

Curriculum Vitae

James Mukasa Ntambi, PhD

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TITLE: Professor of Biochemistry and Steenbock Professor of Nutritional Sciences

EDUCATION AND DEGREES:

1972-1975 BSc (Hons) Chemistry and Biochemistry
Makerere University, Kampala, Uganda

1975-1978 Msc in Microbial Biochemistry
Makerere University, Kampala, Uganda

1980-1985 PhD Johns Hopkins University School of Medicine, Baltimore, MD, USA
Thesis title: "Studies on the Replication of Kinetoplast DNA in *Trypanosoma Equiperdum*" Major Professor: Paul Englund

POSITIONS HELD:

1975-1978 **Research Fellow**, Federal Republic of Germany (DAAD)
Makerere University, Kampala, Uganda

1976-1980 **Resident Tutor/Warden**, Makerere University, Kampala, Uganda

1978-1980 **University Lecturer** in Biochemistry, Makerere University, Kampala, Uganda

1980-1985 Fulbright Fellows; **Graduate Research Assistant**, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA
Mentor: Professor Paul Englund

1985-1987 **Rockefeller Foundation Postdoctoral Research Fellow**, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA
Mentor: Professor Daniel M. Lane

- 1987-1989 **Research Associate**, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA Title: Genetic regulation of fat cell differentiation and metabolism, Mentor: Professor Daniel M. Lane
- 1989-1992 **Assistant Professor of Biochemistry and Molecular Biology**, Georgetown University Medical School, Washington, DC USA
- 1992-97 **Assistant Professor of Biochemistry and of Nutritional Sciences**, University of Wisconsin-Madison, Madison, Wisconsin, USA
- 2000 **Acting Assistant Dean**, College of Agricultural and Life Sciences, University of Wisconsin-Madison, Madison, Wisconsin, USA
- 1997- 2002 **Associate Professor of Biochemistry and of Nutritional Sciences**, University of Wisconsin-Madison, Madison, Wisconsin, USA
- 2002-Present **Professor of Biochemistry and of Nutritional Sciences**, University of Wisconsin-Madison, Madison, Wisconsin, USA
- 2003-Present **Katherine Berns Van Donk Steenbock Professor in Nutrition** University of Wisconsin-Madison, Madison, Wisconsin, USA
- 2011-2015 **Chair, Department of Nutritional Sciences**, University of Wisconsin-Madison, USA
- 2011-2015 **Director of Interdepartmental Graduate Program in Nutritional Sciences**, University of Wisconsin-Madison, USA
- 2016- **Adjunct Professor of Biological Chemistry**, Johns Hopkins University School of Medicine, Baltimore MD

HONORS AND AWARDS:

- 1975 Honors in Biochemistry and Chemistry
- 1975 UNDP/UNESCO Fellowship
- 1976-1978 Exchange Program of the Federal Republic of Germany (DAAD) Fellowship
- 1980-1985 Predoctoral Fulbright Fellowship
- 1985 The David Israel Macht Research Award in Medical Science, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA
- 1985-1987 Rockefeller Foundation Postdoctoral Fellowship
- 1986 Rockefeller Foundation Career Development Award

1990-1997	Frolisch/New York Academy of Sciences Fellowship
1991	Nominee for Dean's Medical School Teaching Award, Georgetown University School of Medicine, Washington, DC
1992-1998	Steenbock Career Development Award, University of Wisconsin-Madison, Madison, Wisconsin
1994-2000	Fogarty International Center/National Institutes of Health (NIH) International Biomedical Research Minority Faculty Fellowship
2001-2003	Wisconsin/Hilldale Undergraduate/Faculty Research award
2002	Outstanding teaching and advising Award Univ. of Wisconsin-Madison
2003	Katherine Berns Van Donk Steenbock Professor in Nutrition
2004	Osborne and Mandel award in Nutritional Sciences
2005	Hilldale Faculty Research award, University of Wisconsin-Madison
2006	Hilldale Faculty Research award, University of Wisconsin-Madison
2008	Fulbright Fellow, African Regional Research Award College of Agricultural and Life Sciences Extra Mile Award Vilas Research Award, University of Wisconsin-Madison
2009	Excellence in International Activities award, University of Wisconsin-Madison Scientist of the week Elected to the Uganda National Academy of Sciences (UNAS)
2010	Chancellor's distinguished Teaching award
2012	Appointed to the Institute of Medicine (IOM)/ Food Nutrition Board of the US National Academy of Sciences Appointed to the International committee of the American Society for Cell Biology (ASCB)
2013	Hilldale Faculty Research award, University of Wisconsin-Madison American Society for Biochemistry and Molecular Biology (ASBMB) Award for Exemplary Contributions to Education

Reappointed to the Board of Scientific Counselors of the National Institutes of Health/National Institute of Alcohol and Alcohol Abuse (NIH/NIAAA)

Reappointed the Katherine Berns Van Donk Steenbock Professor in Nutrition

“Ekitiibwa kya Buganda” Award for Contributions to Education

2016

Wisconsin Without Borders Peter Bosscher Award

RESEARCH AND TEACHING AND SERVICE:

RESEARCH TRAINING AT WISCONSIN:

Past trainees include: 15 Postdoctoral fellows, 22 PhDs, 4 Masters, 30 Undergraduates and 4 High school students.

GENERAL RESEARCH INTERESTS:

The general theme of my research is to understand the genetic regulation of metabolism, adipocyte biology and differentiation. I am specifically interested in the genetic basis of obesity, cardiovascular disease, insulin resistance and diabetes and how dietary factors, hormones and environmental factors influence these disease states. In particular I study the regulation of the mammalian stearoyl-CoA desaturase (SCD) genes that encode an enzyme involved in the biosynthesis of monounsaturated fatty acids. We are using these genes as a model to understand nutrient gene interactions. **We have recently genetically engineered mice that are born without the stearoyl-CoA desaturase gene-1 and found that these mice resist obesity, diabetes, fatty liver disease, and other aspects of the metabolic syndrome. Based on our findings pharmaceutical companies are developing drugs for the treatment of human obesity and diabetes.**

I am also interested in conducting research on obesity and diabetes and other non-communicable metabolic diseases in developing countries. I provide advice on how to prevent or delay the progression of metabolic diseases through nutritional interventions.

I am involved in building the African National Sciences Research Consortium (ANSRC), which is consortium bringing together academic and research institutions across the East and central African region with the goal of building a PhD training program in basic laboratory research in biochemistry and nutritional sciences.

PUBLICATIONS:

1. **Ntambi, J. M.**, Marini, J. C., Bangs, J. D., Hajduk, S. L., Jiminez, H. E., Kitchin, P. A., Klein, V. A., Ryan, K. A. and Englund, P. T. The presence of bent helix in the fragments of kinetoplast DNA minicircles from several trypanosomatid species. *Mol. Biochem. Parasitol.* 1984 12, 273-286.
2. **Ntambi, J. M.** and Englund, P. T. A gap at a unique location in newly replicated kinetoplast DNA minicircles from *Trypanosoma equiperdum*. *J. Biol. Chem.* 1985 260, 5574-5579.
3. **Ntambi, J. M.**, Shapiro, T., Ryan, K. A. and Englund, P. T. Ribonucleotides associated with a gap in newly replicated kinetoplast DNA minicircles from *Trypanosoma equiperdum*. *J. Biol. Chem.* 1986 261, 11890-11895.
4. **Ntambi, J. M.**, Ryan, K. A. and Englund, P. T. The replication origin in kinetoplast DNA minicircles from *Trypanosoma equiperdum*. In: *Molecular Biology of Parasitic Invasion*, Alan R. Liss, Inc., 1987 pp. 113-120.
5. **Ntambi, J. M.**, Buhrow, S. A., Kaestner, K. H., Sibley, E., Christy, R. J., Kelly, T. J. and Lane, M. D. Differentiation-induced gene expression in 3T3-L1 preadipocytes: Characterization of a differentially expressed gene encoding stearoyl-CoA desaturase. *J. Biol. Chem.* 1988 263, 17291-17300.
6. Kaestner, K. H., **Ntambi, J. M.**, Kelly, T. J. and Lane, M. D. Differentiation-induced gene expression in 3T3-L1 preadipocytes: A second differentially expressed gene encoding stearoyl-CoA desaturase. *J. Biol. Chem.* 1989 264, 14755-14761.
7. Christy, R. J., Young, V. W., **Ntambi, J. M.**, Geiman, D. E., Landschulz, W. H., Friedman, A. D., Nakabeppu, Y., Kelly, T. J. and Lane, M. D. Differentiation-induced gene expression in 3T3-L1 preadipocytes: C/EBP interacts with and activates the promoters of two adipocyte-specific genes. *Genes Dev.* 1989 9, 1323-1335.
8. **Ntambi, J. M.** Dietary regulation of stearoyl-CoA desaturase 1 gene expression in mouse liver. *J. Biol. Chem.* 1992 267, 10925-10930.
9. Pastano, G., Prince, A., Guyden, J., **Ntambi, J. M.**, Atkin, A. and Boto, W. O. Independent divergence in the CD4 binding site and V3 loop encoded in two seroprevalent Ugandan HIV-1 clinical isolates. *J. Acq. Immune Def. Syndromes* 1993 6, 872-80.
10. Waters, K. and **Ntambi, J. M.** Insulin and dietary fructose induce stearoyl-CoA desaturase 1 gene expression in liver of diabetic mice. *J. Biol. Chem.* 1994 269, 27773-27777.
11. **Ntambi, J. M.** Cellular differentiation and dietary regulation of gene expression. *Prostaglandins Leukotrienes and Essential Fatty Acids* 1995 52, 117-120.

12. **Ntambi, J. M.** The regulation of stearoyl-CoA desaturase (SCD). *Prog. Lipid Res.* 1995 34, 139-150.
13. Smulson, M. E., Kang, V. H., **Ntambi, J. M.**, Rosenthal, D. S., Ding, R. and Simbulan, C. M. Requirement of the expression of poly (ADP-ribose) polymerase during the early stages of differentiation of 3T3-L1 preadipocytes as studied by antisense RNA induction. *J. Biol. Chem.* 1995 270, 119-127.
14. **Ntambi, J. M.**, Sessler, A. M. and Takova, T. A model cell line to study regulation of stearoyl-CoA desaturase gene 1 expression by insulin and polyunsaturated fatty acids. *Biochem. Biophys. Res. Commun.* 1996 220, 990-995.
15. Waters, K. and **Ntambi, J. M.** Polyunsaturated fatty acids inhibit hepatic stearoyl-CoA desaturase 1 gene in diabetic mice. *Lipids* 1996 31, S-33-S-36.
16. **Ntambi, J. M.** and Takova, T. Role of Ca²⁺ in the early stages of murine adipocyte differentiation as evidenced by calcium mobilizing agents. *Differentiation* 1996 60, 151-158.
17. Casimir, D. A., Miller, C. W. and **Ntambi, J. M.** Preadipocyte differentiation blocked by prostaglandin stimulation of prostanoid FP₂ receptor in murine 3T3-L1 cells. *Differentiation* 1996 60, 203-210.
18. Miller, C. W. and **Ntambi, J. M.** Peroxisome proliferators induce mouse liver stearoyl-CoA desaturase 1 gene expression. *Proc. Natl. Acad. Sci. USA* 1996 93, 9443-9448.
19. Casimir, D. A., Miller, C. W. and **Ntambi, J. M.** Preadipocyte differentiation blocked by prostaglandin stimulation of FP receptor. *South African J. Sci.* 1996 92, Abs., p. 563.
20. Casimir, D. A. and **Ntambi, J. M.** cAMP activates the expression of stearoyl-CoA desaturase gene 1 during early preadipocyte differentiation. *J. Biol. Chem.* 1996 271, 29847-29853.
21. Sessler, A., Kaur, N., Palta, J.P. and **Ntambi, J. M.** Regulation of stearoyl-CoA desaturase1 mRNA stability by polyunsaturated fatty acids in 3T3-L1 adipocytes. *J. Biol. Chem.* 1996 271, 29854-29858.
22. Miller, C. W., Casimir, D. A. and **Ntambi, J. M.** The mechanism of inhibition of 3T3-L1 preadipocyte differentiation by prostaglandin F₂alpha. *Endocrinology* 1996 137, 5641-5650.
23. Lee, K. N., Pariza, M. and **Ntambi, J. M.** Differential expression of hepatic stearoyl-CoA desaturase gene 1 in male and female mice. *Biochim. Biophys. Acta* 1996 1304, 85-88.
24. Miller, C. W., Waters, K. M. and **Ntambi, J. M.** Regulation of hepatic stearoyl-CoA desaturase gene 1 by vitamin A. *Biochem. Biophys. Res. Comm.* 1997 231, 206-210.

