

KEE-HONG KIM, Ph.D.

EDUCATION

Degree Received	Institution	Date
Ph.D. Food Science	Rutgers University	1999
M.S. Food Science & Biotechnology	Seoul National University (Korea)	1993
B.S. Food Science & Biotechnology	Seoul National University (Korea)	1991

PROFESSIONAL EXPERIENCE

Position	Department	Institution	Period
Associate Professor	Food Science	Purdue University	Aug. 2013-present
Assistant Professor	Food Science	Purdue University	July 2007-July 2013
Courtesy Faculty Member	Nutrition Science	Purdue University	June 2008-present
Faculty Member	Purdue University Center for Cancer Research	Purdue University	Jan 2016-present
Faculty Member	Institute for Inflammation, Immunol. and Infectious Diseases	Purdue University	Jan 2016-present
Faculty Member	Interdepartmental Nutrition Program (INP)	Purdue University	August 2007-Present
Faculty Member	Purdue University Interdisciplinary Life Science Ph.D. Program (PULSe)	Purdue University	August 2007-present
Adjunct Faculty	Food & Nutrition	Yonsei University (Seoul, Korea)	June 2013-present
Adjunct Faculty	Food Bioscience & Technology	Korea University (Seoul, Korea)	September 2012-2014
Assistant Professor	Division of Endocrinology Department of Medicine	Medical College of Wisconsin	March 2004-June 2007
Assistant Professor	Human Molecular Genetics Center	Medical College of Wisconsin	March 2004-June 2007
Postdoctoral Fellow	Nutritional Sciences & Toxicology	Univ. of California at Berkeley	Jan 1999-Feb 2004

PROFESSIONAL AWARDS AND HONORS

American Society for Nutrition (ASN), McCormick Science Institute Research Award (2016)

- *This award is presented to an investigator conducting clinical, translational, in vitro, and/or ex vivo research, whose scientific contributions have advanced the understanding of the potential health benefits of culinary herbs and spices."*

ASN-Korean Nutrition Society (KNS) award (2015)

- *This award is presented to an investigator who promotes excellence in nutrition research conducted by a North American scientist who is an ASN member and who is engaged with KNS, Korea or related collaborators or studies.*

Ralph W. and Grace M. Showalter Trust Award (2011)

Ralph W. and Grace M. Showalter Trust Award (2009)

Best Graduate Scholarship, Theobald Smith Society-The American Society for Microbiology (ASM) (1998)

2nd Place at Graduate Student Poster Competition at Theobald Smith Society-ASM (1998)

1st Place at Graduate Student Poster Competition- New York IFT (1997)

Best Graduate Student Poster Winning Award, Theobald Smith Society-ASM (1997)

3rd Place at the Annual Graduate Research Paper Competition at Korean American Food Technologists Association (1997)

MEMBERSHIPS

American Society for Nutrition (ASN) (2009-Present)

American Society of Biochemistry and Molecular Biology (ASBMB) (2013-Present)

Institute for Food Technologists (IFT) (2008-2013)

The Korean Society of Food Science and Technology (2008-Present)

Korean-American Scientists and Engineers Association (2010-Present)

PUBLICATIONS

Journal Articles (Citation analyzed by Google Scholar)

1. Zhu, Y., **Kim, K.-H.** 2017, Inhibition of ACAT1 ameliorates obesity and type 2 diabetes by lowering food intake. (*in preparation*)
2. Wang, J., Yue, Y., Shen, P., **Kim, K.-H.**, Park, Y. 2017, Methylglyoxal influences development and life span in *Caenorhabditis elegans*. (*in preparation*)
3. Kwon, J.Y., Kershaw, J., Chen, C.Y., Zhu, Y., Komanetsky, S., **Kim, K.-H.** 2017, Piceatannol antagonizes lipolysis in adipocytes by promoting autophagy-lysosome-dependent degradation of lipolytic protein cluster. (*in preparation*)
4. Shen, Y., Wang, O., Kershaw, J., **Kim, K.-H.**, Park, Y. 2017, Conjugated linoleic acids decrease fat accumulation and increase locomotive activity of *Caenorhabditis elegans*. (*submitted*)
5. Kershaw, J., **Kim, K.-H.** 2017, The therapeutic potential of piceatannol, a natural stilbene, in metabolic diseases – a review. (*submitted*)

