchymal Stem cells. *J. Bone Min. Res.* 22, 1720-31.
41. O. van Beekum, A.B. Brenkman, L. Grøntved, N. Hamers, N.J.F. van den Broek, R. Berger, **S. Mandrup**, E. Kalkhoven (2008) The adipogenic acetyltransferase TIP60 targets activation function 1 of PPAR $\gamma$ . *Endocrinology* 149, 1840-49.
42. R. Nielsen\*, T. Å. Pedersen\*, D. Hagenbeek\*, P. Moulos, R. Siersbæk, E. Megens, M. Børgesen, K.-J. Francoijs, **S. Mandrup** and H. G. Stunnenberg (2008) Genome-wide profiling of PPAR $\gamma$ :RXR and RNA polymerase II occupancy reveals temporal activation of distinct metabolic pathways and changes in RXR dimer composition during adipogenesis. *Genes & Dev.* 22, 2953 - 2967. (\*equal contribution,  $\times$ co-correspondence)
43. M. V. Hollegaard, J. Grove, P. Thorsen, X. Wang, **S. Mandrup**, M. Christiansen, B. Norgaard-Pedersen, K.R. Wojdemann, A. Tabor, J. Attermann, D. M. Hougaard (2008) Polymorphisms in the tumor necrosis factor alpha and interleukin 1-beta promoters with possible gene regulatory functions increase the risk of preterm birth. *Acta Obstetrica et Gynecologica Scandinavica* 87, 1285-90.
44. S. Carobbio, F. Frigerio, B. Rubi, L. Vetterli, M. Bloksgaard, A. Gjinovci, S. Pournourmohammadi, P. L. Herrera, W. Reith, **S. Mandrup**, and P. Maechler (2009) Deletion of glutamate dehydrogenase in beta-cells abolishes part of the insulin secretory response not required for glucose homeostasis. *J. Biol. Chem.* 284:921-929.
45. A. Bugge, L. Grøntved, M. M. Aagaard, R. Borup, and **S. Mandrup** (2009) The PPAR $\gamma$ 2 A/B-domain plays a gene specific role in transactivation and co-factor recruitment. *Mol. Endocrinology* 23, 794–808.
46. M. Raff, T. Tholstrup, S. Toubro, J.M. Bruun, P. Lund, E. M. Straarup, R. Christensen, M.B. Sandberg, **S. Mandrup** (2009) A mixture of conjugated linoleic acids reduce lower body fat mass in healthy postmenopausal women. *J. Nutrition* 139, 1347-1352.
47. E. H. Jenning, A. Bugge, R. Nielsen, S. Kersten, C. Dani, M. Wabitsch, R. Berger, H. Stunnenberg, **S. Mandrup** and E. Kalkhoven (2009) Peroxisome Proliferator-Activated receptor  $\gamma$  (PPAR $\gamma$ ) regulates expression of the anti-lipolytic G-protein-coupled receptor 81 (GPR81/Gpr81). *J. Biol. Chem.* 284, 26385-26393.
48. F. Lalloyer, T. Å. Pedersen, B. Gross, S. Yous, E. Vallez, J.-Å. Gustafsson, **S. Mandrup**, C. Fiévet, B. Staels, A. Tailleux (2009) The rexinoid bexarotene modulates triglyceride but not cholesterol metabolism via gene specific permissivity of the RXR/LXR heterodimer. *Arterioscler. Thromb. Vasc. Biol.* 29, 1488-1495.

