

PUBLICATIONS LIST

ORIGINAL PUBLICATIONS IN PEER REVIEWED JOURNALS

1. **Haiyan Xu**, Jaswinder Sethi, Gökhan S. Hotamisligil. The transmembrane form of tumor necrosis factor- α inhibits adipocyte differentiation by selectively activating TNF receptor I. *Journal of Biological Chemistry* 274 (37): 26287-26295, 1999
2. Jaswinder K. Sethi, **Haiyan Xu**, K. Teoman Uysal, Sarah M. Wiesbrock, Ludger Scheja, and Gökhan S. Hotamisligil. Characterization of receptor-specific TNF α functions in adipocyte cell lines lacking TNF receptors. *FEBS letters* 469: 77-82, 2000
3. Qiang Tong, Gökhan Dalgın, **Haiyan Xu**, Chao-Nan Ting, Jeffrey M. Leiden, Gökhan S. Hotamisligil. Function of GATA transcription factors in preadipocyte-adipocyte transition. *Science* 290: 134-38, 2000
4. **Haiyan Xu**, Gökhan S. Hotamisligil. Signaling pathways utilized by tumor necrosis factor receptor 1 in adipocytes to suppress differentiation. *FEBS letters* 506: 97-102, 2001
5. Chiara Chiellini, Anna Bertacca, Silvia E. Novelli, Cem Z. Görgün, Annamaria Ciccaglione, Antonio Giordano, **Haiyan Xu**, Alexander Soukas, Mario Costa, Daniele Gandini, Roberto Dimitri, Pietro Bottone, Paolo Cecchetti, Ennia Pardini, Lucia Perego, Renzo Navalesi, Franco Folli, Luca Benzi, Saverio Cinti, Jeffrey M. Friedman, Gökhan S. Hotamisligil, Margherita Maffei. Obesity modulates the expression of haptoglobin in the white adipose tissue via TNF α . *Journal of Cellular Physiology* 190 (2):251-8, 2002
6. **Haiyan Xu**, K. Teoman Uysal, J. David Becherer, Peter Arner and Gökhan S. Hotamisligil. Altered TNF α processing in adipocytes and increased expression of transmembrane TNF α in obesity. *Diabetes* 51 (6), 1876-1883, 2002
7. **Haiyan Xu**, Jiro Hirosumi, K. Teoman Uysal, A. Deniz Guler and Gökhan S. Hotamisligil. Exclusive action of transmembrane TNF α in adipose tissue leads to reduced adipose mass and local but not systemic insulin resistance. *Endocrinology* 143 (4): 1502-11, 2002
8. **Haiyan Xu** (corresponding author), Marlene Dembski, Qing Yang, Daseng Yang, Ann Moriarty, Olga Tayber, Hong Chen, Rosana Kapeller and Louis A. Tartaglia. Dual specificity MAP kinase phosphatase-4 plays a potential role in insulin resistance. *Journal of Biological Chemistry* 278 (32): 30187-30192, 2003
9. **Haiyan Xu**, Glenn T. Barnes, Qing Yang, Guo Tan, Daseng Yang, Chieh J. Chou, Jason Sole, Andrew Nichols, Jeffrey S. Ross, Louis A. tartaglia and Hong Chen. Chronic inflammation in adipose tissue plays a crucial role in the development of obesity-related insulin resistance. *Journal of Clinical Investigation*, 112 (12): 1821-1830, 2003