25. Waters, K. M., Miller, C. W. and **Ntambi, J. M.** Localization of a negative thyroid hormone-response element in hepatic stearoyl-CoA desaturase gene 1. *Biochem. Biophys. Res. Commun.* 1997 233, 838-843.
26. **Ntambi, J. M.** Fat cell differentiation blocked by prostaglandin F2alpha stimulation of the prostanoid FP2 receptor. *Emerging Therapeutic Targets* 1997 1, 237-240.
27. Waters, K. M., Miller, C. W. and **Ntambi, J. M.** Localization of a polyunsaturated fatty acid response region in stearoyl-CoA desaturase gene 1. *Biochim. Biophys. Acta* 1997 1349, 33-42.
28. Sessler, N. and **Ntambi, J. M.** Polyunsaturated fatty acid regulation of gene expression. *J. Nutr.* 1998 128, 923-926.
29. Singh, M. and **Ntambi, J. M.** Nuclear Factor 1 is essential for expression of stearoyl-CoA desaturase 1 gene during preadipocyte differentiation. *Biochim. Biophys. Acta* 1998 1398, 148-156.
30. Lee, K. N., Pariza M. W. and **Ntambi, J. M.** Conjugated linoleic acid decreases hepatic stearoyl-CoA desaturase mRNA expression. *Biochem. Biophys. Res. Commun.* 1998 248, 817-821.
31. Miller, C. C. and **Ntambi, J. M.** The role of prostaglandin F2alpha in the inhibition of fat cell differentiation. *Recent Res. Devel. in Lipids Res.* 1998 2, 11-19.
32. **Ntambi, J. M.**, Choi, Y. and Kim, Y.-C. Regulation of stearoyl-CoA desaturase by conjugated linoleic acid AOCs. In: *Conjugated Linoleic Acid: Biochemical, Nutritional, Clinical, Cancer and Methodological Aspects*, 1999 Vol. 26, pp. 340-347.
33. **Ntambi, J. M.** Regulation of stearoyl-CoA desaturase by polyunsaturated fatty acids and cholesterol. *J. Lipid Res.* 1999 40, 1549-1558.
34. **Ntambi, J. M.** Regulation of stearoyl-CoA desaturase in preadipocyte differentiation and metabolism. *Chem. Phys. Lipids* 1999 101, 142.
35. Kim, Y.-C. and **Ntambi, J. M.** Regulation of stearoyl-CoA desaturase genes: Role in cellular metabolism and preadipocyte differentiation. *Biochem. Biophys. Res. Commun.* 1999 266, 1-4.
36. **Ntambi, J. M.** and Sessler, A. M. Fatty acid regulation of gene expressions and fat cell differentiation. In: *Fatty Acids in Foods and Their Health Implications*, Chapter 28 (C. K. Chow, Editor), Marcel Dekker Inc., New York, 1999 pp. 597-606.
37. **Ntambi, J. M.**, Kim, Y.-C., Gomez, F. E. and Fox, B. G. Regulation of stearoyl-CoA desaturase 1 gene expression in preadipocyte differentiation, diabetes and obesity. In: *Adipocyte Biology and Hormone Signaling*, 27th Steenbock Symposium, Madison, WI, June, 1999 (J. M. Ntambi, Editor) IOS Press, The Netherlands, 2000 pp. 69-78.

38. Choi, Y., Kim, Y.-C., Han, Y.-B., Park, Y., Pariza, M. W. and **Ntambi, J. M.** The trans-10, cis-12 isomer of conjugated linoleic acid down regulates stearoyl-CoA desaturase gene expression in 3T3-L1 adipocytes. *J. Nutr.* 2000 130, 1920-1924.
39. Kim, Y.-C., Gomez, E., Fox, B. G. and **Ntambi, J. M.** Differential regulation of the stearoyl-CoA desaturase genes by thiazolidinediones in 3T3-L1 adipocytes. *J. Lipid Res.* 2000 41, 1310-1316.
40. Park, Y., Storkson, J. M., **Ntambi, J. M.**, Cook, M. E., Sih, C. J. and Pariza, M. Inhibition of hepatic stearoyl-CoA desaturase activity by trans-10, cis-12 conjugated linoleic acid and its derivatives. *Biochim. Biophys. Acta* 2000 1486, 285-292.
41. Miyazaki, M., Kim, Y.-C., Gray-Keller, M. P., Attie, A. D. and **Ntambi, J. M.** The biosynthesis of hepatic cholesterol esters and triglycerides is impaired in mice with a disruption in the gene for stearoyl-CoA desaturase 1. *J. Biol. Chem.* 2000 275, 30132-30138.
42. **Ntambi, J. M.** and Kim, Y.-C. Adipocyte differentiation and gene expression. *J. Nutr.* 2000 130, 3122S-3125S.
43. **Ntambi, J. M.** and Bené, H. Polyunsaturated fatty acid regulation of gene expression. *J. Mol. Neurosci.* 2001 16, 273-278.
44. Miyazaki, M., Kim, Y.-C. and **Ntambi, J. M.** A lipogenic diet in mice with a disruption of the stearoyl-CoA desaturase 1 gene reveals a stringent requirement of endogenous monounsaturated fatty acids for triglyceride synthesis. *J. Lipid Res.* 2001 42, 1018-1024.
45. **Ntambi, J. M.** and Kim, Y.-C. Regulation of stearoyl-CoA desaturase gene expression: Role of polyunsaturated fatty acids. In: *Nutrition and Gene Expression*, CRS Press, 2001 pp. 49-61.
46. Choi, Y., Park, Y., Pariza, M. W. and **Ntambi, J. M.** Regulation of stearoyl-CoA desaturase activity by the trans-10, cis-12 isomer of conjugated linoleic acid in HepG2 cells. *Biochem. Biophys. Res. Commun.* 2001 284, 689-693.
47. Bené, H., Lasky, D. and **Ntambi, J. M.** The cloning and characterization of the human stearoyl-CoA desaturase gene promoter: Transcriptional activation by sterol regulatory element binding protein and repression by polyunsaturated fatty acids and cholesterol. *Biochem. Biophys. Res. Commun.* 2001 284, 1194-1198.
48. Miyazaki, M. Man W.C. and **Ntambi, J. M.** Targeted disruption of stearoyl-CoA desaturase 1 gene in mice cause atrophy of sebaceous and meibomian glands and depletion of wax esters in the eyelid. *J. Nutr.* 2001 131, 2260-2268.

49. Miyazaki, M., Kim, H. J., Man, W. C. and **Ntambi, J. M.** Oleoyl-CoA is the major de novo product of stearoyl-CoA desaturase 1 gene isoform and substrate for the biosynthesis of the harderian gland 1-alkyl-2,3-diacylglycerol. *J. Biol. Chem.* 2001 276, 39455-39461.
50. Lasky, D., Becerra, E., Boto, W., Otim, M. and **Ntambi, J. M.** Obesity and gender differences in the risk of type 2 diabetes mellitus in Uganda. *Nutrition* 2002 18, 417-421.
51. Gomez, E. F., Miyazaki, M., Marwah, P., Lardy, H. A., **Ntambi, J. M.** and Fox, B. G. Molecular differences caused by differentiation of 3T3-L1 preadipocytes in the presence of either dehydroepiandrosterone (DHEA) or 7-oxo-DHEA. *Biochemistry* 2002 41, 5473-5482.
52. Kim, H.-J., Miyazaki, M., Man, W. C. and **Ntambi, J. M.** Sterol regulatory element binding proteins (SREBPs) as regulators of lipid metabolism: Polyunsaturated fatty acids oppose cholesterol-mediated induction of SREBP-1c maturation. *Ann. N.Y. Acad. Sci.* 2002 967, 34-42.
53. Choi, Y, Parka, Y., Storkson, J. M., Pariza, M. and **Ntambi, J. M.** Inhibition of stearoyl-CoA desaturase activity by the cis-9, trans-11 isomer and the trans-10, cis-12 isomer of conjugated linoleic acid in MDA-MB-231 and MCF-7 human breast cancer cells. *Biochem. Biophys. Res. Commun.* 2002 294, 785-790.
54. Cohen, P., Miyazaki, M., Socci, N D, Hagge-Greenberg, A., Liedtke, W., Soukas, A. A., Sharma, R., Hudgins, L. C., **Ntambi, J. M.** and Friedman, J. M. Role for stearoyl-CoA desaturase-1 in leptin mediated weight loss. *Science* 2002 297, 240-243.
55. **Ntambi, J. M.**, Miyazaki, M., Stoehr, J. P., Lan, H., Kendziorski, C. M., Yandell, B. S., Cohen, P, Friedman, J. and Attie, A. D. Loss of stearoyl CoA desaturase-1 function protects mice against adiposity. *Proc. Natl. Acad. Sci.* 2002 99, 11482-11486.
56. Cohen, P., Miyazaki, M., Hudgins, L. C., Socci, N D, **Ntambi, J. M.**, Hagge-Greenberg, A., Liedtke, W., Soukas, A. A., Sharma, R. and Friedman, J. M. Energy expenditure and treating obesity. *Science* 2002 298, 539-541.
57. **Ntambi, J. M.**, Choi, Y., Park, Y., Peters, J. M. and Pariza, M. W. Effects of conjugated linoleic acid (CLA) on immune responses, body composition and stearoyl-CoA desaturase. *Can. J. Appl. Physiol.* 2002 27, 617-628.
58. Kim, H-J., Miyazaki, M. and **Ntambi, J. M.** Dietary cholesterol opposed PUFA-mediated repression of the stearoyl-CoA desaturase 1 gene by SREBP-1 independent mechanism. *J. Lipid Res.* 2002 43, 1750-1757.