6. Shen, P., Yue, Y., **Kim, K.-H.**, Park, Y., 2017, Piceatannol reduces fat accumulation in *Caenorhabditis elegans*. (submitted)
7. Shen, P., Yue, Y., Sun, Q., Kasireddy, N., **Kim, K.-H.**, Park, Y. 2017, Piceatannol extends the lifespan of *Caenorhabditis elegans* via a daf-16-dependent mechanism. *BioFactors* (in press)
8. Kim, C.Y., Zhu, Y., Buhman, K.K., **Kim, K.-H.** 2015, Dietary selenate attenuates adiposity and improves insulin sensitivity in high-fat diet-induced obese mice. *Journal of Functional Foods*, 17:33-42
9. Malaypally, S.P., **Kim, K.-H.**, Ferruzzi, M., San Martin, F., Goforth, R., Liceaga, 2015, A. Invasive silver carp (*Hypophthalmichthys molitrix*) protein hydrolysates -A potential source of natural antioxidants. *Journal of Functional Foods*, 18:1158-1166
10. Wang, Y., Lee, K., Moon, Y.S., Ahmadian, M., **Kim, K.-H.**, Roder, K., Kang, C., Sul, H.S. 2015, Overexpression of Pref-1 in pancreatic islet beta-cells in mice causes hyperinsulinemia with increased islet mass and insulin secretion. *Biochemical and Biophysical Research Communications*, 461:630-635 (cited by 2)
11. Shin, S.H., Seo, S.G., Min, S., Song N., Lee, D.E., Kwon, J.Y., Yue, S., **Kim, K.-H.**, Cheng, J.-X., Lee, H.J., Lee, K.W. 2014, Caffeic acid phenethyl ester, a major component of propolis, inhibits mitotic clonal expansion in vitro, and suppresses high fat diet-induced obesity in vivo. *Journal of Agricultural and Food Chemistry*, 62:4306-12 (cited by 5)
12. Park, J.G., Lee, D.H., Moon, Y.S., **Kim, K.-H.** 2014. Reversine increases the plasticity of lineage-committed preadipocytes to osteogenesis by inhibiting adipogenesis through induction of TGF- β pathway in vitro. *Biochemical and Biophysical Research Communications* 446:30-36 (cited by 13)
13. Cheng, M.W., Chegeni, M., Zhang, G., **Kim, K.-H.**, Benmoussa, M., Quezada-Calvillo, R., Nichols, B.L., Hamaker, B.R. 2014. Different sucrose-isomaltase response of Caco-2 cells to glucose and maltose suggests dietary maltose sensing. *Journal of Clinical Biochemistry and Nutrition* 54:55-60 (cited by 8)
14. Kim, C.Y., **Kim, K.-H.** 2014. Curcumin prevents leptin-induced tight junction dysfunction in intestinal Caco-2 BBe cells. *Journal of Nutritional Biochemistry* 25:26-35 (cited by 5)
15. Kim, C.Y., **Kim, K.-H.** 2013. Dexamethasone-degraded SEPS1 in the early phase of differentiation is required for endoplasmic reticulum (ER) stress- and ubiquitin proteasome system (UPS)-dependent adipogenesis. *Journal of Lipid Research*, 54:2069-82 (cited by 9)
16. Seo, S.G., Shin, S.H., Min, S., Lee, D.E., Kwon, J.Y., Yang, H., Yue, S., Heo, Y.S., **Kim, K.-H.**, Cheng, J.-X., Lee, K., Lee, H.J. 2013. 6,7,4'-Trihydroxyisoflavone, a metabolite of daidzein, suppresses adipogenesis of 3T3-L1 preadipocytes via the direct inhibition of PI3K activity. *Molecular Nutrition and Food Research*, 57:1446-55 (cited by 14)
17. Chen, C.Y., Abell, A., Moon, Y.S., **Kim, K.-H.** 2012. An advanced glycation end product (AGE)-receptor for AGEs (RAGE) axis restores adipogenic potential of senescent preadipocytes through modulation of p53 function. *Journal of Biological Chemistry*, 287:44498-44507 (cited by 18)
18. Kwon, J.Y., Seo, S.G., Heo, Y.S., Yue, S., Cheng, J.X., Lee, K.W., **Kim, K.-H.** 2012. Piceatannol, a natural polyphenolic stilbene, inhibits adipogenesis via modulation of mitotic clonal expansion and insulin receptor-dependent signaling in the early phase of differentiation. *Journal of Biological Chemistry*, 287: 11566-11578 (cited by 55)
19. Kim, C.Y., Kim, G.N., Wiacek, J.L., Chen, C.Y., **Kim, K.-H.** 2012. Selenate, an inorganic form of selenium, inhibits adipogenesis through induction of transforming growth factor- β 1

- (TGF- β 1) signaling. *Biochemical and Biophysical Research Communications*, 426:551-557 (cited by 20)
20. Kwon, J.Y., Seo, S.G., Yue, S., Cheng, J.X., Lee, K.W., **Kim, K.-H.** 2012. An inhibitory effect of resveratrol in the mitotic clonal expansion and insulin signaling pathway in the early phase of adipogenesis. *Nutrition Research*, 32:607-616 (cited by 34)
 21. **Kim, K.-H.**, Park, Y.H. 2011. Food components with anti-obesity effect, *Annual Review of Food Science and Technology* 2:237-57 (cited by 30)
 22. Kim, C.Y., Bordenave, N, Ferruzzi, M.G., Safavy, A., **Kim, K.-H.** 2011, Modification of curcumin with polyethylene glycol enhances the delivery of curcumin in preadipocytes and its ant adipogenic property, *J Agric Food Chem* 59:1012-1019 (cited by 21)
 23. Kim, C.Y., Le, T.T., Chen, C., Cheng, J.-X., **Kim, K.-H.** 2010, Curcumin inhibits adipocyte differentiation through modulation of mitotic clonal expansion, *Journal of Nutritional Biochemistry* 22:910-920 (cited by 83)
 24. **Kim, K.-H.** 2009. Perspective in Regulation of Adipogenesis by Bioactive Food Components. *Food Science and Industry*, 42(4): 51 (cited by 7)
 25. Jaworski, K., Ahmadian, M., Duncan, R.E., Sarkadi-Nagy, E., Varady, K.A., Hellerstein, M.K., Lee, H.Y., Samuel, V.T., Shulman, G.I., **Kim, K.-H.**, de Val, S., Kang, C., Sul, H.S. 2009. AdPLA ablation increases lipolysis and prevents obesity induced by high-fat feeding or leptin deficiency, *Nature Medicine*, 15(2):159-68 (cited by 161)
 26. **Kim, K.-H.***, Gao, Y., Walder, K., Collier, G.R., Skelton, J., Kissebah, A.H. 2007. SEPS1 protects RAW264.7 cells from pharmacological ER stress agent-induced apoptosis. *Biochem. Biophys. Res. Commun.*, 354:127-132 (* *corresponding author*) (cited by 61)
 27. Gao, Y., Hannan, N., Wanyoni, S., Konstantopolous, N., Pagnon, J., Feng, H.C., Jowett, J.B., **Kim, K.-H.**, Walder, K., Collier, G.R. 2006. Activation of the selenoprotein SEPS1 gene expression by pro-inflammatory cytokines in HepG2 cells. *Cytokine* 33:246-51 (cited by 76)
 28. Sakajiri S, O'Kelly J, Yin D, Miller C.W., Hofmann W.K., Oshimi K., Shih L.Y., **Kim K.-H.**, Sul H.S., Jensen C.H., Teisner B., Kawamata N., Koeffler H.P. 2005. Dlk1 in normal and abnormal hematopoiesis. *Leukemia* 19:1404-10 (cited by 78)
 29. Villena, J.A., Roy, S., Sarkadi-Nagy, E., **Kim, K.-H.**, Sul, H.S. 2004. Desnutrin, a new patatin-like adipocyte protein, is induced by fasting and glucocorticoids and increases triglyceride hydrolysis. *J Biol Chem*. 279:47066-75 (cited by 526)
 30. **Kim, K.-H.**, Zhao, L., Moon, Y., Kang, C., Sul, H.S. 2004. Dominant inhibitory ADSF/Resistin enhances adipogenesis and improves insulin sensitivity. *Proc Natl Acad Sci U S A* 101:6780-85 (cited by 109)
 31. Lee, K., Villena, J.A., Moon, Y.S., **Kim, K.-H.**, Lee, S., Kang, C., and Sul, H.S. 2003. Inhibition of adipogenesis and development of glucose intolerance by soluble preadipocyte factor-1 (Pref-1). *J Clinical Investigation* 111:453-61 (cited by 231)
 32. **Kim, K.-H.**, Moon, Y.S., 2003. Molecular cloning of adipose tissue-specific genes by cDNA microarray. *Asian-Australian journal of Animal Sciences* 16:1837-41 (cited by 3)
 33. Villena, J.A., **Kim, K.-H.**, Sul, H.S. 2002. Pref-1 and ADSF/Resistin: two secreted factors controlling adipose tissue development. *Hormone and Metabolic Research* 34:664-70 (cited by 58)
 34. Moon, Y.S., Smas, C.M., Lee, K., Villena, J.A., **Kim, K.-H.**, Yun, E.J., Sul, H.S. 2002. Mice lacking paternally expressed pref-1/dlk1 display growth retardation and accelerated adiposity. *Mol Cell Biol*. 22:5585-92 (cited by 370)