10. Suk-Bong Hong, Thomas H. Lubben, Christine M. Dolliver, Anthony J. Petrolonis, Rebecca A. Roy, Zhi Li, Thomas F. Parsons, Ping Li, **Haiyan Xu**, Regina Reilly, James M. Trevillyan, Andrew J. Nichols, Peter J. Tummino, Thomas G. Gant. Expression, purification, and enzymatic characterization of the dual specificity mitogen-activated protein kinase phosphatase, MKP-4. *Bioorganic Chemistry*, 33(1):34-44, 2005
11. **Haiyan Xu**, Qing Yang, Minhui Shen, Xueming Huang, Marlene Dembski, Ruth Gimeno, Louis A. Tartaglia, Rosana Kapeller and Zhidan Wu. Dual specificity MAP kinase phosphatase-3 activates PEPCK transcription and increases gluconeogenesis in rat hepatoma cells. *Journal of Biological Chemistry*, 280 (43): 36013-8, 2005
12. **Haiyan Xu (corresponding author)**, Denise Wilcox, Phong Nguyen, Martin Voorbach, Thomas Suhar, Sheryl J. Morgan, W. Frank An, Lin Ge, Jack Green, Zhidan Wu, Ruth Gimeno, Regina Reilly, Peer Jacobson, Christine A. Collins, Katherine Landschulz, Terry Surowy. Hepatic knockdown of mitochondrial glycerol-3-phosphate acyltransferase 1 via RNA interference improves the metabolic profile of *ob/ob* mice. *Biochemical and Biophysical Research Communications*, 349 (1), 439-448, 2006
13. **Haiyan Xu (corresponding author)**, Denise Wilcox, Phong Nguyen, Martin Voorbach, Harriet Smith, Thomas Suhar, Regina Reilly, Peer Jacobson, Christine Collins, Katherine Landschulz, Terry Surowy. Hepatic knockdown of stearoyl-CoA desaturase 1 via RNA interference in obese mice decreases lipid content and changes fatty acid composition. *Frontiers in Bioscience*, 12:3781-3794, 2007
14. Jing Du, Qiu Chen, Hiroshi Takemori, **Haiyan Xu**. SIK2 can be activated by deprivation of nutrition and it inhibits lipogenic gene expression in adipocytes. *Obesity*, 16(3): 531-538, 2008
15. Natalie Moroz, Ming Tong, Lisa Longato, **Haiyan Xu**, Suzanne M. de la Monte. Limited Alzheimer-Type Neurodegeneration in Experimental Obesity and Type 2 Diabetes Mellitus. *Journal of Alzheimer's Disease*, 15(1): 29-44, 2008
16. Ping Jiao, Qiu Chen, Suketu Shah, Jing Du, Bo Tao, Iphigenia Tzamelis, Weiqun Yan, **Haiyan Xu**. Obesity-related upregulation of monocyte chemotactic factors in adipocytes: involvement of $\text{NF-}\kappa\text{B}$ and JNK pathways. *Diabetes*, 58: 104-115, 2009
17. Lascelles E. Lyn-Cook, Margot Lawton, Ming Tong, E Silbermann, Lisa Longato, Ping Jiao, P Mark, Jack R. Wands, **Haiyan Xu**, Suzanne M. de la Monte. Hepatic ceramide may mediate brain insulin resistance and neurodegeneration in type 2 diabetes and non-alcoholic steatohepatitis. *Journal of Alzheimer's Disease*, 16(4): 715-29, 2009
18. Zhidan Wu, Ping Jiao, Xueming Huang, Bin Feng, Yajun Feng, Shengyong Yang, Philip Hwang, Jing Du, Yaohui Nie, Guozhi Xiao, **Haiyan Xu**. MAP kinase phosphatase 3 promotes hepatic gluconeogenesis through dephosphorylation of forkhead box O1 in mice. *Journal of Clinical Investigation*, 120 (11): 3901-3911, 2010

19. Ping Jiao, Jie Ma, Bin Feng, Hao Zhang, J. Alan Diehl, Y. Eugene Chin, Weiqun Yan, **Haiyan Xu**. FFA-induced adipocyte inflammation and insulin resistance: involvement of ER Stress and IKK β pathways. *Obesity*, 19(3):483-491, 2011
20. Shengyong Yang, **Haiyan Xu**, Shibing Yu, Huiling Cao, Jie Fan, Chunxi Ge, Renny T. Fransceschi, Henry H Dong, Guozhi Xiao. FOXO1 mediates IGF1/Insulin regulation of osteocalcin expression by antagonizing Runx2 in osteoblasts. *Journal of Biological Chemistry*, 286(21):19149-58, 2011
21. Bin Feng, Ping Jiao, Yaohui Nie, Thomas Kim, Dale Jun, Nico van Rooijen, Zaiqing Yang, **Haiyan Xu**. Clodronate liposomes improve metabolic profile and reduce visceral adipose macrophage content in diet-induced obese mice. *PLoS One*, 6(9): e24358, 1-11, 2011
22. Ping Jiao, Bin Feng, Jie Ma, Yaohui Nie, Erin Paul, Yujie Li, **Haiyan Xu**. Constitutive activation of IKK β in adipose tissue prevents diet-induced obesity. *Endocrinology*, in press, ePub Nov. 8, 2011

OTHER PEER-REVIEWED PUBLICATIONS

1. Ping Jiao, **Haiyan Xu**. Adipose inflammation: cause or consequence of obesity-related insulin resistance? Review. *Diabetes, Metabolic Syndrome and Obesity*, 1: 25-31, 2008

PUBLICATIONS SUBMITTED OR IN PREPARATION

1. Yaohui Nie, **Haiyan Xu** and Gang Xu. Glucose-dependent insulintropic peptide impairs insulin signaling via inducing inflammation in glucose-dependent insulintropic peptide receptor over-expressing adipocytes. *Manuscript submitted*
2. Bin Feng, Ping Jiao, Zaiqing Yang, **Haiyan Xu**. MEK/ERK pathway mediates insulin-promoted MKP-3 protein degradation in liver cells. *Manuscript submitted*
3. Ping Jiao, Bin Feng, **Haiyan Xu**. Mapping the functional domains required for MKP-3/FOXO1 interaction and liver cell glucose output. *Manuscript in preparation*