59. Attie, A. D., Krauss, R. M., Gray-Keller, M. P., Brownlie, A., Miyazaki, M., Kastelein, J. J., Lusi, A. J., Stalenhoef, A. F. H., Stoeberl, J. P., Hayden, M. R. and **Ntambi, J. M.** Relationship between stearoyl-CoA desaturase activity and plasma triglycerides in human and mouse hypertriglyceridemia. *J. Lipid Res.* 2002 43, 1899-1907.
60. Miyazaki, M., Gomez, F. E. and **Ntambi, J. M.** Lack of stearoyl-CoA desaturase-1 function induces a palmitoyl-CoA Delta6 desaturase and represses the stearoyl-CoA desaturase-3 gene in the preputial gland of the mouse. *Proceedings of the International Symposium on Plant Lipids, Okazaki, Japan.* *J. Lipid Res.* 2002 43, 2146-2154.
61. Laviano, A., Meguid, M. M., Rossi-Fanelli, F., Cohen, P., Miyazaki, M., Hudgins, L. C., Soccia, N. D., **Ntambi, J. M.**, Hagge-Greenberg, A., Liedtke, W., Soukas, A. A., Sharma, R. and Friedman, J. M. Energy expenditure and treating obesity. *Science* 2002 298, 539-541.
62. Miyazaki, M and **Ntambi, J. M.** Role of stearoyl-CoA desaturase in lipid metabolism. *Prostaglandins Leukot. Essent. Fatty Acids* 2003 68, 113-121.
63. Pariza, M. W., Park, Y., Xu, X., **Ntambi, J.** and Kang, K. Speculation on the mechanisms of action of conjugated linoleic acid. In: *Advances in Conjugated Linoleic Acid Research, 2003 Vol. 2*, J. L. Sebedio, Editor, AOCS Press, Champaign, IL.
64. Gomez, F. E., Bauman, D. E., **Ntambi, J. M.** and Fox, B. G. Effects of sterculic acid on stearoyl-CoA desaturase in differentiating 3T3-L1 adipocytes. *Biochem. Biophys. Res. Commun.* 2003 300, 316-326.
65. Miyazaki, M., Gomez, F. E. and **Ntambi, J. M.** Presence of a palmitoyl-CoA desaturase in the preputial gland of the mouse. *Advance Research on Plant Lipids: Proceedings of the 15th International Symposium on Plant Lipids, Okazaki, Japan, 2003* pp. 95-99.
66. **Ntambi, J. M.** and Miyazaki, M. Recent insights into stearoyl-CoA desaturase-1. *Curr. Opin Lipidol.* 2003 14, 255-261.
67. Miyazaki, M., Jacobson, M. J., Man, W. C., Cohen, P., Asilmaz, E., Friedman, J. M. and **Ntambi, J. M.** Identification and characterization of murine SCD4, a novel heart-specific stearoyl-CoA desaturase isoform regulated by leptin and dietary factors. *J. Biol. Chem.* 2003 278, 33904-33911.
68. Rahman, S. M., Dobrzyn, A., Dobrzyn, P., Lee, S. H., Miyazaki, M. and **Ntambi, J. M.** Stearoyl-CoA desaturase 1 deficiency elevates insulin-signaling components and down-regulates protein-tyrosine phosphatase 1B in muscle. *Proc. Natl. Acad. Sci. USA* 2003 100, 11110-11115.

69. Cohen, P., **Ntambi, J. M.** and Friedman, J. M. Stearoyl-CoA desaturase-1 and the metabolic syndrome. *Curr. Drug Targets Immune Endocr. Metabol. Disord.* 2003 3, 271-280.
70. **Ntambi, J. M.** and Miyazaki, M. Regulation of stearoyl-CoA desaturases and role in metabolism. *Prog. Lipid Res.* 2004 43, 91-104.
71. Kang, K., Miyazaki, M., **Ntambi, J. M.** and Pariza, M. W. Evidence that the anti-obesity effect of conjugated linoleic acid is independent of effects on stearoyl-CoA desaturase 1 expression and enzyme activity. *Biochem. Biophys. Res. Commun.* 2004 315, 532-537.
72. Asilmaz, E., Cohen, P., Miyazaki, M., Dobrzyn, P., Ueki, K., Fayzikhodjaeva, G., Soukas, A. A., Kahn, C. R., **Ntambi, J. M.**, Socci, N. D. and Friedman, J. M. Site and mechanism of leptin action in a rodent form of congenital lipodystrophy. *J. Clin. Invest.* 2004 113, 414-424.
73. Dobrzyn, A. and **Ntambi, J. M.** The role of stearoyl-CoA desaturase in body weight regulation. *Trends Cardiovasc. Med.* 2004 14, 77-81.
74. **Ntambi, J. M.** and Georgieff, M. Testing Ingredients with Preclinical Studies. *Infant Formula: Evaluating the Safety of New Ingredients*, Institute of Medicine, National Research Council of the National Academies, 2004 pp. 5-1-5-39.
75. Wilson, R. A., Chang, P.-K., Dobrzyn, A, **Ntambi, J. M.** and Keller, N. O. Two Delta9- stearic acid desaturases are required for *Aspergillus nidulans* growth and development. *Fungal Genet. Biol.* 2004 41, 501-509.
76. Dobrzyn, P., Dobrzyn, A., Miyazaki, M., Cohen, P., Asilmaz, E., Hardie, D. G., Friedman, J. M. and **Ntambi, J. M.** Stearoyl-CoA desaturase-1 deficiency increases fatty acid oxidation by activating AMP-activated protein kinase in liver. *Proc. Natl. Acad. Sci. USA* 2004 101, 6409-6414.
77. Miyazaki, M., Dobrzyn, A., Man, W. C., Chu, K., Sampath, H., Kim, H. J. and **Ntambi, J. M.** Stearoyl-CoA desaturase 1 gene expression is necessary for fructose-mediated induction of lipogenic gene expression by sterol regulatory element-binding protein-1c-dependent and -independent mechanisms. *J. Biol. Chem.* 2004 279, 25164-25171.
78. Miyazaki, M., Dobrzyn, A., Sampath, H., Lee, S. H., Man, W. C., Chu, K., Peters, J. M., Gonzalez, F. J. and **Ntambi, J. M.** Reduced adiposity and liver steatosis by stearoyl-CoA desaturase deficiency are independent of peroxisome proliferator-activated receptor-alpha. *J. Biol. Chem.* 2004 279, 35017-35024.
79. Lee, S. H., Dobrzyn, A., Dobrzyn, P., Rahman, S. M., Miyazaki, M. and **Ntambi, J. M.** Lack of stearoyl-CoA desaturase 1 upregulates basal thermogenesis but causes hypothermia in a cold environment. *J. Lipid Res.* 2004 45, 1674-1682.

80. Sampath, H. and **Ntambi, J. M.** Polyunsaturated fatty acid regulation of gene expression. *Nutr. Rev.* 2004 62, 333-339.
81. **Ntambi, J. M.**, Miyazaki, M. and Dobrzyn, A. Regulation of stearoyl-CoA desaturase expression. *Lipids* 2004 39, 1061-1065.
82. Rahman, S. M., Dobrzyn, A., Lee, S. H., Dobrzyn, P., Miyazaki, M. and **Ntambi, J. M.** Stearoyl-CoA desaturase 1 deficiency increases insulin signaling and glycogen accumulation in brown adipose tissue. *Am. J. Physiol. Endocrinol. Metab.* 2005 288, E381-E387.
83. Dobrzyn, A., Dobrzyn, P., Lee, S. H., Miyazaki, M., Cohen, P., Asilmaz, E., Hardie, D. G., Friedman, J. M. and **Ntambi, J. M.** Stearoyl-CoA desaturase-1 deficiency reduces ceramide synthesis by downregulating serine palmitoyltransferase and increasing β -oxidation in skeletal muscle. *Am. J. Physiol. Endocrinol. Metab.* 2005 288, 599-607.
84. Dobrzyn, A. and **Ntambi, J. M.** Stearoyl-CoA desaturase as a new drug target for obesity treatment. *Obes. Rev.* 2005 6, 169-174.
85. Sampath, H. and **Ntambi, J. M.** Polyunsaturated fatty acid regulation of genes of lipid metabolism. *Annu. Rev. Nutr.* 2005 25, 317-340.
86. Biddinger, S. B., Almind, K., Miyazaki, M., Kokkotou, E., **Ntambi, J. M.** and Kahn, C. R. Effects of diet and genetic background on stearoyl-CoA desaturase 1, and the development of the metabolic syndrome. *Diabetes* 2005 54, 1314-1323.
87. Dobrzyn, A. and **Ntambi, J. M.** Stearoyl-CoA desaturase: a therapeutic target of insulin resistance and diabetes. *Drug Discovery Today: Therapeutic Strategies* 2005 2, 125-128.
88. Dobrzyn, A., Dobrzyn, P., Miyazaki, M., Sampath, H., Chu, K. and **Ntambi, J. M.** Stearoyl-CoA desaturase 1 deficiency increases CTP:choline cytidyltransferase translocation into the membrane and enhances phosphatidylcholine synthesis in liver. *J. Biol. Chem.* 2005 280, 23356-23362.
89. Dobrzyn, A. and **Ntambi, J. M.** The role of stearoyl-CoA desaturase in the control of metabolism. *Prostaglandins, Leukot. Essent. Fatty Acids* 2005 73, 35-41.
90. Agnieszka Dobrzyn and James M. Ntambi. Stearoyl-CoA desaturase as a new drug target for obesity. *Obesity Reviews.* 2005 May;6(2):169-74.
91. Dobrzyn, A., Dobrzyn, P., Miyazaki, M. and **Ntambi, J. M.** Polyunsaturated fatty acids do not activate AMP-activated protein kinase in mouse tissues. *Biochem. Biophys. Res. Commun.* 2005 332, 892-896.

92. Miyazaki, M., Dobrzyn, A., Elias, P. M. and **Ntambi, J. M.** Stearoyl-CoA desaturase-2 gene expression is required for lipid synthesis during early skin and liver development. *Proc. Natl. Acad. Sci. USA* 2005 102, 12501-12506.
93. Hulver, M. W., Berggren, J. R., Carper, M. J., Miyazaki, M., **Ntambi, J. M.**, Hoffman, E. P., Thyfault, J. P., Stevens, R., Dohm, G. L., Houmard, J. A. and Muoio, D. M. Elevated stearoyl-CoA desaturase-1 expression in skeletal muscle contributes to abnormal fatty acid partitioning in obese humans. *Cell Metab.* 2005 2, 251-261.
94. Sampath, H. and **Ntambi, J. M.** Dietary regulation of stearoyl-CoA desaturase-1 expression. *Annals of Nutrition and Metabolism: Proceedings of the 18th International Congress of Nutrition.* 2006 September 19-23, 2005, Durban, South Africa.
95. Sampath, H. and **Ntambi, J. M.** The fate and intermediary metabolism of stearic acid. *Lipids* 2005 40, 1187-1191.
96. Man, W. C., Miyazaki, M., Chu, K. and **Ntambi, J. M.** Membrane topology of mouse stearoyl-CoA desaturase 1. *J. Biol. Chem.* 2006 281, 1251-1260.
97. Sampath, H. and **Ntambi, J. M.** Stearoyl-coenzyme A desaturase 1, sterol regulatory element binding protein-1c and peroxisome proliferators-activated receptor-alpha: Independent and interactive roles in the regulation of lipid metabolism. *Curr. Opin. Clin. Nutr. Metab. Care* 2006 9, 84-88.
98. Miyazaki, M., Bruggink, S. M. and **Ntambi, J. M.** Identification of mouse palmitoyl-coenzyme A Delta9-desaturase. *J. Lipid Res.* 2006 47, 700-704.
99. **Ntambi, J. M.** Lipids, genes, and health. *Science* 2006 312, 698.
100. Flowers, M. T., Miyazaki, M., Liu, X. and **Ntambi, J. M.** Probing the role of stearoyl-CoA desaturase-1 in hepatic insulin resistance. *J. Clin. Invest.* 2006 116, 1478-1481.
101. Biddinger, S. B., Miyazaki, M., Boucher, J., **Ntambi, J. M.** and Kahn, C. R. Leptin suppresses stearoyl-CoA desaturase 1 by mechanisms independent of insulin and sterol regulatory element-binding protein-1c. *Diabetes* 2006 55, 2032-2041.
102. Sampath, H. and **Ntambi, J. M.** Regulation of gene expression by polyunsaturated fatty acids. *Heart and Metabolism* 2006 32: 32-5.
103. Man, W. C., Miyazaki, M., Chu, K. and **Ntambi, J. M.** Co-localization of SCD1 and DGAT2: implying preference for endogenous monounsaturated fatty acids in triglyceride synthesis. *J. Lipid Res.* 2006 47, 1928-1939.