35. Roder, K, **Kim, K.-H**, Sul, H.S. 2002. Induction of murine H-rev107 gene expression by growth arrest and histone acetylation: involvement of an Sp1/Sp3-binding GC-box. *Biochem Biophys Res Commun.* 294:63-70 (**cited by 14**)
36. **Kim, K.-H.**, Lee, K., Moon, Y.S., Sul, H.S. 2001. A cysteine-rich adipose tissue-specific secretory factor inhibits adipocyte differentiation. *J Biol Chem.* 276:11252-6 (**cited by 796**)
37. Latasa, M.J., Moon, Y.S., **Kim, K.-H.**, Sul, H.S. 2000. Nutritional regulation of the fatty acid synthase promoter in vivo: sterol regulatory element binding protein functions through an upstream region containing a sterol regulatory element. *Proc Natl Acad Sci U S A.* 97:10619-24 (**cited by 133**)
38. Moon, Y.S., Latasa, M.J., Kim, K.-H., Wang, D, Sul, H.S. 2000. Two 5'-regions are required for nutritional and insulin regulation of the fatty-acid synthase promoter in transgenic mice. *J. Biol Chem.* 275:10121-7 (**cited by 41**)
39. Sul, H.S., Latasa, M.J., Moon, Y., **Kim, K.-H.** 2000. Regulation of the fatty acid synthase promoter by insulin. *J Nutr.* 130(2S Suppl):315S-320S (**cited by 80**)
40. Kim, K.-S., **Kim, K.-H.**, Storey, M.K., Voelker, D.R. and Carman, G.M. 1999 Isolation and characterization of the *Saccharomyces cerevisiae*. *EKI* gene encoding ethanolamine kinase. *J Biol Chem.* 274:14857-66 (**cited by 72**)
41. **Kim, K.-H.**, and Carman, G.M. 1999. Phosphorylation and regulation of choline kinase from *Saccharomyces cerevisiae*. *J Biol Chem.* 274:9531-8 (**cited by 44**)
42. **Kim, K.-H.**, Voelker, D.R., Flocco, M.T., and Carman, G.M. 1998. Expression, purification, and characterization of choline kinase, product of the *CKI* gene from *Saccharomyces cerevisiae*. *J. Biol. Chem.* 273: 6844-52 (**cited by 52**)
43. **Kim, K.-H.**, Kim, D.O., Park, K.-H., and Seo, J.-H. 1994. Thermal deactivation of cyclodextrin glycosyltransferase near optimum temperatures. *Kor. J. of Food & Biotechnology* .3: 261-264
44. **Kim, K.-H.**, Lim, H.G., and Seo, J.-H. 1993. Production of beta-cyclodextrin from starch by cyclodextrin glycosyltransferase from alkalophilic *Bacillus sp.* *E1. Kor. J. Food Sci. Technol* 25:608-10
45. Lim, H.G., **Kim, K.-H.**, and Seo, J.-H. 1992. Effect of sucrose on invertase expression in recombinant *S. cerevisiae* *Kor. J. Appl. Microbial. Biotechnol* 20:417-421

Book Chapter

1. **Kim, K.-H.**, Lee, K.W. 2016, Phytochemicals in prevention and treatment of obesity and related disorder. *Nutrition in the Prevention and Treatment of Diseases*. 4th edition. Coulston, A.M., Boushey, C., and Ferruzzi, M., Academic Press.
2. **Kim, K.-H.**, Kim, G.N., Lee, K.W. 2015, Phytochemicals in prevention and treatment of obesity and related disorder. *Nutrition in the Prevention and Treatment of Diseases*. 3rd edition. Coulston, A.M., Boushey, C., and Ferruzzi, M., Academic Press, 2015 ISBN: 9780123918840, 391-406
3. **Kim, K.-H.**, Griffin, M.G., Villena, J.A., and Sul, H.S. 2005, Regulation of fat synthesis and adipogenesis. *Genomics and Proteomics in Nutrition (Nutrition in Health and Disease)*, Marcel Dekker Inc., New York (ISBN: 0824754301) 77-106