49. S. Pozzi, M. Børgeesen, Satrajit Sinha, **S. Mandrup**, R. Mantovani (2009) Peroxisome proliferator activated receptor alpha is a functional target of p63 in adult human keratinocytes. *J. Invest. Dermatology*, 129, 2376-85.
50. F. Frigerio, C. Bartley, A. Usardi, K. Ravnskjaer, **S. Mandrup**, P. Maechler (2010) PPAR $\alpha$  protects against fatty acid induced INS-1E  $\beta$ -cell dysfunction by preserving carbohydrate metabolism. *Diabetologia*, 53, 331–340.
51. A. Kennedy, K. Martinez, S. Schmidt, **S. Mandrup**, K. LaPoint, M. McIntosh (2010) Antiobesity Mechanisms of Action of Conjugated Linoleic Acid. *J. Nutr. Biochem.* 21, 171-9.
52. B. Rauwel, B. Mariamé, H. Martin, R. Nielsen, S. Allart, B. Pipy, **S. Mandrup**, M. D. Devignes, D. Evain-Brion, T. Fournier, C. Davrinche (2010) Activation of PPAR $\gamma$  by human cytomegalovirus for de novo replication impairs migration and invasiveness of cytotrophoblast from early placenta. *J. Virology* 84, 2946 - 54.
53. L. Grøntved, M. S. Madsen, M. Børgeesen, R. G. Roeder, **S. Mandrup** (2010) MED14 tethers the Mediator to the N-terminal domain of PPAR $\gamma$  and is required for full transcriptional activity and adipogenesis. *Mol. Cell Biol.* 30, 2155-69.
54. K. Ravnskjaer, F. Frigerio\*, M. Børgeesen\*, T. Nielsen, P. Maechler, **S. Mandrup** (2010) PPAR $\delta$  is a fatty acid sensor, which activates mitochondrial oxidation and protects insulin secreting cells against lipotoxicity. *J. Lipid Res.* 51, 1370–1379. (\* equal contribution)
55. A. Bugge\*, M. Siersbæk\*, M. S. Madsen, A. Göndör, C. Rougier, **S. Mandrup** (2010) 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. *J. Biol. Chem.* 285, 17310-17317. (\* equal contribution)
56. A. Kennedy, K. Martinez, S. Chung, K. LaPoint, R. Hopkins, S.F. Schmidt, K. Andersen, **S. Mandrup**, M. McIntosh (2010) Inflammation and insulin resistance induced by trans-10, cis-12 conjugated linoleic acid are dependent on intracellular calcium levels in primary cultures of human adipocytes. *J. Lipid Res.* 51, 1906-1916.
57. J. Tuckermann, W. Bourguert, **S. Mandrup** (2010) Nuclear Receptors – Transcription factors and drug targets connecting basic research with translational medicine. *Mol. Endocrinol.* 24, 1311-1321.
58. R. Siersbæk, R. Nielsen, **S. Mandrup** (2010) PPAR $\gamma$  in adipocyte differentiation and metabolism - novel insights from genome-wide studies. *FEBS Lett.* 584, 3242-3249.
59. A. Bugge, **S. Mandrup** (2010) Molecular mechanisms and genome-wide aspects of PPAR subtype specific transactivation. *PPAR Res.* 2010, ID 169506, 1-12.
60. A. Nebbioso, D'A. Carmela, A. Bugge, R. Sarno, S. Valente, D. Rotili, F. Manzo, D. Teti, **S. Mandrup**, P. Ciana, A. Maggi, A. Mai, H. Gronemeyer, L. Altucci (2010) HDACs class II selective inhibition alters nuclear receptor dependent differentiation. *J. Mol. Endocrinol.* 45, 219 - 228.
61. 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) Disruption of the acyl-CoA binding protein results in delayed hepatic adaptation to the metabolic changes at weaning. *J. Biol. Chem.* 286, 3460-3472. (\*equal contribution)
62. S. F. Schmidt\*, M. Jørgensen\*, Y. Chen, R. Nielsen, A. Sandelin, **S. Mandrup** (2011) Cross species comparison of C/EBP $\alpha$  and PPAR $\gamma$  profiles in mouse and human adipocytes reveals interdependent retention of binding sites. *BMC Genomics* 12: 152, 1-16 (\*equal contribution,  $\alpha$  co-correspondence).
63. C. J. Villanueva, H. Waki, C. Godio, R. Nielsen, W.-L. Chou, L. Vargas, K. Wroblewski, C. Schmedt, R. Boyadjian, **S. Mandrup**, A. Hevener, E. Saez, P. Tontonoz (2011) TLE3 is a dual function transcriptional coregulator of adipogenesis. *Cell Metabolism* 13, 413-27.
64. M. Børgeesen\*, L.L.C. Poulsen\*, S. F. Schmidt, F. Frigerio, P. Maechler, **S. Mandrup** (2011) ChREBP mediates glucose-repression of PPAR $\alpha$  expression in pancreatic  $\beta$ -cells. *J. Biol. Chem.* 286, 13214-13225 (\*equal contribution).
65. R. Siersbæk, R. Nielsen, S. John, M.-H. Sung, S. Baek, A. Loft, G. L. Hager $\beta$ , **S. Mandrup** $\beta$  (2011) Extensive chromatin remodeling and establishment of transcription factor 'hotspots' during early adipogenesis. *EMBO J* 30, 1459-72 (highlighted in 'Have You Seen' in the same issue) ( $\beta$  co-correspondence).

66. M. M. Aagaard, R. Siersbæk, **S. Mandrup** (2011) Molecular basis for gene-specific transactivation by nuclear receptors. *BBA-Molecular Basis of Disease* 1812, 824-35.
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#### **Publications for public outreach**

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