104. McGinnis, J. M., Birt, D. F., Brannon, P. M., Carroll, R. J., Gibbons, R. D., Hazzard, W. R., Kamerow, D. B., Levin, B., **Ntambi, J. M.**, Paneth, N., Rogers, D., Saftlas, A. F. and Vaughan, W. National Institutes of Health State-of-the-Science Conference Statement: Multivitamin/Mineral Supplements and Chronic Disease Prevention. *Annals of Internal Medicine*, 2006 Vol. 145, Issue No. 5, pp. 364-371.
105. Chu, K., Miyazaki, M., Man, W. C. and **Ntambi, J. M.** Stearoyl-coenzyme A desaturase 1 deficiency protects against hypertriglyceridemia and increases plasma high-density lipoprotein cholesterol induced by liver X receptor activation. *Mol. Cell. Biol.* 2006 26, 6786-6798.
106. Flowers, M. T., Groen, A. K., Oler, A., Gray-Keller, M. P., Choi, Y., Schueler, K. L., Richards, O. C., Lan, H., Miyazaki, M., Kuipers, F., Kendziorowski, C., **Ntambi, J. M.** and Attie, A. D. Cholesterol and hypercholesterolemia in SCD1-deficient mice fed a low-fat, high-carbohydrate diet. *J. Lipid Res.* 2006 47(12) 2668-80.
107. Ashok Marwah, A., F. Enrique Gomez, Padma Marwah, **James M. Ntambi**, Brian B. Fox, and Henry Lardy. Redox reactions of dehydroepiandrosterone and its metabolites in differentiating 3T3-L1 adipocytes. A liquid chromatographic-mass spectrometric study. *Arch. Biochem. Biophys* 2007 456,1-7.
108. Sampath H, Miyazaki M, Dobrzyn A, **Ntambi JM**. Stearoyl CoA desaturase-1 mediates the pro-lipogenic effects of dietary saturated fat. *J Biol Chem.* 2007;282: 2483-93.
109. Sampath, H. and Ntambi, J. M. Polyunsaturated fatty acids and regulation of gene expression. In: *Fatty Acids in Foods and Their Health Implications, Third Edition* C. K. Chow, Editor, CRC Press. 2007 pp. 727-739
110. Brian Thomson, Jamie M. Ahrens, **James M. Ntambi**, Hector DeLuca, Margaret Clagett-Dame. 2-Methylene-19-nor-1alpha-hydroxyvitamin D₃ analogs inhibit adipocyte differentiation and PPAR gamma 2 gene transcription *Arch. Biochem. Biophys.* 2007 460 192-201.
111. Flowers, J.B., Rabaglia, M.E., Schueler, K.L., Flowers, M.T., Lan, H., Keller, M.P., Ntambi J.M., Attie, A.D. Loss of stearoyl-CoA desaturase-1 improves insulin sensitivity in lean mice but worsens diabetes in leptin-deficient obese mice. *Diabetes.* 2007 56(5):1228-39.
112. Alan D. Attie, Matthew T. Flowers, Jessica B. Flowers, Albert K. Groen, Folkert Kuipers, and **James M. Ntambi**. Stearoyl-CoA Desaturase Deficiency, Hypercholesterolemia, Cholestasis, and Diabetes; *Nutr. Rev.* 2007 65 S35-8.
113. Zarnowski R, Miyazaki M, Dobrzyn A, **Ntambi JM**, Woods JP. Typing of *Histoplasma capsulatum* strains by fatty acid profile analysis. *J Med Microbiol.* 2007 Jun; 56(Pt 6):788-97.

114. Florence Isabirye Mulanga, Harini Sampath, Judith A. Marlett and **James M. Ntambi**. Impact of processing technique on apparent bioavailability of cooking banana (matooke) starch. *African Journal of Biochemistry Research* 2007 1(5), 72-77.
115. JM McGinnis, DF Birt, PM Brannon, RJ Carroll, RD Gibbons, WR Hazzard, DB Kamerow, B Levin, **J. M. Ntambi**, N Paneth, D Rogers, AF Saftlas, and W Vaughan. Reply to BN Ames et al. *Am J Clin Nutr* 2007 86: 523.
116. Makoto Miyazaki, Matthew T. Flowers, Harini Sampath, Kiki Chu, Carolin Otzelberger, Xueqing Liu and **James M. Ntambi**. Hepatic Stearoyl-CoA Desaturase-1 Deficiency Protects Mice from Carbohydrate-Induced Adiposity and Hepatic Steatosis *Cell Metabolism*, 2007 Vol 6, 484-496.
117. Chi Chen, Yatrik M. Shah, Keiichirou Morimura, Kristopher W. Krausz, Makoto Miyazaki, Terrilyn A. Richardson, Edward T. Morgan, **James M. Ntambi**, Jeffrey R. Idle, and Frank J. Gonzalez. Metabolomics Reveals that Hepatic Stearoyl-CoA Desaturase 1 Downregulation Exacerbates Inflammation and Acute Colitis *Cell Metabolism*, 2008 Vol 7, 135-147.
118. Pawel Dobrzyn, **James M. Ntambi**, Agnieszka Dobrzyn. Stearoyl-CoA desaturase: A novel control point of lipid metabolism and insulin sensitivity *Eur. J. Lipid Sci. Technol*, 2008 110, 93-100.
119. Sampath, H. and **Ntambi, J. M.** Role of stearoyl-CoA desaturase in human metabolic disease. *Future Lipidology* 2008. Vol. 3, No. 2, 163-173.
120. Matthew T. Flowers and **James M. Ntambi**. Role of stearoyl-Coenzyme A desaturase in regulating lipid metabolism. *Curr Opin. Lipidol* 2008, 19, 248-256.
121. R. Mar-Heyming, M. Miyazaki, D. Weissglas-Volkov, N. A. Kolaitis, N. Sadaat, C. Plaiser, P. Pajukanta, R. M. Cantor, T. W. de Bruin, **J. M. Ntambi** and A. J. Lusis. Association of stearoyl-CoA desaturase 1 activity with familial combined hyperlipidemia. *Arterioscler Thromb Vasc Biol* 2008 28 817-23.
122. M. T. Flowers, M. P. Keller, Y. Choi, H. Lan, C. Kendzierski, **J. M. Ntambi** and A. D. Attie. Liver gene expression analysis reveals endoplasmic reticulum stress and metabolic dysfunction in SCD1-deficient mice fed a very low fat diet. *Physiological Genomics* 2008 33 361-72.
123. Michael J. MacDonald, Agnieszka Dobrzyn, **James M. Ntambi** and Scott W. Stoker. The Role of Rapid Lipogenesis in Insulin Secretion: Insulin Secretagogues Acutely Alter Lipid Composition of INS-1 832/13 Cells. *Archives of Biochemistry and Biophysics* 2008 279 153-162.
124. Pawel Dobrzyn, Harini Sampath, Agnieszka Dobrzyn, Makoto Miyazaki, and **James M. Ntambi**. Loss of stearoyl-CoA desaturase 1 inhibits fatty acid oxidation and increases glucose utilization in the heart. *Am J Physiol Endocrinol Metab*. 2008 294(2):E357-64.

125. Zarnowski R, Dobrzyn A, **Ntambi JM**, Woods JP. Neutral storage lipids of *Histoplasma capsulatum*: Effect of culture age. *Curr Microbiol.* 2008 56(2):110-4.
126. Zarnowski, R., Dobrzyn, A., Ntambi, J.M., and Woods, J.P. Ferrous, but not Ferric, Iron Maintains Homeostasis in *Histoplasma capsulatum* triacylglycerides. *Curr Microbiol.* 2008 57(2):153-157.
127. Makoto Miyazaki and **James M. Ntambi**. Fatty Acid desaturation and elongation in mammals; In *Biochemistry of Lipids, Lipoproteins and Membranes 5th edition* D.E. Vance and J. E. Vance Editors 2008 pp.191-211.
128. Flowers, Matthew T. and **Ntambi, James M.** Gene Inactivation and Tissue-specific Metabolism. In: *ENCYCLOPEDIA OF LIFE SCIENCES*. John Wiley & Sons, Ltd: Chichester 2008.
129. Chad Paton and **James M. Ntambi**. Biochemical and Physiological Function of Stearoyl-CoA Desaturase. *Am J Physiol Endocrinol Metab.* 2009 297(1): E28-37.
130. Matthew T. Flowers and **James M. Ntambi**. Stearoyl-CoA Desaturase and its Relation to High-Carbohydrate Diets and Obesity. *BBA* 2009 1791 85-91.
131. Makoto Miyazaki, Harini Sampath, Xueqing Liu, Matthew T. Flowers, Kiki Chu, Agnieszka Dobrzyn and **James M. Ntambi**. Stearoyl-CoA Desaturase-1 deficiency attenuates obesity and insulin resistance in leptin-resistant obese mice. *BBRC* 2009 380, 818-822.
132. Florence Isabirye Muranga, Miriam Kanyago, Fabian Nabugoomu and **James M. Ntambi**. Investigation of the potential of fortified instant Matooke flour (ITF) in rehabilitation of malnourished children (Part 1): Optimal level of fortification of instant Matooke flour porridge and its nutritional quality attributes. *African Journal of Food Science* 2009 Vol. 3(10) pp. 273-278.
133. Florence Isabirye Muranga, Miriam Kanyago, Fabian Nabugoomu and **James M. Ntambi**. Investigation of the potential of fortified instant Matooke flour (ITF) in rehabilitation of malnourished children (Part 2): Testing potential of ITF as a vehicle food for malnutrition intervention. *African Journal of Food Science* 2009 Vol. 3(10) pp. 279-287.
134. Harini Sampath, Matthew T. Flowers, Xueqing Liu, Chad M. Paton, Ruth Sullivan, Kiki Chu, Minghui Zhao, and **James M. Ntambi**. Skin-specific deletion of stearyl-CoA desaturase-1 alters skin lipid composition and protects mice from high-fat diet-induced obesity. *JBC* 2009 284 19961-19973.
135. Xueqing Liu and **James M Ntambi**. Atherosclerosis: keep your macrophages in shape. *Nature Medicine* 2009 15, 1357-1358.

136. Liu X, Miyazaki M, Flowers MT, Sampath H, Zhao M, Chu K, Paton CM, Joo DS, **Ntambi JM**. Loss of stearoyl-CoA Desaturase-1 Attenuates Adipocyte inflammation: Effects of Adipocyte-Derived Oleate. *Arterioscler Thromb Vasc Biol*. 2010 30, 31-8. PMID: 19910642
137. Strable MS and **Ntambi JM**. Genetic control of *de novo* lipogenesis: role in diet-induced obesity. *Crit Rev Biochem Mol Biol*. 2010 45(3): 199-214. PMID: 20218765
138. Pawel Dobrzyn, Agnieszka Dobrzyn, Makoto Miyazaki, **James M. Ntambi**. Loss of stearoyl-CoA desaturase 1 rescues cardiac function in obese leptin-deficient mice. *J. Lipid Res*. 2010 51:(8) 2202-2210. PMID: 20363835
139. **James M. Ntambi**. Role of Stearoyl-CoA desaturase in Regulating Obesity. *ASBMB today*. 2010 May 32.
140. Chang-Kee Hyun, Eun-Do Kim, Matthew T. Flowers, Xueqing Liu, Eunha Kim, Maggie Strable and **James M. Ntambi**. Adipose-specific deletion of stearoyl-CoA desaturase 1 up-regulates the glucose transporter GLUT1 in adipose tissue. *Biochem Biophys Res Commun*. 2010 399(4):480-6. PMID: 20655875
141. Chad M. Paton and **James M. Ntambi**. Loss of stearoyl-CoA desaturase activity leads to free cholesterol synthesis through increased Xbp-1 splicing. *American Journal of Physiology* 2010 299 (6), 1066-75. PMID: 20923962
142. Sihao Liu, Ben Hatano, Minghui Zhao, Chen-Chung Yen³, Kihwa Kang¹, Shannon M. Reilly, Matthew Gangl, Cem Gorgun, James A. Balschi, **James M. Ntambi** and Chih Hao Lee. Role of peroxisome proliferator-activated receptor $\{\delta\}/\{\beta\}$ in hepatic metabolic regulation. *J. Biol. Chem*. 2011 286: 1237-1247. PMID: 21059653
143. Xueqing Liu, Maggie S. Strable, and **James M. Ntambi**. Stearoyl CoA desaturase 1: role in cellular inflammation and stress. *Adv. Nutr*. 2011 2: 15–22. PMID: 22211186
144. Harini Sampath and **James M. Ntambi**. The role of fatty acid desaturases in epidermal metabolism. *Dermato-Endocrinology* 2011 3:2, 62-64. PMID: 21695013
145. Matthew T. Flowers, Chad M. Paton, Sheila M. O'Byrne, Kevin Scheisser, John Dawson, William S. Blaner, Christina Kendzierski, **James M. Ntambi**. Metabolic Changes in Skin Caused by *Scd1* deficiency: A Focus on Retinol Metabolism. *PLoS One* 2011 5, (5)e19734. PMID: 21573029
146. **James M. Ntambi**. Obesity in Africa highlights this global epidemic. *ASBMB today* June 2011 36.
147. Richard J. Deckelbaum, **James M. Ntambi**, and Debra J. Wolgemuth. Basic Science Research and Education: A Priority for Training and Capacity Building in Developing Countries. *Infect Dis Clin N Am* 2011 25, 669–676. PMID: 21896366