INVITED TALKS

International

1. **Kim, K.-H.** 2016. The impact of piceatannol, a resveratrol analogue, on lipid metabolism in adipocytes, Korea University, Seoul, Korea
2. **Kim, K.-H.** 2016. The impact of piceatannol, a resveratrol analogue, on lipid metabolism in adipocytes, Seoul National University, Seoul, Korea
3. **Kim, K.-H.** 2016. The impact of piceatannol, a resveratrol analogue, on lipid metabolism in adipocytes, Ewha University, Seoul, Korea
4. **Kim, K.-H.** 2014. Maillard Reaction Products and Adipose Aging, Department of Food Biotechnology, Kookmin University, Seoul, Korea
5. **Kim, K.-H.** 2014. Advanced Glycation End-Products and Adipose Aging, Department of Nutrition, Yonsei University, Seoul, Korea
6. **Kim, K.-H.** 2014. Role of Advanced Glycation End-Products in Lipid Metabolism and Senescence of Adipose Tissue, Dasan Conference, Pyungchang, Korea
7. **Kim, K.-H.,** Kwon, J.Y., Chen, C.Y., Zhu, Y., Komanetsky, S. 2014. Leaving Resveratrol's Shadow: Role of Piceatannol, a Resveratrol Analogue, in Adipogenesis and Lipid Metabolism in Adipocytes, US-Korea Conference, San Francisco, CA
8. **Kim, K.-H.,** Chen, C.Y., Abell, A.M., Moon, Y. 2014. Role of Advanced Glycation End-Products (AGEs)/Receptor for AGEs (RAGE) Axis in Adipocyte Differentiation, US-Korea Conference, San Francisco, CA
9. **Kim, K.-H.,** 2013. Leaving Resveratrol's Shadow: the Role of Piceatannol in Adipose Tissue, Metabolism and Obesity Laboratory, Unit of Diabetes and Metabolism, Vall d'Hebron-Research Institute, Barcelona, Spain
10. **Kim, K.-H.,** 2013. Role of Piceatannol in Lipid Metabolism in Obesity and Cancer, School of Agriculture and Biology, Shanghai Jiao Tong University, Shanghai, China
11. **Kim, K.-H.,** 2012. Leaving Resveratrol's Shadow: the Role of Piceatannol in Adipose Tissue, the Annual Meeting of the Korean Society of Food Science and Nutrition, Jeju Island, Korea
12. **Kim, K.-H.,** 2012. Regulation of the link between obesity and intestine dysfunction by curcumin, The 3rd International Symposium on Curry and Spice, Seoul, Korea
13. **Kim, K.-H.,** 2012. A Perspective view of dietary control of adipose development of obesity, Seoul National University, Seoul, Korea (an invited lecturer)
14. **Kim, K.-H.** 2010. Dietary regulation of adipose development: Role of curcumin in adipogenesis, The 77th Annual Meeting of Korean Society of Food Science and Technology, Incheon, Korea.
15. **Kim, K.-H.** 2010. Improvement of the anti-adipogenic function of curcumin in adipocytes, Department of Food Science and Biotechnology, Seoul National University, Seoul, Korea.
16. **Kim, K.-H.** 2010. Role of curcumin in adipose development, Department of Food Science, Ewha University, Seoul, Korea.
17. **Kim, K.-H.** 2010. Improvement of the anti-adipogenic function of curcumin in adipocytes, Department of Food Science and Biotechnology, Kyung Hee University, Seoul, Korea.
18. **Kim, K.-H.** 2010. Improvement of the anti-adipogenic function of curcumin in adipocytes, Department of Food Science, Korea University, Seoul, Korea.
19. **Kim, K.-H.** 2007. Promising molecular targets for dietary control of obesity: ADSF/Resistin and endoplasmic reticulum stress, Department of Food, Nutrition and Health, University of British Columbia, Vancouver, Canada.
20. **Kim, K.-H.** 2006. Hormonal and metabolic regulation of adipocyte biology: role of ADSF/resistin and desnutrin/ATGL, Kangnung National University, Kangnung, Korea.

21. **Kim, K.-H.** 2003. The role of ADSF/resistin in adipogenesis and insulin action, Department of Food Science and Biotechnology, Seoul National University, Seoul, Korea.
22. **Kim, K.-H.** 2003. The role of ADSF/resistin in adipogenesis and insulin action, Center for Health Research, Chungbuk National University, Cheongju, Chungbuk, Korea.

National

1. **Kim, K.-H.** 2016. The impact of piceatannol, a resveratrol analogue, on obesity, Department of Nutrition and Food Science, FSTC 681 seminar series, Texas A&M University, College Station, TX
2. **Kim, K.-H.** 2016. Role of piceatannol in adipose lipolysis and obesity, Experimental Biology meeting, San Diego, CA
3. Larrick, B., Donkin, S., **Kim, K.-H.**, Teegarden, D. 2016. 1,25-Dihydroxyvitamin D regulates energy substrate metabolism to reduce triacylglycerol accumulation in 3T3-L1 adipocytes. Experimental Biology meeting, San Diego, CA
4. Zhu, Y., Chen, C.Y., **Kim, K.-H.** 2015. Role of Acyl-Coenzyme A:Cholesterol Acyltransferase 1 in Lipogenesis in Adipocytes. Experimental Biology meeting, Boston, MA
5. **Kim, K.-H.**, Kwon, J.Y., Chen, C.Y., Komanetsky, S., Zhu, Y., Kershaw, J. 2015. Piceatannol inhibits lipolysis in adipocytes by promoting autophagy-lysosome-induced degradation of lipolytic proteins. Experimental Biology meeting, Boston, MA
6. **Kim, K.-H.**, 2012. Leaving Resveratrol's Shadow: the Role of Piceatannol in Adipose Tissue, the 3rd Annual Symposium on the Prevention of Metabolic Syndrome by Dietary Phytochemicals, Pennsylvania State University, College Station, PA
7. **Kim, K.-H.** 2009. Dietary regulation of adipocyte development: role of curcumin in adipogenesis. Department of Food Science and Human Nutrition, University of Illinois, Urbana-Champaign, IL.
8. **Kim, K.-H.** 2009. The inhibitory role of curcumin in the early stage of adipocyte differentiation, Center of Diabetes Research, Indiana University School of Medicine, Indianapolis, IN.
9. **Kim, K.-H.** 2008. Examining the role of Selenoprotein S in endoplasmic reticulum stress and metabolic syndrome, Indiana University School of Medicine-Evansville, IN.
10. **Kim, K.-H.** 2007. Selenoprotein S, endoplasmic reticulum stress and metabolic syndrome, Department of Pharmacology and Toxicology, Medical College of Wisconsin, WI.
11. **Kim, K.-H.** 2006. Role of SEPS1 in endoplasmic reticulum stress signaling and macrophage biology" Endocrine Research Ground Rounds, Department of Medicine, Medical College of Wisconsin, WI.
12. **Kim, K.-H.** 2006. Role of SEPS1 in endoplasmic reticulum stress signaling and macrophage biology" Human and Molecular Genetics Center Seminar Series, Medical College of Wisconsin, WI.
13. **Kim, K.-H.** 2005. The role of ADSF/resistin in adipogenesis and insulin resistance", Clinical and Scientific Endocrinology Sessions, Max McGee National Research Center, Medical College of Wisconsin, WI.
14. **Kim, K.-H.** 2003. The role of ADSF/resistin in adipogenesis and insulin action", Department of Nutritional Sciences, Rutgers University, NJ.

Regional

1. Kershaw, J., **Kim, K.-H.** 2015. Grape compounds may prevent the cancer “wasting” syndrome. Sigma Xi Graduate Student and Poster Competition, Purdue University
2. **Kim, K.-H.** 2015. Dietary regulation of autophagy-dependent lipid hydrolysis in adipose tissue and its impact on obesity. Basic Medical Sciences 692 Seminar Series, Purdue University
3. Kershaw, J., **Kim, K.-H.** 2015. Piceatannol, a grape polyphenol, lowers lipolysis in models of cancer cachexia, The Purdue Lipid Club meeting, Purdue University
4. **Kim, K.-H.** 2013. Advanced glycation end-products and adipocyte aging. Ingestive Behavior Research Center (IBRC) Corporate Affiliates meeting, Purdue University
5. **Kim, K.-H.** 2013. Leaving resveratrol’s shadow: role of piceatannol in adipose tissue. Food Science industrial associate meeting, Department of Food Science, Purdue University
6. **Kim, K.-H.**, 2012. Leaving Resveratrol’s Shadow: the Role of Piceatannol in Adipose Tissue, Interdepartmental Nutrition Program (INP) Seminar, Purdue University.
7. **Kim, K.-H.** 2012. Dietary regulation of adipose tissue development and function: food functional genomics of obesity, Visit of faculty from Shanghai Jiao Tong University, Department of Food Science, Purdue University.
8. **Kim, K.-H.** 2010. Anti-obese function of curcumin, Annual Showalter Trustee Visit, Purdue University.
9. **Kim, K.-H.** 2008. Strategies for dietary regulation of obesity”, Annual Food Science Club Symposium, Purdue University.
10. **Kim, K.-H.** 2008. Food functional genomics of obesity, Purdue Lipid Club meeting.
11. **Kim, K.-H.** 2008. Regulation of adipogenesis by a dietary phytochemical, The Ingestive Behavior Research Center (IBRC), Purdue University.
12. **Kim, K.-H.** 2008. Modulation of endoplasmic reticulum stress by Selenoprotein S, Department of Biochemistry, Purdue University.

INTELLECTUAL PROPERTY DEVELOPMENT

Invention Disclosure

1. **Kim, K.-H.**, Kwon, J.Y., 2013. Method for Inhibiting Lipolysis and Lipolysis-Dependent Obesity-Associated Metabolic Diseases and Cancers. (Reference#: 2013-KIM-66614)

Provisional Patents

1. **Kim, K.-H.**, Zhu, Y., 2016. Methods of treating obesity and type 2 diabetes
2. **Kim, K.-H.**, Kwon, J.Y., 2012. Anti-obesity action of piceatannol
3. **Kim, K.-H.** Wiacek, J., Kim, C.Y., Kim, G.N., 2012. Selenate for the treatment of metabolic disorders

ABSTRACTS

1. Larrick, B., Donkin, S., **Kim, K.-H.**, Teegarden, D. 2016. 1,25-Dihydroxyvitamin D regulates energy substrate metabolism to reduce triacylglycerol accumulation in 3T3-L1 adipocytes. Experimental Biology meeting, San Diego, CA
2. Kershaw, J., **Kim, K.-H.** 2016. An inhibitory role of piceatannol in cancer cachexia-induced lipolysis in vitro. Experimental Biology meeting, San Diego, CA