148. Kim E, Lee JH, **Ntambi JM**, Hyun CK. Inhibition of stearoyl-CoA desaturase1 activates AMPK and exhibits beneficial lipid metabolic effects in vitro. *Eur J Pharmacol.* 2011 Dec 15;672(1-3):38-44. PMID: 21970804
149. Harini Sampath and **James M. Ntambi**. The role of stearoyl-CoA desaturase in obesity, insulin resistance, and inflammation. *Ann N.Y Acad Sci* 2011 Dec;1243:47-53. PMID: 22211892
150. Kristen E.N. Scott, Frances B. Wheeler, Michael J. Thomas, **James M. Ntambi**, Darren F. Seals and Steven J. Kridel. Metabolic regulation of invadopodia and invasion by acetyl-CoA carboxylase and *de novo* lipogenesis. *PLoS One* 2012 7, e29761. PMID: 22238651
151. Matthew T. Flowers, Lacmbouh Ade, Maggie S. Strable and **James M. Ntambi**. Combined deletion of SCD1 from adipose tissue and liver does not protect mice from obesity. *Journal of Lipid Research* 2012 53. 1646-1653. PMID: 22669918
152. Lisa Krugner-Higby, Richard Brown, Matthew Rasette, Melissa Behr, Ogi Okwumabua, Mark Cook, Cynthia Bell, Matthew T Flowers, **James M. Ntambi** and Annette Gendron. Ulcerative Dermatitis in C57BL/6 Mice Lacking Stearoyl CoA Desaturase. *Comp Med* 2012 62: 257-263.
153. Anna Dziewulska, Pawel Dobrzyn, Magdalena Jazurek, Aleksandra Pyrkowska, **James M. Ntambi** and Agnieszka Dobrzyn. Monounsaturated fatty acids are required for membrane translocation of protein kinase C-theta induced by lipid overload in skeletal muscle. *Mol. Mem. Biol.* 2012 29(7): 309–320. PMID: 22881371
154. Macdonald MJ, Hasan NM, Dobrzyn A, Stoker SW, **Ntambi JM**, Liu X, Sampath H. Knockdown of pyruvate carboxylase or fatty acid synthase lowers numerous lipids and glucose-stimulated insulin release in insulinoma cells. *Arch Biochem Biophys.* 201 532(1): 23-31. PMID: 23357280
155. **James M. Ntambi**. Stearoyl-CoA Desaturase-1 is a regulator of Energy Homeostasis. In: *Stearoyl-CoA Desaturase Genes in Lipid Metabolism*. J. M. Ntambi Editor Springer 2013 pp. 27.
156. Jennifer L. Cantley, Lucas M. O'Neil, **James M. Ntambi** and Michael P. Czech. The Cellular Function of Stearoyl-CoA Desaturase-2 in Development and Differentiation. In: *Stearoyl-CoA desaturase Genes in Lipid Metabolism*. J. M. Ntambi Editor Springer 2013 pp. 119.
157. Laura Bond and **James M. Ntambi**. Stearoyl-CoA Desaturase Genes 3 and 4: Avenues for Tissue Specific D9 Desaturase Activity. In: *Stearoyl-CoA Desaturase Genes In Lipid Metabolism*. J. M. Ntambi Editor Springer 2013 pp. 131.
158. Michael P. Rogowski, Matthew T. Flowers, Alexis D. Stamatikos, **James M. Ntambi**, & Chad M. Paton. SCD1 activity in muscle increases triglyceride PUFA content, exercise capacity, and PPAR δ expression in mice. *J. Lipid Res.* 2013 Oct;54(10):2636-46. PMID: 23918045

159. Jie Liu, Resat Cinar, Keming Xiong, Grzegorz Godlewski, Tony Jourdan, Yuhong Lin, **James M. Ntambi**, and George Kunos. Monounsaturated fatty acids generated via stearoyl CoA desaturase-1 are endogenous inhibitors of fatty acid amide hydrolase. PNAS 2013 110 (47) 18832-18837. PMID: 24191036
160. **James M. Ntambi**. Stearoyl-CoA Desaturase-1 is a regulator of Energy Homeostasis. In: Stearoyl-CoA Desaturase Genes in Lipid Metabolism. J. M. Ntambi Editor Springer 2013 pp. 27-35.
161. Harini Sampath and **James M. Ntambi**. Role of Stearoyl-CoA Desaturase-1 in Skin Integrity and Whole Body Energy Balance. J. Biol. Chem. 2014 289: 2482-2488. PMID: 24356954
162. Nicholas J Friedlander, Maggie S Burhans, Lacmbouh Ade, Lucas M O'Neill, Xiaoli Chen, **James M Ntambi**. Global deletion of lipocalin 2 does not reverse high-fat diet-induced obesity resistance in stearoyl-CoA desaturase-1 skin-specific knockout mice. BBRC 2014 Mar 14;445(3):578-583. PMID: 24548407
163. Elizabeth A. Berkley, Scott D. Peckham, Harini Sampath, Joseph Bodewes, **James M. Ntambi** and Tomothy R. Deelen. Ingestion of Fat Tissue From Wolf Prey Species and Its Influence on Fatty-Acid Composition in Sled Dogs. Wildlife Society Bulletin 2014 38(1):51-59.
164. Zarnowski R, Westler WM, Lacmbouh GA, Marita JM, Bothe JR, Bernhardt J, Lounes-Hadj Sahraoui A, Fontaine J, Sanchez H, Hatfield RD, **Ntambi JM**, Nett JE, Mitchell AP, Andes DR. Novel entries in a fungal biofilm matrix encyclopedia. mBio 2014 Aug 5;5(4):e01333-14. PMID: 25096878
165. Mandrup S, MacDougald OA, Moss J, **Ntambi J**, Pekala P, Tang QQ, Wolfgang M, Bernlohr DA. In memoriam: M. Daniel Lane, 1930-2014. Trends Endocrinol Metab. 2014 S1043-2760(14)00124-6.
166. Guo, Chang, An, O'Neill, Lucas M, and **Ntambi, James M**. Gene Inactivation Strategies: An Update. In: eLS. John Wiley & Sons Ltd, Chichester. 2014 [doi: 10.1002/9780470015902.a0021020.pub2].
167. **Ntambi JM**. Stearoyl-CoA desaturases are regulators of lipid metabolism in skin. Chapter 15, "Lipids and Skin Health" Pappas Editor Springer (December 2014).
168. Maggie S. Burhans, Matthew T. Flowers, Kristin R. Harrington, Laura M. Bond, Chang-An Guo, Rozalyn M. Anderson, and **James M. Ntambi**. Hepatic oleate regulates adipose tissue lipogenesis and fatty acid oxidation J. Lipid Res. 2015 56:(2) 304-318. PMID: 25555387
169. MacDonald MJ, Ade L, **Ntambi JM**, Stoker SW. Characterization of Phospholipids in Insulin Secretory Granules and Mitochondria in Pancreatic Beta Cells and Their Changes with Glucose Stimulation. J Biol Chem. 2015 290 11075-11092. PMID: 25762724

170. Amber J. Marty, Aimee T. Broman, Robert Zarnowski, Teigan Dwyer, Laura M. Bond, Anissa Lounes-Hadj Sahraoui, Joël Fontaine, **James M. Ntambi**, Sunduz Keles, Christina Kendzioriski, Gregory M. Gauthier. Fungal morphology, iron homeostasis, and lipid metabolism regulated by a GATA transcription factor in *Blastomyces dermatitidis*. *PLoS Pathog* 2015 22(6) :983-96. PMID: 26114571
171. Michael A Polewski, Maggie S Burhans, Minghui Zhao, Ricki J Colman, Dhanansayan Shanmuganayagam, Mary J Lindstrom, **James M Ntambi**, Rozalyn M Anderson. Plasma diacylglycerol composition is a biomarker of metabolic syndrome onset in rhesus monkeys *J. Lipid Res.* 2015, 56: 1461-1470. PMID: 26063458
172. Laura M. Bond, Makoto Miyazaki, Lucas M. O'Neill, Fang Ding, **James M. Ntambi**. Fatty Acid Desaturation and Elongation in Mammals. In: *Biochemistry of Lipids, Lipoproteins and Membranes 6th edition* D. E. Vance and J. E. Vance Editors 2015 185-208.
173. Vishal Singh, Benoit Chassaing, Limin Zhang, Beng San Yeoh, Xia Xiao Manish Kumar, Mark T Baker, Kevin Harvatin, **James M. Ntambi**, Andrew D. Patterson, Andrew Gewirtz, Matam Vijay-Kumar. Microbiota-Dependent Hepatic Lipogenesis Mediated by Stearoyl CoA Desaturase (SCD-1) Determines Metabolic Syndrome in TLR5-Deficient Mice. *Cell Metabolism* 2015 22(6):983-96. PMID: 26525535
174. Masashi Masuda, Shinobu Miyazaki-Anzai, Audrey L. Keenan, Kayo Okamura, Stefan Offermans, **James M. Ntambi**, Makoto Kuro, Makoto Miyazaki. Saturated phosphatidic acids mediate saturated fatty acid-induced vascular calcification and lipotoxicity. *J Clin Invest.* 2015 125(12): 4544-58. PMID: 26517697
175. Hepatic De Novo Lipogenesis and Regulation of Metabolism. **James M. Ntambi** Editor Springer 2016.
176. Vishal Singh, Beng San Yeoh, **James M. Ntambi**, Matam Vijay-Kumar. Influence of Gut Microbiota on Hepatic Lipogenesis and Disease Pathogenesis In: *Hepatic De Novo Lipogenesis and Regulation of Metabolism* J. M. Ntambi Editor Springer 2016. 143-164.
177. Mohamed Amine, Lounis Sabri Rial, **James M. Ntambi** Catherine Mounier. Role of Lipogenesis and Lipid Desaturases in Non-alcoholic Fatty Liver Disease In: *Hepatic De Novo Lipogenesis and Regulation of Metabolism* J. M. Ntambi Editor Springer 2016. 189-210.
178. Maggie S. Burhans and **James M. Ntambi**. Monounsaturated Fatty Acid Mediated Liver-Adipose Tissue Crosstalk and Metabolic Regulation In: *Hepatic De Novo Lipogenesis and Regulation of Metabolism* J. M. Ntambi Editor Springer 2016. 255-266.
179. Chang-An Guo, Laura M. Bond and **James M. Ntambi**. Metabolic Regulation of Inflammation. *Frontiers in Inflammation*, 2016, Vol. 1, 83-105.