3. Kershaw, J., **Kim, K.-H.** 2015. A grape compound, piceatannol, may help prevent the cancer “wasting” syndrome. Purdue “Three-Minute Thesis” competition. West Lafayette, IN
4. Song, Z., Sheng, S., Zhu, Y., Ahn, J.B., **Kim, K.-H.** 2015. Transparentizing adipose tissue for intact biological structure analysis. Transdisciplinary Obesity Prevention Sciences Research Program (TOPRS) Service Learning meeting, Discovery Park, Purdue University.
5. Larrick, B.M., **Kim, K.-H.**, Teegarden. D. 2015. 1,25dihydroxyvitamin D Regulation of Lipid Metabolism in 3T3-L1 Adipocytes. Obesity Conference, Obesity Society, Los Angeles, CA
6. Kershaw, J., **Kim, K.-H.** 2014. Piceatannol may have a role in ameliorating cancer cachexia. Purdue office of Interdisciplinary Graduate Programs poster competition. Purdue University
7. Zhu, Y., **Kim, K.-H.** 2014. Oral administration of selenate attenuates high fat diet induced obesity in mice. INP poster session for Corporate Affiliates, Purdue University
8. Larrick, B.M., **Kim, K.-H.**, Teegarden. D. 2014. 1,25dihydroxyvitamin D Regulation of Adipocyte Lipid Metabolism. Obesity Conference, Obesity Society, Los Angeles, CA
9. Larrick, B.M., **Kim, K.-H.**, Teegarden. D. 2014. 1,25dihydroxyvitamin D Regulation of Adipocyte Lipid Metabolism. Experimental Biology meeting, Boston, MA
10. Hayes, C., Chen, C.Y., **Kim, K.-H.**, 2013. The effects of 3-methyladenine, piceatannol and rapamycin on autophagy, Undergraduate research poster symposium, Purdue University
11. **Kim, K.-H.**, Chen, C.Y., Abell, A.M., Moon, Y.S. 2013. Glycated proteins restore impaired adipogenic potential of senescent preadipocytes via modulation of RAGE/p53 axis. Lipids, Molecular & Cellular Biology of, Gordon Research Conferences, Waterville Valley, NH
12. **Kim, K.-H.**, Kim, C.Y., Zhu, Y. 2013. Selenate prevents diet-induced obesity with improved insulin sensitivity in vivo. 20th International Congress of Nutrition, Granada, Spain
13. Kim, H., Amalaradjou, M.A.R., **Kim, K.-H.**, Bhunia, A. 2012. Listeria Adhesion Protein Induces Epithelial Tight Junction Compromise through Activation of NF-kappaB and Down Regulation of Tight Junction Proteins. Annual Meeting of American Society for Microbiology, San Francisco, CA
14. Kim, C.Y., **Kim, K.-H.** 2012. Luminal Leptin Impairs Intestinal Tight Junction Function in Vitro through JAK2-Dependent Signaling Pathway. Experimental Biology Annual Meeting, San Diego, CA
15. Kim, C.Y., **Kim, K.-H.** 2012. SEPS1 Degradation by Dexamethasone during the Early Stage of Differentiation is Required for Proper Adipogenesis in 3T3-L1 Preadipocytes. Annual Poster Presentation, Interdepartmental Nutrition Program, Purdue University.
16. Chen, C.Y., Martorano, A., **Kim, K.-H.** 2012. Advanced Glycation End Products (AGEs) Promote Adipogenesis of Senescent Preadipocytes via RAGE-Inhibited p53 Function. Annual Poster Presentation, Interdepartmental Nutrition Program, Purdue University.
17. **Kim, K.H.**, Kim. G.N., Kim, C.Y. Wiacek, J., Chen, C.Y., 2012. Selenate-induced TGFbeta1 inhibits adipogenesis, Keystone Symposia, Santa Fe, NM
18. Shin, S.H., Seo, S.G., Min, S., Song N., Lee, D.E., Kwon, J.Y., Yue, S., **Kim, K.-H.**, Cheng, J.-X., Lee, H.J., Lee, K., 2011. Caffeic acid phenethyl ester, a major component of

- Propolis, inhibits mitotic clonal expansion in vitro and suppresses high fat diet-induced obesity in vivo. Annual meeting of Obesity 2011, Orlando, FL
19. Seo, S.G., Shin, S.H., Min, S., Lee, D.E., Kwon, J.Y., Yang, H., Yue, S., Heo, Y.S., **Kim, K.-H.**, Cheng, J.-X., Lee, K., Lee, H.J., 2011. 6,7,4'-trihydroxyisoflavone, a metabolite of daidzein, suppresses adipogenesis of 3T3-L1 preadipocytes by directly inhibiting phosphatidylinositol 3-kinase activity. Annual meeting of Obesity 2011, Orlando, FL
 20. Kwon, J.Y., Seo, S.G., Heo, Y.S., Yue, S., Cheng, J.X., Lee, K.W., and **Kim, K.-H.**, 2011. Piceatannol, a natural polyphenolic stilbene, inhibits adipogenesis via modulation of insulin receptor function in the early phase of differentiation. Annual meeting of Obesity 2011, Orlando, FL
 21. Kim, G.N., Kim, C.Y., Wiacek, J., **Kim, K.-H.** 2011. Selenate controls adipogenesis by activating TGF- β signaling. 34th Steenbock Symposium, Univ. of Wisconsin, Madison
 22. Kwon, J.Y., Seo, S.G., Lee, K.W., Yue, S., Cheng, J.X., **Kim, K.-H.**, 2011. Piceatannol, a Natural Polyphenolic Stilbene, Inhibits Adipogenesis via Modulation of Insulin Receptor Function in the Early Phase of Differentiation. Experimental Biology Annual Meeting, Washington D.C.
 23. Seo, S.G., Shin, S.H., Min, S., Kwon, J.Y., **Kim, K.-H.**, Lee, K.W., Lee, H.J. 2011. Caffeic Acid Phenethyl Ester, a Major Component of Propolis, Inhibits Mitotic Clonal Expansion in vitro and Suppresses High Fat Diet-Induced Obesity in vivo. Experimental Biology Annual Meeting, Washington D.C.
 24. Chen, C.Y., Moon, Y.S., **Kim, K.-H.** 2011. Role of advanced glycation end products in adipogenesis in senescent preadipocytes. Experimental Biology Annual Meeting, Washington D.C.
 25. Kim, C.Y., Wiacek, J., Kim, G.N., **Kim, K.-H.** 2011. Selenium inhibits adipogenesis through suppression of ER-stress and induction of Selenoprotein S. Experimental Biology Annual Meeting, Washington D.C.
 26. **Kim, K.-H.**, Kim, C.Y., Bordenave, N., Ferruzzi, M.G., Safavy, A. 2011. Improved bioavailability and anti-adipogenic property of water-soluble curcumin conjugates. Experimental Biology Annual Meeting, Washington D.C.
 27. **Kim, K.-H.** 2010. Curcumin inhibits adipogenesis through an impairment of mitotic clonal expansion. USDA-NIFA Joint Project Director Meeting, Chicago, IL
 28. Chen, C., Martorano, A., **Kim, K.-H.** 2010. Advanced glycation end products (AGEs) promote adipogenesis in vitro. Annual meeting of International Food Technologists, Chicago, IL.
 29. Kim, C.Y., Wiacek, J., **Kim, K.-H.** 2010. Selenium exerts both inhibitory and preventive roles in adipogenesis. Annual meeting of International Food Technologists, Chicago, IL.
 30. Chen, C., Martorano, A., **Kim, K.-H.** 2010. The effect of advanced glycation end products on adipogenesis, Graduate Poster Competition in Indiana-IFT section, Purdue University.
 31. Kim, C.Y., Wiacek, J., **Kim, K.-H.** 2010. Selenium exerts both inhibitory and protective roles in adipogenesis through suppression of endoplasmic reticulum (ER)-stress, Graduate Poster Competition in Indiana-IFT section, Purdue University.
 32. Chen, C., Martorano, A., **Kim, K.-H.** 2010. The pro-adipogenic effect of advanced effect of advanced glycation end products in adipogenesis, Experimental Biology Annual Meeting, Anaheim, CA.
 33. Kim, C.Y., Wiacek, J., **Kim, K.-H.** 2010. Sodium selenate inhibits adipogenesis, Experimental Biology Annual Meeting, Anaheim, CA.

34. Kim, C.Y., **Kim, K.-H.** 2009. Inhibitory role of curcumin in adipogenesis. Annual meeting of Experimental Biology, New Orleans, LA.
35. Kim, C.Y., **Kim, K.-H.** 2009. Regulation of adipogenesis by curcumin, Annual meeting of International Food Technologists, Anaheim, CA.
36. Kim, C.Y., **Kim, K.-H.** 2009. Inhibitory role of curcumin in adipogenesis. Annual Poster Presentation, Interdepartmental Nutrition Program, Purdue University.
37. Kim, C.Y., **Kim, K.-H.** 2008. Inhibition of preadipocyte differentiation by curcumin, North American Association for the Study of Obesity. Phoenix, AZ.
38. **Kim, K.-H.** Kissebah, A.H. 2006. A selenoprotein SEPS1 protects RAW264.7 macrophages from TNF- α -induced cell death via modulating NF- κ B pathway. North American Association for the Study of Obesity. Boston, MA.
39. Solca, C., Maciolek, A., **Kim, K.-H.**, Tint, G.S., Patel, S.B. 2006. Reversal of infertility in Abcg8 knockout mice by dietary sterol manipulation. American Society for Clinical Investigation, Chicago, IL.
40. **Kim, K.-H.** Skelton, J.A., Walder, K.R., Gao, Y., Collier G.R., Kissebah, A.H. 2006. Protective role of Selenoprotein S (SEPS1) against endoplasmic reticulum stress- induced cytotoxicity and apoptosis in macrophages. American Society for Biochemistry and Molecular Biology, San Francisco, CA.
41. Proffitt J.M., Cai G., Azim D., Freeland-Graves, J., **Kim, K.-H.**, Blangero, J., Kissebah, A.H. 2005. Quantitative trait loci influencing plasma TNF- α and IL-1 β in human co localize to chromosome 18. North American Association for the Study of Obesity. Vancouver, Canada.
42. **Kim, K.-H.** Skelton, J.A., Walder, K.R., Gao, Y., Collier G.R., Kissebah, A. H. 2005. The selenoprotein Sels is induced by endoplasmic reticulum stress and is involved in protecting cells from ER stress-induced cytotoxicity and apoptosis. North American Association for the Study of Obesity. Vancouver, Canada.
43. Walder K.R., Blangero J, Jowett J.B., Bayles L, Curran J.E., Elliott K.S., **Kim K.-H.**, Skelton J.A., Comuzzie A.G., Zimmer P.Z., Collier G.R., Kissebah A.H. 2005. Genetic variation in PSARL is associated with plasma insulin concentration. American Diabetes Association. San Diego, CA.
44. Proffitt, J.M., Azim, D., Cai, G., Freeland-Graves, J., **Kim, K.-H.**, Blangero, J., Kissebah, A., Comuzzie, A. 2004. Evidence of shared genetic effects between acute phase reactants and parameters of adiposity. North American Association for the Study of Obesity, Las Vegas, NV.
45. **Kim, K.-H.**, Sul, H.S. 2003. The role of ADSF/resistin in adipogenesis and insulin action. Annual Meeting of Korean Life Scientists in Bay Area, San Francisco, CA.
46. **Kim, K.-H.**, Lee, K., Moon, Y.S., Sul, H.S. 2002. A cysteine-rich adipose tissue-specific secretory factor inhibits adipocyte differentiation. Annual Meeting of Korean Life Scientists in Bay Area, San Francisco, CA.
47. **Kim, K.-H.**, Lee, K., Moon, Y.S., Sul, H.S. 2002. A cysteine-rich adipose tissue-specific secretory factor inhibits adipocyte differentiation. Annual Meeting of the Am. Soc. Biochem. Mol. Biol. San Francisco, CA.
48. **Kim, K.-H.**, Carman, G. M. 1998. Phosphorylation and regulation of yeast choline kinase by protein kinase A. Annual Meeting of the Am. Soc. Biochem. Mol. Biol. San Francisco, CA.