180. **James M. Ntambi**. miRNAs Caught Up in Metabolic Organ Crosstalk to Combat Obesity EBioMedicine 2016 5, 10-11. PMID: 27077099
181. Xueqing Liu, Maggie S. Burhans, Matthew T. Flowers, **James M. Ntambi**. Hepatic oleate regulates liver stress response partially through PGC-1 α during high-carbohydrate feeding. J. Hepatology 2016 65, 103-112. PMID: 26976120
182. Mohamed A. Lounis, Quentin Escoula, Cathy Veillette, Karl F. Bergeron, **James M. Ntambi**, Catherine Mounier. SCD1 deficiency protects mice against ethanol-induced liver injury. Biochim Biophys Acta. 2016 1861(11) 1662-1670. PMID: 27477676
183. Emily A. Sawin, Bridget M. Stroup, Sangita G. Murali, Lucas M. O'Neill, **James M. Ntambi**, and Denise M. Ney. Differential Effects of Dietary Fat Content and Protein Source on Bone Phenotype and Fatty Acid Oxidation in Female C57Bl/6 Mice. PLoS One 2016 Oct 03. PMID: 27695036
184. Tomasz Bednarski; Adam Olichwier; Agnieszka Opasinska; Aleksandra Pyrkowska; Ana-Maria Gan; **James M Ntambi**; Pawel Dobrzyn. Stearoyl-CoA desaturase 1 deficiency reduces lipid accumulation in the heart by activating lipolysis independently of peroxisome proliferator-activated receptor alpha Biochim Biophys Acta 2016 1861 (12), 2029-2037. PMID: 27751891
185. Lai KK, Kweon SM, Chi F, Hwang E, Kabe Y, Higashiyama R, Qin L, Yan R, Wu RP, Fujii N, French S, Xu J, Wang JY, Murali R, Mishra L, Lee JS, **Ntambi JM**, Tsukamoto H. Stearoyl-CoA Desaturase Promotes Liver Fibrosis and Tumor Development in Mice via Wnt Signaling and Stabilization of Low Density Lipoprotein Receptor-related Proteins 5 and 6. Gastroenterology. 2017 Jan 28. pii: S0016-5085(17)30081-1. doi: 10.1053/j.gastro.2017.01.021. PMID: 28143772
186. Miller KN, Burhans MS, Clark JP, Howell PR, Polewski MA, DeMuth TM, Eliceiri KW, Lindstrom MJ, **Ntambi JM**, Anderson RM. Aging and caloric restriction impact adipose tissue, adiponectin, and circulating lipids. Aging Cell. 2017 Feb 03. doi: 10.1111/accel.12575. PMID: 28156058
187. Ansari IH, Longacre MJ, Stoker SW, Kendrick MA, O'Neill LM, Zitur LJ, Fernandez LA, Ntambi JM, MacDonald MJ. Characterization of Acyl-CoA synthetase isoforms in pancreatic beta cells: Gene silencing shows participation of ACSL3 and ACSL4 in insulin secretion. Arch Biochem Biophys. 2017 618:32-43. PMID: 28193492
188. Mary J. Christoph, PhD, MPH, Diana S. Grigsby-Toussaint, PhD, MPH, Rhona Baingana, MS, **James M. Ntambi, PhD**. Physical Activity, Sleep, and BMI Percentile in Rural and Urban Ugandan Youth. Ann of Glob Health 2017 83 (2) 311-319. PMID: 28619406

189. Lounis MA, Bergeron KF, Burhans MS, **Ntambi JM**, Mounier C. Oleate increases SREBP-1 signaling activity in SCD1 deficient hepatocytes. *Am J Physiol Endocrinol Metab.* 2017 Aug 29: ajpendo.00151.2017. PMID: 28851735
190. Forney LA, Stone KP, Wanders D, **Ntambi JM**, Gettys TW. The role of suppression of hepatic SCD1 expression in the metabolic effects of dietary methionine restriction. *Appl Physiol Nutr Metab.* 2017 Oct 05. doi: 10.1139/apnm-2017-0404. PMID: 28982014
191. Ahmed M. ALJohani, Deeba N. Syed, **James M. Ntambi**. Insights into Stearoyl-CoA desaturase-1 Regulation of Systemic Metabolism. *Trends in Endocrinology and Metabolism 2017. In Press*

PATENTS:

1. Us Patent #P00186US
2. US Patent #7816075
3. US Patent #7696151
4. US Patent #7790408
5. US: 60/398,471: Methods for Increasing Insulin Sensitivity and for Treating and Preventing Type 2 Diabetes
6. US PO1394 US: Increased Lean Body Mass Through Inhibition of Stearoyl-CoA Desaturase (SCD1): SCD1 is a Target for Muscle Building and Lean Beef Production
7. P05141 US: Development of Specific Assay for Human SCD Isoforms and Determination of Substrate Specificities
8. P05362 US: Methods and Materials for Assaying Non-SCD1 Isoforms
9. P04003 US: Vitamin D Analogs For Obesity Prevention And Treatment; (App # 10/997698)
10. U.S. Patent Application No. 11/147,606: Stearoyl-CoA Desaturase 4 Gene
11. US P130387US01 Prevention and Treatment of Dermatitis and Ulcerative Dermatitis
12. P150057: Molecular Blood Profile and Use thereof for clinically predicting the subsequent development of metabolic syndrome and/or gluoregulatory impairment.

ABSTRACTS: more than 60

TEACHING:

Biochemistry 501: Introduction to Biochemistry (1993-2012)

This is a high enrollment course (approx. 800 students) that is designed to survey the principles of biochemistry for students who are non-majors and those who are biochemistry majors. Some of the students are graduate students. The course is taught every semester. The students come from different disciplines of the campus including Chemical Engineering, Nutritional Sciences, Bacteriology, Dairy Science, Horticulture, Meat and Animal Science. Biochemistry 501 therefore represents an important service course to the University. This is a three-credit course, which includes three lectures per week and two discussion sections led by the second- or third-year Ph.D. student within the department of Biochemistry. 22 of the 86 lectures per year are presented by myself while the other lectures are presented by Drs. Amasino (20), Butcher (22) and Kelly Harris-Johnson (22).

Biochemistry 510: Biochemical Principles of Human and Animal Nutrition (1999-2004)

This is a three-credit course emphasizing human nutrition. It is a team-taught course, and I present sixteen lectures on micronutrients and hormones that utilize steroid hormone nuclear receptors to elicit biological responses. Enrollment is about 70 students.

Biochemistry 511: Undergraduate seminar course (Fall 1996, Spring 2010)

This course is intended for the undergraduate students to disseminate information to colleagues about recent advances in biochemistry, cell biology, molecular biology, immunology, genetics, toxicology, virology, and neurology and related areas. It provides the students with an opportunity to study a topic of interest in depth and to practice oral presentation in a semi-formal, yet supportive setting.

Nutritional Sciences 619: Intermediary Metabolism of Macronutrients (Spring 2000-present)

This is a three credit graduate team-taught course. My lectures are on lipid metabolism and gene expression.

Biochemistry 901: Nutrition and Metabolism seminar course (Fall 1994-present)

This is a 1 credit graduate level course taught in the fall. The seminar topics are organized as a series of talks, which deal with recent advances in a number of specific areas of importance to metabolism/nutrition. Dr. Richard Eisenstein and myself have assumed major responsibility for the organization and management of this course. 10-15 graduate students enroll in this course.

Biochemistry 999: Research orientation course (Fall 1993-present)

I have presented one lecture during the fall semester to new Biochemistry graduate students about various aspects of the research going on in my laboratory.

International Health and Nutrition: The Uganda Undergraduate Program (2002-present)

I have never been satisfied with success just in the classroom. I embody the philosophy that an educational experience at UW is multi-faceted and involves efforts outside the classroom as well as within it. For example, my contribution to international education is a significant service to the department of biochemistry and nutritional sciences department, the University of Wisconsin and the international community. Since the fall of 2002, I have led an extraordinary and invaluable program for UW-Madison undergraduates, taking them to Uganda to both learn about nutrition and put what they learn into practice – an experience that brings new meaning to their education.

The program combines a semester course with a 3-week field experience in Uganda. During the fall course, my colleagues here at UW and I provide students with background information on the biochemical basis of nutrition, agriculture, culture, education, economics and public health issues particular to Uganda, so that when they arrive they have a good grasp of the realities faced by Ugandans as they make their health and nutrition decisions. While in Uganda, they visit rural health centers, HIV/AIDS clinics, child nutrition centers, agricultural research stations, farms and local markets to learn about the relationships between health, water and food. While in the field and towards the end of every day I discuss with the students the real life experiences they would have witnessed putting them in the context of biochemistry or nutritional sciences lectures they receive in classroom setting in Madison.

Global Health Certificate:

We provide global health field experience that introduces students to the many facets of multidisciplinary and collaborative approaches to global health. Our typical field course includes mobile clinics, some combination of site visits, service learning and meetings with government agencies, nonprofits and community groups in Uganda. The field experiences offer students the chance to see connections between human, animal and environmental health. They also allow them to compare their perceptions of health and wellness in new settings among diverse populations. Students on field courses do not provide medical care to patients.

PhD Training programs in Nutritional Sciences in Africa by ANSRC:

The primary goal of the African Nutritional Sciences Consortium (ANSRC) is to develop world class graduate level (PhD) training in laboratory-based biochemistry and nutritional sciences, which will in turn enhance nutritional security and economic capacity in East Africa through improved access to quality advanced training and research opportunities.

PAST AND PRESENT UNIVERSITY SERVICE:

- Served as Acting Assistant Dean of the college of Agricultural and Life sciences (CALs) for student affairs (Spring semester 2000)
- Member of CALs task force for the Acceleration of Internationalization
- Member of CALs Equity and Diversity Committee
- Grant reviewer Hatch competitive funded programs
- Member of International degrees committee
- Serve on 8 departmental committees of Biochemistry and Nutritional Sciences
- Numerous Ph.D., Master degree and preliminary examination committees
- 5 University training programs
- Member of the CALs Curriculum Committee
- Member of Biological Sciences Curriculum planning committee
- Member, CALs Animal Care and Use Committee (ACUC) (1996-1999)
- Chairperson, The Biochemistry Roundtable Discussion Section for the 10th Annual Committee on Institutional Cooperation (CIC) Conference (1997)
- Forum organized by World Bank on funding of international programs (1997)
- Faculty Senator for Department of Biochemistry (1993-1995)
- Chair, Dept. of Nutritional Sciences
- Director, Interdepartmental Graduate Program In Nutritional Sciences
- Faculty Senator for Department of Biochemistry (2015-)

PROFESSIONAL EXPERIENCE AND SERVICE:

- | | |
|-----------|-------------------------------------------------------------------------------------------------------------------|
| 1986 | Visiting Scientist, International Laboratory for Research on Animal Diseases (ILRAD), Nairobi, Kenya |
| 1989-1992 | Member, NIH grant review committee |
| 1990 | Visiting Professor, Department of Biochemistry, Makerere University, Kampala, Uganda |
| 1991-1994 | Consultant, ISTI and USAID's Agency Center for University Cooperation in Development, Washington, DC |
| 1992 | Visiting Professor, Department of Biochemistry, Makerere University, Kampala, Uganda |
| 1993 | Committee Member, National Research Council/National Academy of Sciences Grant Review Panel, Washington, DC |
| 1994 - | Reviewer, Proceedings of the National Academy of Sciences
Reviewer, <i>The Journal of Biological Chemistry</i> |
| 1995 | Member, NIH site visit team, Hunter College, New York, New York |

- Grant reviewer for the National Research Council/National Academy of Sciences
- Reviewer, *Journal of Lipid Research*
- Chairperson, The Biochemistry Roundtable Discussion Section for the 10th Annual Committee on Institutional Cooperation (CIC) Conference, University of Wisconsin-Madison
- 1996 Reviewer, *Journal of Nutritional Biochemistry*
- Reviewer, *Biochim. Biophys. Acta*
- 1997 - Reviewer, *Journal of Lipid Research*
- Reviewer, *Journal of Nutrition*
- Grant Reviewer for USDA
- 1998 - Grant Reviewer for American Heart Association
- Member, Editorial Advisory Board of Nutrition: The International Journal of Applied and Basic Nutritional Sciences
- Member, NIH Site Visit Team, Boston University
- Member, NIH site visit team, Boston University
- 2001-2002 Chair, Nutrient and Gene Interactions Interest Research Section International Society of Nutritional Sciences
- 2001-2004 Member, NIH Physiological Chemistry Study section
- 2004-2006 Member of MGC NIH Study section
- 2002-2004 Committee member Food and Nutrition Board, Institute of Medicine, National Academy of Sciences
- 2002-2007 Member of National Institutes of Alcohol and Alcohol Abuse (NIAAA) Board of Scientific Counselors
- Member of the Graduate Record Examination (GRE) Biochemistry, Cell and Mol. Biol. Committee of Examiners
- 2004 Grant Reviewer for Research Council of Norway
- 2006 Committee member NIH State of-the-Science Conference on Multivitamin/Mineral Supplements and Chronic Disease

- Member of Cellular Aspects of Diabetes and Obesity (CADO) NIH Study section
- 2006 - Reviewer, *Biochemical Biophysical Research Communications (BBRC)*
 Reviewer, *Cell and Metabolism*
 Reviewer, *Journal of Clinical Investigation*
 Reviewer, *American Journal of physiology Endocrinology and Metabolism*
 Reviewer, *Diabetes Journal*
 Reviewer, *International Journal of Obesity*
- 2007 Co-Chair of the Board of Examiners for the Graduate Record Examination in Biochemistry, Cell and Molecular Biology
- 2008-2010 Member of cellular aspects of Diabetes and obesity (CADO) NIH study section
 Xenobiotic and Nutrient Disposition and Action (XNDA) NIH study section
 Reviewer, Fulbright African Regional Research Program
- 2011 Reviewer, Mouse metabolic Phenotyping Centers Consortium, National Institutes of Health (NIH) study section
 Co-Chair and reviewer of the American Heart Association (AHA) Lipoprotein and Metabolism Basic science -1 grants
 Board member Malaria Institute, Johns Hopkins University School of Public Health, Baltimore MD, USA
- 2011-2017 Reviewer, National Institutes of Health Diabetes, Digestive and kidney diseases (NIH DDK-B) subcommittee
- 2012 Reviewer, *American Institute of Biological Sciences*
- 2012-Present Member of Institute of Medicine (IOM) Food and Nutrition Board
 Chair, of the American Heart Association Lipoprotein and Metabolism Basic Science-1 grant review panel
 Editorial Board of *Annual Review of Nutrition*
 Member on the International Committee of the American Society for Cell Biology

- 2014-Present Editorial Board of *Journal of Biological Chemistry*
 Editorial Board *BBRC Journal*
- 2014 Thesis defense opponent University of Oslo Norway
- 2015 Thesis defense opponent, University of Southern Denmark
- 2017 Thesis defense opponent, University of Southern Denmark

MEETINGS ORGANIZED:

- 1999 Organizer of the 27th Steenbock Symposium, on Adipocyte Biology and Hormone Signaling, University of Wisconsin-Madison, Madison, WI
 Organizer and Chair of Federation of American Society for Biochemistry (FASEB) symposium on Lipid Metabolism and Gene Expression, Washington, DC
- 2000 Organizer and Chair of the Federation of American Society for Biochemistry (FASEB) mini symposium on Adipocyte Differentiation, Metabolism and Gene Expression, San Diego, CA
- 2004 One of the organizers of the American Diabetes Association research symposium on Integrative Role of Fatty Acids in Metabolic Regulations for Obesity and Diabetes, Newport, RI
- 2005 Chair of Federation of American Society for Biochemistry (FASEB) session of the metabolic regulatory circuits meeting, San Diego, CA
- 2006 Chair of International Society for the study of fatty acids and lipids session on omega 3 fatty acids, Cairns, Australia
- 2008 Theme Chair of the 2008 American Society for Biochemistry and Molecular Biology (ASBMB) in San Diego, CA
- 2011 Symposium chair ASBMB on enzymes, hormones, and obesity, Washington, DC
 Organizer of the 34th Steenbock Symposium, on Metabolism of lipids: Implications in Human diseases, University of Wisconsin-Madison, Madison, WI
- 2012 Session Chair Frontiers in Lipid Biology Conference, Banff, Canada
- 2015 Session Chair at Gordon Conference on Cellular and Molecular Biology of Lipids Waterville Valley NH

2016 Organizer and Chair of the American Society for Biochemistry and Molecular Biology symposium on Lipids and Lipid Signaling, San Diego CA

INVITED SEMINARS AND LECTURES (1993-Present):

- 1993 • Department of Physiology, Michigan State University, East Lansing, MI
• Department of Biochemistry, Makerere University, Kampala, Uganda
- 1994 • Department of Pharmacology, Makerere University School of Medicine, Kampala, Uganda
• Department of Nutrition, University of Wisconsin-Madison, Madison, WI
• Federation of the American society for Biochemistry (FASEB) Meeting, Anaheim, CA
• 2nd Round Table on Fatty Acids and Cell Signaling, University of Wisconsin-Madison, Madison, WI
- 1995 • Department of Biochemistry and Molecular Biology, Georgetown University School of Medicine, Washington, DC
• 2nd International Congress of the ISSFAL; International Society for the Study of Fatty Acids and Lipids at NIH, Bethesda, MD
• Environmental Toxicology Center, University of WI-Madison, Madison, WI
• Wisconsin Biotechnology Association (WBA) Midwest Regional Biotechnology Conference, Madison, WI
- 1996 • First South African International Symposium on Development, Cell and Molecular Biology, University of Witwatersrand, Johannesburg, South Africa
• Department of Biochemistry, The University of the North, South Africa
• Department of Biological Chemistry, Johns Hopkins University School of Medicine, Baltimore, MD
• National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Division of Diabetes, Endocrinology, and Metabolic Diseases, Bethesda, MD
• Department of Anatomy, University of Wisconsin-Madison, Madison, WI
• Department of Medical Biochemistry, University of Oslo, Oslo, Norway
• Scandinavian Forum for Lipid Research and Technology, Norwegian Academy of Science and Letters, Oslo, Norway
• Department of Biochemistry and Molecular Biology, Odense University, Odense, Denmark
- 1997 • Department of Biochemistry, University of Wisconsin-Madison, Madison, WI
- 1998 • Division of Nutritional Sciences, Cornell University, Ithaca, NY
• FASEB Meeting San Francisco, CA
• Invited speaker to the 89th American Oil Chemical Society and Expo, Chicago, IL
• Department of Nutrition, University of California, Berkeley, CA
• Division of Gastroenterology, Department of Medicine, University of California, San Francisco, CA

- Department of molecular and cellular and developmental Biology, University of California, Santa Barbara, CA
- 1999
- Departments of Biochemistry and Animal Sciences, University of Missouri Columbia: The Boyd O'Del lecture
 - Skin Biology Research Center, Johnson and Johnson
 - Cardiovascular Disease Section, Turlik Corporation
 - FASEB Meeting, Washington, DC, and also chair of session of Lipid Metabolism and Gene Expression
 - 40th International Conference on the Biochemistry of Lipids, Dijon, France
 - The XXXV annual meeting of The Argentina Society of Biochemical and Molecular Biology, Mendoza City, Argentina
 - International Workshop on Dietary Factors and Cardiovascular Disease, Rome, Italy
 - 27th Steenbock Symposium on Adipocyte Biology and Hormone Signaling, University of Wisconsin-Madison, Madison, WI
- 2000
- FASEB Meeting, San Diego, CA, and also chair of session of Adipocyte Differentiation and Metabolism and Gene Expression
 - An International Workshop on Brain Uptake and Utilization of Fatty Acids, Bethesda, MD
 - Department of Biology, San Diego State University, San Diego, CA
 - Xenon Genetics Inc., Vancouver, BC, Canada
 - 51st Harden Conference on Fatty Acid Desaturases: Function and Future. Wye College, Kent, England
 - International Society for the Study of Fatty Acids and Lipids, Tsukuba, Japan
 - Invited participant FASEB Minority Access Research Career Program Tucson, AZ
 - Invited speaker: Canadian Society of Exercise Physiology, (CSEP) Conference University of Calgary, Calgary, Alberta, Canada
 - Invited speaker: An International workshop on Omega 3 Fatty Acids, Diabetes and Cardiovascular Disease, Bethesda, MD
- 2001
- FASEB Meeting, Orlando, FL
 - Seminar Dept. of Biochemistry, James Cook University, Townsville, Australia
 - 2nd Messengers and phosphoproteins, Melbourne, Australia
 - Department of Jewish studies, University of Sydney, Australia
 - Millennium Pharmaceuticals Inc, Cambridge, MA
 - Hoffmann-La Roche, Nutley, NJ
 - Gordon Research Conference, Kimball Union Academy, Meriden, NH
 - American Chemical Society symposium on Influence of Food Components on Gene Expression, Chicago, IL
 - 4th International Smolenice Insulin Symposium: Lipids and insulin Resistance, Smolenice Castle, Slovak Republic
 - Department of Nutrition, University of North Carolina, Chapel Hill, NC
 - National Eye Institute, NIH
- 2002
- Department of Chemistry, City College of the City University of New York, NY

- Department of Medicine, National Jewish Medical and Research Center, Denver, CO
 - Eli Lilly and Company, Indianapolis, IN
 - FASEB Meeting, New Orleans, LA
 - American Oil Chemical Society symposium on Lipid Modulation of Gene Expression, Montreal, Canada
 - 15th International Symposium on Plant Lipids, Okazaki, Japan
 - Kern Conference Aspen, CO
 - 53rd EAAP conference, Cairo, Egypt
 - Department of Nutrition, Columbia University, New York, NY
 - External Examiner for Vern Dolinsky's Ph.D. thesis Department of Biochemistry, University of Alberta, Edmonton, Alberta, Canada
 - Department of Biochemistry, University of Alberta, Edmonton, Alberta, Canada
- 2003
- Department of Nutrition, The Pennsylvania State University, PA
 - Federation of American Society for Experimental Biology (FASEB) Meeting, San Diego, CA
 - Gordon Research Conference, Kimball Union Academy, Meriden, NH
 - Federation of American Society for Experimental Biology (FASEB) Summer Conference (Intestinal Lipid transport), Snowmass, CO
 - Federation of American Society for Experimental Biology (FASEB) Summer Conference (Nutrient Gene Expression), Snowmass, CO
 - Arteriosclerosis, Thrombosis and Vascular Biology Conference, Washington, DC
 - Department of Nutrition, University of Wisconsin-Madison, Madison, WI
 - Department of Human Nutrition, University of Florida, Gainesville, FL
 - Department of Biology, San Diego State University, San Diego, CA
 - Department of Biological Chemistry, Johns Hopkins University School of Medicine, Baltimore, MD
 - Departments of Physiology and Internal Medicine, Touchstone Center for Diabetes Research, UT Southwestern Medical Center, Dallas, TX
 - Pfizer Discovery Technology Center, Cambridge, MA
 - Diabetes and Metabolism, Novartis Institutes for Biomedical Research, Cambridge, MA
 - SPRL, Cambridge, MA
- 2004
- Case Western Reserve University, Department of Nutrition, Cleveland, OH
 - American Diabetes Association Symposium, Newport, RI
 - American Diabetes Association meeting, Orlando, FL
 - International Society for the Study of Fatty Acids and Lipids (ISSFAL) meeting, Brighton, England
 - Pfizer Discovery Technology Center, Cambridge, MA
 - Department of Food Science and Nutrition, University of Minnesota, St Paul, MN
 - Saturated Fatty Acids Revisited International Seminar, Uppsala, Sweden
 - Third Throne Holst Symposium on Nutrition "Overweight and Nutrition," Oslo, Norway
 - NAASO 2004 Scientific Meeting, Las Vegas, NV