49. **Kim, K.-H.**, and Carman, G.M. 1998. Phosphorylation and regulation of choline kinase from *Saccharomyces cerevisiae*., Theobald Smith Society Annual Meeting, New Brunswick, NJ.
50. **Kim, K.-H.**, Voelker, D.R., and Carman, G.M. 1997. Phosphorylation and regulation of yeast choline kinase by protein kinase A. Eastern Food Science Conference, NJ.
51. **Kim, K.-H.**, Voelker, D.R., and Carman, G.M. 1997. Phosphorylation of choline kinase from *S. cerevisiae* by protein kinase A. Institute of Food Technologists Annual Meeting, Orlando, FL.
52. **Kim, K.-H.**, Voelker, D.R., and Carman, G.M. 1997. Expression, purification, and characterization of choline kinase, product of the *CKI* gene from *S. cerevisiae*. Annual Meeting of the Am. Soc. Biochem. Mol. Biol., Washington D.C.
53. **Kim, K.-H.**, Voelker, D.R., and Carman, G.M. 1997. Phosphorylation and regulation of yeast choline kinase by protein kinase A. Theobald Smith Society Annual Meeting, New Brunswick, NJ.
54. **Kim, K.-H.**, Voelker, D.R., and Carman, G.M. 1996. Purification of choline kinase from *S. cerevisiae*. Theobald Smith Society Annual Meeting, New Brunswick, NJ.

RESEARCH GRANTS

Active in 2016: 1 grant

Pending in 2016: 7 grants

CURRENT LAB MEMBERS

Name	Start Date
Jonathan Kershaw	Aug. 2012
Susan Komanetsky	Jan. 2013
Jordan Oshiro	Jan. 2014
Xiaoxuan Guo	Nov. 2016

TEACHING

FS453 Food Chemistry Lab

FS591 Functional Foods

FS552 Nutritional Sciences

NUTR590 Obesity: Behavior, Physiology and Policy

NUTR 695 Nutrition Seminar

SERVICE TO PREFESSION

Journal Editorial Board

- Editorial Board Member: *Journal of Biological Chemistry* (2014-present)
- Editorial Board Member: *Journal of Analytical Biochemistry* (2012-present)
- Review Editor: *Journal of Medicinal Food* (2009-present)
- Managing Editor: *Food Science and Biotechnology* (2008-2012)

Ad Hoc Reviewer for Grants

- NIH Study Section member: Somatosensory and Chemosensory Systems (2016, 2017)
- Poland Science Center (2015)
- USDA Hatch grant reviewer in Purdue University (2012, 2013, 2014)
- USDA-NIFA Exploratory Grants (2014)
- Purdue University internal grant reviews (2011, 2012, 2013)
- Diabetes UK (2013)
- Collaborative Funding Grants Program, North Carolina Biotechnology Center, Research Triangle Park, NC (2013)
- SBIR proposal, South Carolina Experimental Program to Stimulate Competitive Research (SC EPSCoR) (2012)

Leadership

- Session Co-chair of Dietary Bioactive Components and Obesity and Metabolic Syndrome mini-symposium of the American Society of Nutrition (ASN) in the annual Experimental Biology meeting of 2016, San Diego, CA
- Conference program committee for 2015 International Conference on Food Factors (ICoFF), Seoul Korea
- Session chair in Food, Agriculture and Nutrition session, 2014 Annual Meeting for US-Korea Conference, San Francisco, CA
- Abstract reviewer for 2014- 2016 Experimental Biology Meeting
- Secretary & Treasurer of American Society for Nutrition (ASN): Dietary Bioactives Research Interest Section (2010-2013)
- Session Chair of Energy & Macronutrient Metabolism (EMM) Research Interest Section (RIS) of the American Society of Nutrition (ASN) in the annual Experimental Biology meeting of 2012, San Diego, CA
- Session Co-Chair of Energy & Macronutrient Metabolism (EMM) Research Interest Section (RIS) of the American Society of Nutrition (ASN) in the annual Experimental Biology meeting of 2011, Washington D.C.
- Chair of Institute of Food Technology (IFT) Hoosier section (2009)
- Chair-Elect of Institute of Food Technology (IFT) Hoosier section (2008)
- Chair of Korean-American Food Technologist Association (2009-2011)

Department:

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| ➤ Food Science Scholarship Committee | 2013-present |
| ➤ Food Science Social Committee | 2008 |
| ➤ Food Science Undergraduate Curriculum Committee (Chair in 2014-2016) | 2012-present |
| ➤ Food Science Teaching Assistant Assignment | 2014 |
| ➤ Vision and Statement task force in Food Science | 2014 |
| ➤ Food Science Safety Committee | 2011, 2012, 2016 |
| ➤ Food Science Diversity Committee | 2009-2010 |
| ➤ Food Science Club Spring Symposium Faculty Advisor | 2008 |

College:

- Library Committee 2009-2011
- Curriculum and Student Relation Committee, College of Agriculture 2014-present
- Agenda and Policy Committee 2012-2014
- Organizer of the Monthly Food for Health Research Joint Lab Meeting 2008-present

Purdue University:

- Interdepartmental Nutrition Program (INP) graduate admission committee 2008-present
- INP Graduate Program Committee 2011-present
- INP Graduate Seminar Committee 2013, 2014, 2016
- IBRC award committee 2012-present
- Ingestive Behavior Research Center (IBRC) Fellowship Award Committee 2011-present
- Organizer of the Purdue Lipid Club meeting 2010-present
- Poster judge for 2014 Office of Interdisciplinary Graduate Poster competition, Purdue Univ.
- Faculty Search Committee in the Department of Nutrition Science 2014
- Member of faculty mentoring committee 2014