- Department of Nutrition and Toxicology, UC-Berkeley, Berkeley, CA
 - Food summit meeting “Diet and Metabolic Syndrome,” Wageningen, The Netherlands
- 2005
- Department of Biochemistry, Makerere University, Kampala, Uganda
 - Clinical Research Institute of Montreal (IRCM), Montreal, Canada
 - Velma Hamilton Middle School, Madison, WI
 - Tri-Beta--Omega Pi Chapter Biological Honor Society, University of Wisconsin-Madison, Madison, WI
 - Department of Food Science and Human Nutrition, Univ. of Illinois at Urbana-Champaign, Champaign, IL
 - Sarah W. Stedman Nutrition and Metabolism Center Departments of Pharmacology and Cancer Biology, Biochemistry, and Medicine, Duke University Medical Center
 - Division of Metabolism Endocrinology and Diabetes, Department of Internal Medicine, University of Michigan, Ann Arbor, MI
 - The Wenner-Gren Institute, The Arrhenius Laboratories F3 Stockholm University, Stockholm, Sweden
 - External Examiner for Andreas Jakobsson’s Ph.D. Thesis, The Arrhenius Laboratories F3 Stockholm University, Stockholm, Sweden
 - Astra Zeneca, Gotteborg, Sweden
 - FASEB Meeting, San Diego, CA, and also chair of Session of Metabolic Regulatory Circuits meeting
 - Diabetes and Metabolism, Novartis Institutes for Biomedical Research, Cambridge, MA
 - Xenon Pharmaceuticals, Vancouver, Canada
 - Summit SCD1 Inhibitor for the Treatment of Obesity Diabetes and Metabolism Novartis
 - Institutes for Biomedical Research, Cambridge, MA
 - American Oil Chemical Society (AOCS) Annual Meeting, Salt Lake City, UT
 - Pfizer Discovery Technology Center, Cambridge, MA
 - Department of Food Science & Technology, Makerere University, Kampala, Uganda
 - Ph.D. Summer School, University of Southern Denmark, Nyborg, Denmark
 - International Congress of Nutrition, Durban, South Africa
-
- Department of Medicine and of Physiology, University of Manitoba, Winnipeg, Manitoba, Canada
 - Division of Endocrinology, Diabetes, and Metabolism, University of Pennsylvania School of Medicine, Philadelphia, PA
- 2006
- Institute of Public Health Makerere University Kampala, Uganda
 - International Society for the Study of Fatty Acids and Lipids (ISSFAL) meeting, Cairns, Australia
 - Dept. of Biochemistry, University of Sydney, Sydney, Australia
 - Federation of American Society for Experimental Biology (FASEB) Summer Conference (AMPK: Impact on Mammalian metabolism and disease), Snowmass, CO
 - Pfizer Discovery Technology Center, Groton, CT

- Department of biochemistry, University of Montreal, Montreal, Canada
 - NIH/NIHAAA Bethesda, MD
 - Hoffman-La Roche, Nutley, NJ
 - CV Therapeutics, Palo Alto, CA
- 2007
- Deuel Conference on Lipids, Borrego Springs, CA
 - Forest Research Laboratories, Jersey City, NJ
 - University of Washington School of Medicine St Louis, MO
 - Uganda North American Medical Society Conference, Atlanta, GA
 - Endocrinology Society Meeting Toronto, Canada
 - Wake Forest University School of Medicine, Winston-Salem, NC
 - University of Wisconsin La Crosse, La Crosse, WI
 - Gordon Research Conference Waterville Valley, NH
 - Keynote speaker at the Short Term Education Program for Under Represented Persons, NIDDK/NIH
 - Community-based Workshop on Nutrition, Lyantonde, Uganda
 - Disorders of Lipid Metabolism Symposium San Diego, CA
 - Eli Lilly and Company, Indianapolis, IN
 - Morehouse School of Medicine Atlanta, GA
 - Rutgers University New Brunswick, NJ
 - Schering-Plough Research Institute Brunswick, NJ
- 2008:
- FASEB Meeting, San Diego, CA, and also chair of Session of Metabolic Regulatory Circuits meeting
 - Smith-Kline Omega-3 Fatty Acids Scientific Advisory Board Meeting Philadelphia, PA
 - Community-based Workshop on Nutrition, Lyantonde, Uganda
 - School of Public Health Makerere University, Kampala, Uganda
 - Nkumba University, Uganda
 - Community-based Workshop on Nutrition, Kiruhura Uganda
 - Federation of American Society for Experimental Biology (FASEB) Summer Conference in Carefree, AZ
 - City-wide morning rounds' at the University of Toronto, Toronto Canada
 - USAID, African Regional Higher Education Summit, Kigali, Rwanda
 - Glenmark Pharmaceuticals, Mumbai, India
- 2009
- NIH Bethesda, MD
 - Department of Animal Science Texas A&M University, College Station, TX
 - Program in Molecular Medicine University of Massachusetts Medical School, Worcester, MA
 - 2009 International Food Technology (IFT) Annual meeting and Food Expo, Anaheim, CA
 - Summer symposium in Nutrition, Genes and Physical Activity Penn State, State College, PA
 - Makerere University School of Public Health, Kampala, Uganda
 - Pennington Biomedical Research Center Louisiana State University, Baton Rouge, LA
 - Harvard School of Public Health, Boston, MA

- 2010:
- Keystone Symposium, Big Sky, MT
 - 5th International Barth Syndrome conference, Orlando, FL
 - Uganda National Academy of Sciences inauguration, Kampala Uganda
 - LEM symposium Johns Hopkins University School of Medicine, Baltimore, MD
 - Department of Biochemistry and Molecular Biology, Johns Hopkins School of Public Health, Baltimore, MD
 - OMICS symposium, University of Maryland College Park, MD
- 2011
- Department of Biological Chemistry Johns Hopkins University School of Medicine, Baltimore, MD
 - McArdle Laboratory for Cancer Research, University of Wisconsin-Madison, WI
 - North Carolina A&T State University, Greensboro, NC
 - Department of Nutritional sciences, University of Wisconsin-Madison, Madison, WI
 - FASEB Meeting, Washington DC, and also chair of Session on Enzymes, Hormones and obesity. One of my students participated in the ASBMB undergraduate student research poster competition
 - The role of basic research in global health education and training
 - 34th Steenbock Symposium, University of Wisconsin-Madison, Madison, WI
 - Fudan University Shanghai medical College, Shanghai, China
 - ASN-ASAS-ADSA pre conference, New Orleans, LA
 - Center For African Action, Inc., Milwaukee, WI
 - ICBL, Warsaw, Poland
 - Merck Program, University of Minnesota, MN
 - Department of Biochemistry, Molecular Biology and Biophysics, University of Minnesota, MN
 - Division of Endocrinology, Metabolism and Clinical Nutrition Medical College of Wisconsin, Milwaukee, WI
 - Merck Program, Brookfield, WI
 - International Symposium at ABRC, Academia Sinica, Taipei Taiwan
 - Department of Human Nutrition, Ohio State University, Columbus, Ohio
 - CFSA/ ANDP Joint Meeting Presentations Penn State, College Station, PA
 - Merck Program, Orlando, FL
 - Sanford Burnham, Medical Research Institute, Orlando, FL
- 2012:
- Africa Nutritional Sciences Research Consortium, Nairobi, Kenya
 - Colorado State University, Fort Collins, CO
 - University of Kentucky, Lexington, KY
 - International Society for the study of fatty acids and Lipids (ISSFAL) Vancouver BC, Canada
 - Institute of Food Technology (IFT), Las Vegas, NV
 - Advanced Summer School for Biochemistry and Molecular Biology, Shanghai, China
 - Merck Program, Denver, CO
 - University of Colorado School of Medicine, Denver, CO
 - FASEB conference, Snowmass, CO
 - Frontiers in Lipid Biology Conference, Banff, Canada

- Mini Med School on Weight Management, Diabetes and Obesity symposium, University of Wisconsin-Madison School of Medicine and Public Health, WI
 - Eastern Virginia Medical School, Norfolk, VA
 - Merck Program, Norfolk, VA
 - Department of Pharmacology, University of Virginia, Charlottesville, VA
 - Division of Endocrinology and Metabolism, University of Wisconsin-School of Medicine and Public Health, Madison, WI
 - Skin Biology Research Center, Johnson and Johnson, NJ
- 2013
- Africa Nutritional Sciences Research Consortium, Nairobi, Kenya
 - Federation of American Society for Experimental Biology (FASEB), Boston, MA
 - Oregon Rotary Club, Oregon, WI
 - Gordon Research Conference, Waterville Valley, NH
 - Africa Nutritional Sciences Research Consortium, Arusha, Tanzania
 - Yale University School of Medicine Section of Comparative Medicine, New Haven, CT
 - Texas Tech University Lubbock, TX
 - Science & Medicine Graduate Research Scholars program
 - Washington University School of Medicine St. Louis, MO
 - International Conference on the Bioscience of Lipids, Banff, Canada
- 2014
- Africa Nutritional Sciences Research Consortium, Kampala, Uganda
 - Uganda Bureau of Standards, Kampala, Uganda
 - Chaos and Complex Systems Seminar series, University of Wisconsin-Madison, WI
 - Virginia Commonwealth University Richmond, VA
 - FASEB, San Diego, CA
 - American Oil Chemical Society (AOCS), San Antonio, TX
 - International Conference on the Bioscience of Lipids, Aberdeen, Scotland
 - FASEB, Saxtons River, VT
 - Rubaga Club, Kampala, Uganda
 - Department of Nutritional Sciences Penn State University PA USA
- 2015
- Dept. of Medicine University of Wisconsin-Madison
 - University of Illinois at Urbana-Champaign
 - Johns Hopkins University School of Medicine Baltimore MD
 - University of Wisconsin-Madison Dept. of Pediatrics
 - Gordon Research Conference, Waterville Valley, NH
 - Kampala Senior Club, Kampala Uganda
 - Infectious Disease Institute (IDI) Kampala Uganda
 - Danish Diabetes Academy Odense Denmark
 - Morgridge Institute, University of Wisconsin-Madison
 - Department of Genetics, University of Wisconsin-Madison
 - Argentina Society for Research in Biochemistry and Molecular Biology (SAIB) Mar Del Plata Argentina
 - Department of Animal Sciences, University of Wisconsin-Madison
 - College of Agricultural and Life Sciences, University of Wisconsin-Madison

- 2016
- ASBMB meeting in San Diego CA
 - Nutrition and Obesity Research Center (NORC) University of Alabama Birmingham (UAB), Birmingham AL
 - University of Nebraska Lincoln, NE
 - Department of Biochemistry UW-Madison
 - Georgia State University, Atlanta GA
 - Rutgers University NJ
- 2017
- Keystone Symposium on Molecular and cellular Biology, Tahoe CA
 - ASBMB meeting in Chicago IL
 - Keystone Symposia on Molecular and Cellular Biology, Tahoe City CA
 - Johns Hopkins University School of Medicine, Baltimore MD
 - University of Southern Denmark, Odense Denmark
 - Global Harmonization of Methodological Approaches to Nutrient Intake Recommendations Rome Italy
 - Weill Cornell Medical College

SOCIETY MEMBERSHIPS:

- Uganda National Academy of Sciences
- American Society for Biochemistry and Molecular Biology (ASBMB)
- American Institute of Nutrition
- American Diabetes Association
- American Heart Association
- New York Academy of Sciences
- International Society for the study of fatty acids and lipids (ISSFAL)
- American Society for Cell Biology